WILLOW SLOUGH
BRIDGE REPLACEMENT PROJECT

INITIAL STUDY

with Negative Declaration

SACRAMENTO COUNTY, CALIFORNIA

DISTRICT 3 – SAC – 99

Post Miles 6.04 to 7.06

EA: 03-1J630 / EFIS: 0321000023

Prepared by the
State of California Department of Transportation

March 2024

General Information About This Document

The California Department of Transportation (Caltrans) has prepared this Initial Study with Negative Declaration for the proposed Willow Slough Bridge Replacement Project located in Sacramento County, California. Caltrans is the lead agency under the California Environmental Quality Act (CEQA). This document tells you why the project is being proposed, what alternatives have been considered for the project, how the existing environment could be affected by the project, the potential impacts of each of the alternatives, and the proposed Standard Measures and Best Management Practices (BMPs). The Initial Study with Proposed Negative Declaration was circulated to the public for 30 days between January 11, 2024, and February 9, 2024. Comments received during this period are included in Appendix D. Elsewhere throughout this document, a vertical line in the margin indicates a change made since the draft document circulation. Minor editorial changes and clarifications have not been so indicated. Additional copies of this document are available for review at the Elk Grove Library, located at 8900 Elk Grove Boulevard, Elk Grove, CA 95624. The document can be viewed online at: https://dot.ca.gov/caltrans-near-me/district-3/d3-programs/d3-environmental/d3-environmental-docs/d3-sacramento-county.

For individuals with sensory disabilities, this document can be made available in Braille, in large print, on audiocassette, or on computer disk. To obtain a copy in one of these alternate formats, please write to or call Caltrans, Attention: Stacie Gandy, EEO/Safety Office, 703 B Street, Marysville, CA 95901; (530) 218-0632 (Voice) or use the California Relay Service (800) 735-2929 (TTY to Voice), (800) 735-2922 (Voice to TTY) or 711.

WILLOW SLOUGH
BRIDGE REPLACEMENT PROJECT

Replace the existing southbound Willow Slough Bridge on State Route 99 in Sacramento County, from Post Miles 6.04 to 7.06, approximately 6 miles north of the Sacramento and San Joaquin county line.

INITIAL STUDY
with Negative Declaration

Submitted Pursuant to: Division 13, California Public Resources Code

THE STATE OF CALIFORNIA
Department of Transportation

3/19/2024
Date of Approval

Dotrik Wilson
Dotrik Wilson, Acting Office Chief
North Region Environmental - District 3
California Department of Transportation
CEQA Lead Agency

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

North Region Environmental–District 3
Attn: Erin Damm, Environmental Branch Chief, Unit M5
703 B Street
Marysville, CA 95901
(530) 812-4371

or use the California Relay Service TTY number, 711 or 1-800-735-2922.

NEGATIVE DECLARATION

Pursuant to: Division 13, California Public Resources Code

SCH Number: 2024010128

Project Description

The California Department of Transportation (Caltrans) proposes to replace the existing southbound Willow Slough Bridge (Left Bridge–Bridge No. 24-0046L) with a new bridge on SR 99 from Post Miles (PMs) 6.04 to 7.06, approximately 6 miles north of the Sacramento and San Joaquin county line. The proposed scope of work includes constructing a new bridge to match the existing northbound bridge elevation (Right Bridge–Bridge No. 24-0046R) at Willow Slough. In addition, this project would install Transportation Management System (TMS) elements (including a Type III-AF service equipment enclosure, a high-speed weigh-in-motion system controller and cabinet, and closed-circuit television camera on a 90-foot-tall pole), reconstruct the existing Thrie beam guardrail, upgrade metal beam guardrail, and place a Type 842 Concrete Barrier. The project would require one temporary construction easement; however, no acquisition of new permanent right of way would be needed.

Determination

Caltrans has prepared an Initial Study for this project and, following public review, has determined from this study that the proposed project would not have a significant impact on the following resources:

The project would have *No Impact* on:

- Aesthetics
- Agriculture and Forest Resources
- Air Quality
- Cultural Resources
- Energy
- Geology and Soils
- Hazards and Hazardous Materials
- Land Use and Planning
- Mineral Resources
- Noise
- Population and Housing
- Public Services
- Recreation
- Transportation
- Tribal Cultural Resources
- Utilities and Service Systems
- Wildfire
- Mandatory Findings of Significance

The project would have *Less than Significant Impacts* to:

- Biological Resources
- Greenhouse Gas Emissions
- Hydrology and Water Quality

Dotrik Wilson _____ 3/19/2024

Dotrik Wilson, Acting Office Chief
North Region Environmental – District 3
California Department of Transportation
CEQA Lead Agency

Date

Table of Contents

NEGATIVE DECLARATION i

Table of Contents i

List of Appendices iii

List of Figures iii

List of Tables iii

Acronyms and Abbreviated Terms v

Chapter 1. Proposed Project 1

1.1 Introduction 1

1.2 Purpose and Need 4

1.3 Project Description 4

1.4 General Plan Description, Zoning, and Surrounding Land Uses 6

1.5 Permits and Approvals Needed 7

1.6 Standard Measures and Best Management Practices Included in All Alternatives 7

1.7 Discussion of the NEPA Categorical Exclusion 16

Chapter 2. CEQA Environmental Checklist 17

2.1 Aesthetics 22

2.2 Agriculture and Forest Resources 23

2.3 Air Quality 25

2.4 Biological Resources 26

2.5 Cultural Resources 50

2.6 Energy 51

2.7 Geology and Soils 52

2.8 Greenhouse Gas Emissions 54

2.9 Hazards and Hazardous Materials 73

2.10 Hydrology and Water Quality 75

2.11 Land Use and Planning 81

2.12 Mineral Resources 82

2.13 Noise 83

2.14 Population and Housing 84

2.15 Public Services 85
2.16 Recreation 86
2.17 Transportation 87
2.18 Tribal Cultural Resources 88
2.19 Utilities and Service Systems 90
2.20 Wildfire 92
2.21 Mandatory Findings of Significance 94
2.22 Cumulative Impacts 95

Chapter 3. Agency and Public Coordination 96

Chapter 4. List of Preparers 98

Chapter 5. Distribution List 99

Chapter 6. References 101

List of Appendices

APPENDIX A. **Project Layouts**

APPENDIX B. **Title VI Policy Statement**

APPENDIX C. **USFWS, NMFS, CNDDB, CNPS Species Lists**

APPENDIX D. **Response to Comments**

APPENDIX E. **Mitigation and Monitoring Reporting Program**

List of Figures

Figure 1. Project Vicinity Map 2

Figure 2. Project Location Map 3

Figure 3. U.S. 2021 Greenhouse Gas Emissions 58

Figure 4. California 2020 Greenhouse Gas Emissions by Economic Sector 59

Figure 5. Change in California Gross Domestic Product (GDP), Population, and GHG Emissions since 2000 59

List of Tables

Table 1. Agency, Permit/Approval and Status 7

Table 2. Environmental Factors Potentially Affected 17

Table 3. Regional and Local Greenhouse Gas Reduction Plans 60

Table 4. Agency Coordination and Professional Contacts 96

Acronyms and Abbreviated Terms

Acronym/Abbreviation	Description
AADT	Average Annual Daily Traffic
AB	Assembly Bill
BMPs	Best Management Practices
BO	Biological Opinion
BSA	Biological Study Area
CAA	Clean Air Act
CAFE	Corporate Average Fuel Economy
CAL FIRE	California Department of Forestry and Fire Protection
Cal/OSHA	California Occupational Safety and Health Administration
Caltrans	California Department of Transportation
CAPTI	Climate Action Plan for Transportation Infrastructure
CARB	California Air Resources Board
CCR	California Code of Regulations
CDC	California Department of Conservation
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFGC	California Fish and Game Code
CFR	Code of Federal Regulations
CGP	Construction General Permit
CH_4	methane
CIA	Cumulative Impact Analysis
CNPS	California Native Plant Society
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalent
CTP	California Transportation Plan
CVRWQCB	Central Valley Regional Water Quality Control Board
CWA	Clean Water Act
Department	Caltrans
DES	Division of Engineering Services
DNAC	District Native American Coordinator
DOT	Department of Transportation
DP	Director's Policy

Acronym/Abbreviation	Description
ECL	Environmental Construction Liaison
EIR	Environmental Impact Report
EISA	Energy Independence and Security Act
EO(s)	Executive Order(s)
EPA	Environmental Protection Agency
ESA	Endangered Species Act
ESA(s)	Environmentally Sensitive Area(s)
ESL	Environmental Study Limits
ESU	Evolutionarily Significant Unit
ºF	degrees Fahrenheit
FED	Final Environmental Document
FESA	Federal Endangered Species Act
FHWA	Federal Highway Administration
FP	Fully Protected (species listing status)
FR	Federal Register
GDP	Gross Domestic Product
GGS	Giant garter snake
GHG	Greenhouse gas
GWP	Global Warming Potential
H&SC	Health & Safety Code
HFCs	hydrofluorocarbons
HVF	High-Visibility Fencing
IPaC	Information for Planning and Consultation
IS	Initial Study
ISAC	Invasive Species Advisory Committee
IS/ND	Initial Study / Negative Declaration
JPCP	Joint Plane Concrete Pavement
LCFS	Low Carbon Fuel Standard
LRA	Local Responsibility Area
MBTA	Migratory Bird Treaty Act
MLD	Most Likely Descendent
MMT	million metric tons
MMT$C0_2e$	million metric tons of carbon dioxide equivalent
MPO	Metropolitan Planning Organization

Acronym/Abbreviation	Description
MTP	Metropolitan Transportation Plan
MVDS	Microwave vehicle detection system
MVP	Maintenance vehicle pullover
N_2O	nitrous oxide
NAGPRA	Native American Graves Protection and Repatriation Act of 1990
NAHC	Native American Heritage Commission
ND	Negative Declaration
NEPA	National Environmental Policy Act
NES	Natural Environment Study
NHTSA	National Highway Traffic and Safety Administration
NISC	National Invasive Species Council
NMFS	National Marine Fisheries Service
NOAA	National Oceanic and Atmospheric Administration
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service
O_3	ozone
OHWM	Ordinary High Water Mark
OPR	(Governor's) Office of Planning and Research
PDT	Project Development Team
PM(s)	Post Mile(s)
Porter-Cologne Act	Porter-Cologne Water Quality Control Act
Project	Willow Slough Bridge Replacement Project
PRC	Public Resources Code (California)
RC	Reinforced Concrete
RHMA	Rubberized Hot Mix Asphalt
ROW	Right of Way
RTL	Ready to List
RTP	Regional Transportation Plan
RTPA	Regional Transportation Planning Agency
SACOG	Sacramento Council of Governments
SB	Senate Bill
SB	Southbound
SCGP	Sacramento County General Plan
SCS	Sustainable Communities Strategy

Acronym/Abbreviation	Description
SF_6	sulfur hexafluoride
SHPO	State Historic Preservation Officer
SHS	State Highway System
SLR	Sea Level Rise
SNC(s)	Sensitive Natural Community(ies)
SO_2	sulfur dioxide
SPCC Plan	Spill Prevention, Control, and Countermeasures Plan
SR	State Route
SRA	State Responsibility Area
SS	Standard Specification
SSC	Species of Special Concern
SSHCP	South Sacramento Habitat Conservation Plan
SSP	Standard Special Provision
STAA	Surface Transportation Assistance Act
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TCE	Temporary Construction Easement
TDM	Transportation Demand Management
THVF	Temporary High Visibility Fencing
TMDLs	Total Maximum Daily Loads
TMP	Transportation Management Plan
TMS	Transportation Management System
U.S. or US	United States
USACE	United States Army Corps of Engineers
USC	United States Code
USDOT	U.S. Department of Transportation
U.S. EPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
VIA	Visual Impact Assessment
VMT	Vehicle Miles Traveled
WDRs	Waste Discharge Requirements
WOTUS	Waters of the U.S.
WPCP	Water Pollution Control Program

Chapter 1. Proposed Project

1.1 Introduction

State Route (SR) 99 serves interregional travel north and south of the Central Valley, connecting rural communities with larger metropolitan areas. SR 99 allows goods to be easily transported to many areas. Truck traffic within the project limits averages 14.9% of the total Average Annual Daily Traffic (AADT). SR 99 is a part of the Surface Transportation Assistance Act (STAA) National Network, which permits larger trucks to traverse the route. Movement of goods is essential to the economies of California and the nation, with approximately one third of the state's economy directly supported by the freight industry.

Within the project limits, SR 99 is classified as a freeway in the Transportation Concept Report. In District 3, SR 99 extends from the San Joaquin/Sacramento county line in the south, to the Butte/Tehama county line in the north. The proposed project is in rural Sacramento County from Post Miles (PMs) 6.04 to 7.06 (Figure 1).

The existing roadway geometry is a divided four-lane freeway with a bridge structure on both the northbound and southbound sides of the freeway. The posted speed limit is 65 miles per hour within the project limits. Currently, there are no Transportation Management System (TMS) elements within the project vicinity to manage traffic network operations. TMS elements are used to collect traffic volume information.

The Willow Slough Bridge (Bridge No. 24-0046L) serves southbound (SB) traffic. It is located at PM 6.54, approximately 6 miles north of the San Joaquin/Sacramento county line. The bridge is an aging structure that has exceeded its design life. Willow Slough Bridge is a reinforced concrete, continuous slab structure built in 1927 which was widened in 1957 to its current dimensions. This structure is 60.7-feet-long and 37.7-feet-wide. The existing foundation consists of reinforced concrete (RC) pile extension bents and RC pile extension abutments with monolithic wingwalls on RC piles. The existing roadway within and near the project is a 4-lane freeway with two 12-foot-wide lanes and 8-foot-wide shoulders. The bridge has two 12-foot-wide lanes, with shoulders that narrow to 2-feet-wide with bridge railing on both sides. The road surface sits approximately 2 feet lower than the northbound bridge (Bridge No. 24-0046R), also built in 1927.

The Department of Transportation (Caltrans) is the Lead Agency for this project under the California Environmental Quality Act (CEQA).

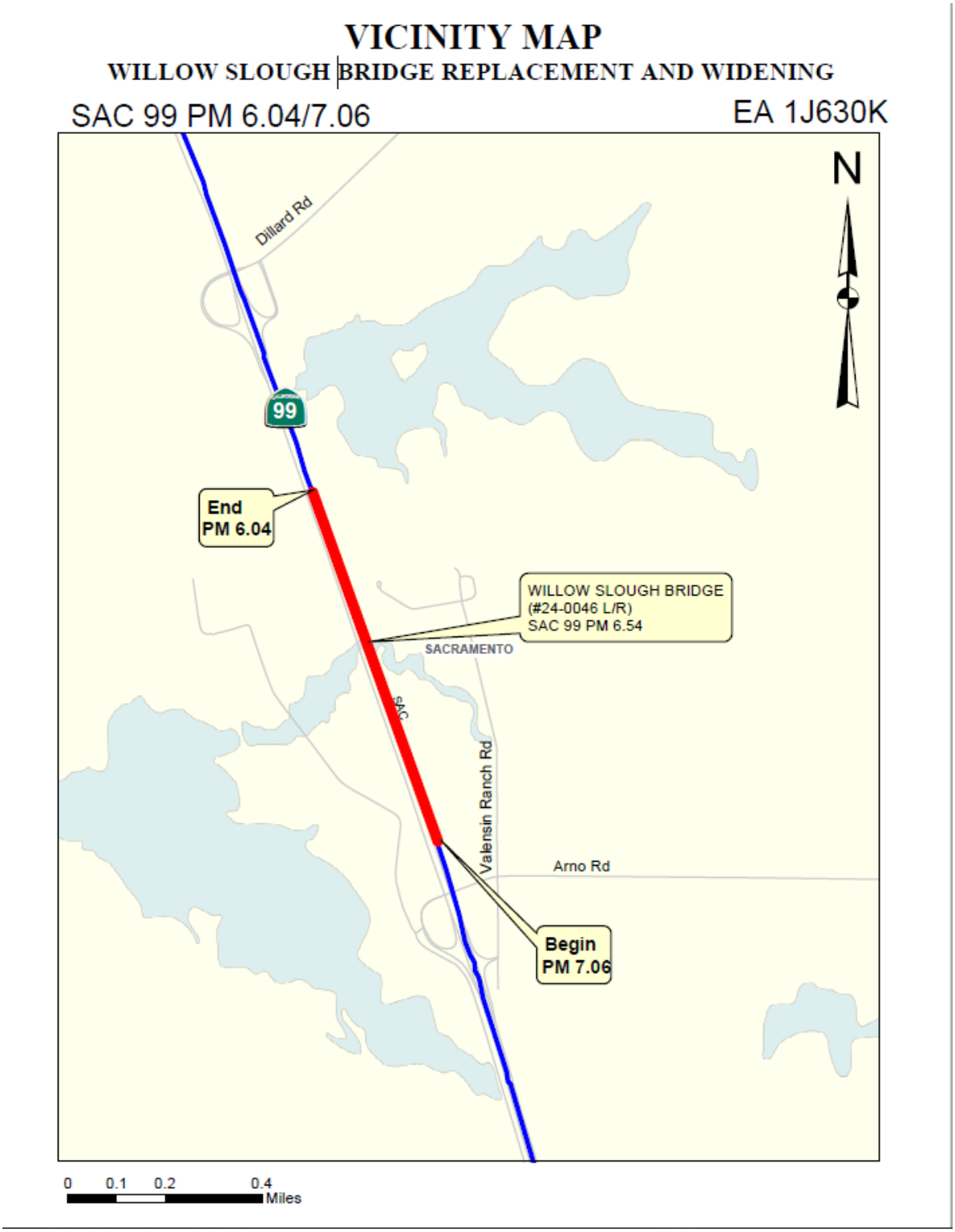


Figure 1. Project Vicinity Map

Figure 2. Project Location Map

1.2 Purpose and Need

Purpose

The purpose of the proposed project is to bring the southbound Willow Slough Bridge (Bridge No. 24-0046L) up to current design standards, maintain mainline geometry, and provide sufficient shoulder space. The purpose of the project is also to better capture traffic data used for corridor capacity management plans.

Need

The southbound Willow Slough Bridge was built in 1927 and has exceeded its design life. The bridge needs to be rehabilitated or replaced to meet seismic standards. Traffic volume information and network functions are not detected within the project limits.

1.3 Project Description

This section describes the proposed action and the project alternatives developed to meet the purpose and need of the project, while avoiding or minimizing environmental impacts. The alternatives are Build Alternative and No-Build Alternative.

No-Build Alternative

The No-Build Alternative would maintain the facility in its current condition and would not meet the purpose and need of the project. Under the No-Build Alternative, no alterations to the existing conditions would occur and the proposed improvements would not be implemented.

Build Alternative

The proposed project would replace the existing southbound Willow Slough Bridge with a new bridge to match the existing profile of the northbound bridge. This analysis included the scope of work to widen the northbound bridge (Bridge No. 24-0046R) toward the median to meet current design standards; however the project is being approved with this scope of work removed from further plan development. Approximately 0.16 acres of permanent earthen fill for bridge support would be added in the slough. The project would increase the impervious surface area of SR 99 by 1.66 acres with temporary surface added for the construction access road, which would be removed upon completion of construction.

The constructed bridge would include 1.5 acres of additional impervious surface area. In addition, the existing Thrie beam guardrail would be removed and reconstructed and the existing metal beam guardrail would be upgraded with Midwest Guardrail Systems. A Type 842 Concrete Barrier would be constructed on both sides of the new southbound bridge. This project proposes to install Transportation Management System (TMS) elements including a Type III-AF service equipment enclosure, a high-speed weigh-in-motion system controller and cabinet, and closed-circuit television camera on a 90-foot-tall pole, install microwave vehicle detection system (MVDS), and install one maintenance vehicle pullover (MVP). This project will also patch rock pockets in the Reinforced Concrete (RC) columns of the Right Bridge as a preventative maintenance. The project would require one temporary construction easement (TCE) for construction storage, parking, and off-highway access to the bridge; no permanent acquisition of right of way (ROW) would be needed.

Temporary construction access roads would be constructed on the east and west sides of SR 99, north of the bridges, to allow equipment and materials to be placed within the ROW for use during construction. An existing culvert, which spans the ROW along the existing northerly earthen fill of both the northbound and southbound bridges, would be cut and removed for construction, and replaced once the access roads are removed. Approximately 1.66 acres of fill would be placed for the access roads, which would be compacted and removed upon completion of construction.

Alternatives Considered but Eliminated from Further Consideration

Accommodation for Future Project State Route 99 Grade Raise Project (EA 03-4J480)

At the May 11, 2023, Project Development Team (PDT) meeting for the Willow Slough Bridge Replacement Project, the *State Route 99 Grade Raise Project (Grade Raise Project)* (EA 03-4J480) was introduced. The *Grade Raise Project* is planned between PMs 5.5 and 7.75, overlapping the Willow Slough Bridge Replacement Project. The *Grade Raise Project* draft scope proposes to raise the profile of SR 99 to the approximate elevation of 45 feet above sea level within the project limits of the Willow Slough Bridge Replacement Project, which includes a proposed profile elevation of about 42.89 feet. The Project Manager instructed the PDT to continue to work on the project with the scope unchanged and consider future project constraints.

A subsequent PDT meeting was held on May 17, 2023, between Design, the Division of Engineering Services (DES), Asset Management, and the Project Manager to discuss the most suitable bridge design that would facilitate raising the newly constructed southbound

bridge in the future to match the projected higher roadway profile, as per the *Grade Raise Project* scope. The following two options for bridge design and stage construction were discussed:

Option 1

Change bridge configuration for the left bridge from a multi-span to a single-span bridge. The new left bridge would still be built to match the elevation of the existing right bridge, however the single-span bridge would be easier than a multi-span bridge to raise in the future to match the new roadway profile. Additionally, there would be no closure pour between the left and right bridges to connect them as a single structure.

Option 2

Replace both left and right bridges to the raised profile elevation as dictated by the *Grade Raise Project*. This option would require roadway geometric design at the approaches and create a crest effect at the Willow Slough Bridge. This option was rejected from further consideration in a PDT meeting on June 15, 2023.

Reversible Lanes

This project does not qualify as a capacity increasing or a major street or highway realignment project, thus reversible lanes were not considered.

1.4 General Plan Description, Zoning, and Surrounding Land Uses

The Willow Slough Bridge Replacement Project location is identified in the 2030 Sacramento County General Plan as being in a flood zone (100-year floodplain, Zone A) (Sacramento County General Plan of 2005-2030, 2011). Property to the west of the project (Assessor's Parcel Number [APN] 134-0270-017-0000) is government owned and is not bound by a Williamson Act contract (Sacramento County General Plan of 2005-2030, 2011). The parcel is part of the General Plan as a Natural Preserve and is protected by a Resource Conservation Area. The land is not part of a Community Plan Land Use area. It is zoned Agricultural–20 Acres.

The property to the east of the project (APN 134-0280-082-0000) is identified in the General Plan as Agricultural Cropland. It is not part of a Community Plan Land Use area. This parcel is within the boundaries of the South Sacramento Habitat Conservation Plan. This

parcel is bound under an active Williamson Act contract (No. 72-AP-131). It is zoned Agricultural–80 Acres and Agricultural–20 Acres.

1.5 Permits and Approvals Needed

The following table (Table 1) indicates the permitting agency, permits/approvals and status of permits required for the project.

Table 1. Agency, Permit/Approval and Status

Agency	Permit/Approval	Status
California Department of Fish and Wildlife (CDFW)	1600 Lake and Streambed Alteration Agreement	Anticipated submittal date 05/01/2024
State Water Resources Control Board (SWRCB)	Construction General Permit	Coordinated After Ready To List (RTL) milestone
Regional Water Quality Control Board (RWQCB)	Clean Water Act (CWA) Section 401 Certification	Anticipated submittal date 05/01/2024
U.S. Army Corps of Engineers (USACE)	Clean Water Act (CWA) Section 404 Permit	Anticipated submittal date 05/01/2024
U.S. Fish and Wildlife Service (USFWS)	Section 7 Federal Endangered Species Act (FESA) Consultation/Biological Opinion	Anticipated issuance date 11/13/2024

1.6 Standard Measures and Best Management Practices Included in All Alternatives

Under CEQA, "mitigation" is defined as avoiding, minimizing, rectifying, reducing/ eliminating, and compensating for an impact. In contrast, Standard Measures and Best Management Practices (BMPs) are prescriptive and sufficiently standardized to be generally applicable, and do not require special tailoring for a project. They are measures that typically result from laws, permits, agreements, guidelines, and resource management plans. For this reason, the measures and practices are not considered "mitigation" under CEQA; rather, they are included as part of the project description in environmental documents.

The following section provides a list of project features, standard practices (measures), and Best Management Practices (BMPs) that are included as part of the project description. These avoidance and minimization measures are prescriptive and sufficiently standardized to be generally applicable and do not require special tailoring to a project situation. These are

generally measures that result from laws, permits, guidelines, resource management plans, and resource agency directives and policies. They predate the project's proposal and apply to all similar projects. For this reason, these measures and practices do not qualify as project mitigation, and the effects of the project are analyzed with these measures in place.

Standard measures relevant to the protection of natural resources deemed applicable to the proposed project include:

Aesthetics Resources

AR-1: Temporary access roads, construction easements, and staging areas that were previously vegetated would be restored to a natural contour and revegetated with regionally appropriate native vegetation.

AR-2: Where feasible, guardrail terminals would be buried; otherwise, an appropriate terminal system would be used, if appropriate.

AR-3: Where feasible, construction lighting would be limited to within the area of work.

AR-4: Where feasible, the removal of established trees and vegetation would be minimized. Environmentally sensitive areas would have Temporary High Visibility Fencing (THVF) installed before start of construction to demarcate areas where vegetation would be preserved and root systems of trees protected.

Biological Resources

BR-1: General

Before start of work, as required by permit or consultation conditions, a Caltrans biologist or Environmental Construction Liaison (ECL) would meet with the contractor to brief them on environmental permit conditions and requirements relative to each stage of the proposed project, including, but not limited to, work windows, drilling site management, and how to identify and report regulated species within the project areas.

BR-2: Animal Species

A. To protect migratory and nongame birds (occupied nests and eggs), if possible, vegetation removal would be limited to the period outside of the bird breeding season (removal would occur between September 16 and January 31). If vegetation removal is required during the breeding season, a

nesting bird survey would be conducted by a qualified biologist within five days prior to vegetation removal. If an active nest is located, the biologist would coordinate with CDFW to establish appropriate species-specific buffer(s) and any monitoring requirements. The buffer would be delineated around each active nest and construction activities would be excluded from these areas until birds have fledged, or the nest is determined to be unoccupied.

B. A Bird Exclusion Plan would be prepared by a qualified biologist prior to construction. Exclusion devices would be designed so they would not trap or entangle birds or bats. Exclusion devices would be installed outside of the breeding season (September 16 through January 31) to eliminate the re-occupancy of existing structures by migratory bird species that may attempt to nest on the structure during construction. On structures or parts of structure where it is not feasible to install bird exclusion devices, partially constructed and unoccupied nests within the construction area would be removed and disposed of on a regular basis throughout the breeding season (February 1 through September 15 with biologist discretion) to prevent their occupation. Nest removal would be repeated weekly under guidance of a qualified biologist to ensure nests are inactive prior to removal.

C. A Bat Exclusion Plan would be prepared by a qualified biologist prior to construction. Exclusion devices would be designed so they would not trap or entangle bats or birds. The Bat Exclusion Plan would include guidelines for appropriate date of exclusion and temperature parameters based on bridge type, geographic location, and species present. At the direction of a qualified biologist, exclusion devices would be installed after the maternity season but before hibernation. If overlapping resources are present (e.g., nesting birds), coordination between the Bat Exclusion Plan and any other relevant plans would occur. Measures would be monitored by a qualified biologist.

D. To prevent attracting corvids (birds of the Corvidae family which include jays, crows, and ravens), no trash or foodstuffs would be left or stored on-site. All trash would be deposited in a secure container daily and disposed of at an approved waste facility at least once a week. Also, on-site workers would not attempt to attract or feed any wildlife.

E. Artificial night lighting may be required. To reduce potential disturbance to sensitive resources, lighting would be temporary, and directed specifically on the portion of the work area actively under construction. Use of artificial lighting would be limited to Cal/OSHA work area lighting requirements.

F. Limited Operating Period would be observed, whereby all construction activities would occur during daytime hours and between May 1 and October 1, which is the time of year when migratory and/or listed species would not be expected to have dependent young.

BR-3: Invasive Plant Species

Invasive non-native plant species control would be implemented. Measures would include:

- Straw, straw bales, seed, mulch, or other material used for erosion control or landscaping which would be free of noxious weed seed and propagules.

- All equipment would be thoroughly cleaned of all dirt and vegetation prior to entering the job site to prevent importing invasive non-native species. Project personnel would adhere to the latest version of the *California Department of Fish and Wildlife Aquatic Invasive Species Cleaning/Decontamination Protocol (Northern Region)* (CDFW 2016) for all field gear and equipment in contact with water.

BR-4: Plant Species, Sensitive Natural Communities, and ESHA

A. A Revegetation Plan would be prepared which would include a plant palette, establishment period, watering regimen, monitoring requirements, and invasive plant species control measures. The Revegetation Plan would also address measures for wetland and riparian areas temporarily impacted by the project.

B. Prior to the start of work, Temporary High Visibility Fencing (THVF) and/or flagging would be installed around sensitive natural communities, environmentally sensitive habitat areas, rare plant occurrences, intermittent streams, and wetlands and other waters, where appropriate. No work would occur within fenced/flagged areas.

C. After completion, all superfluous construction materials would be completely removed from the site. The site would then be restored by regrading and stabilizing with a hydroseed mixture of native species along with fast growing sterile erosion control seed, as required by the Erosion Control Plan.

BR-5: Wetlands and Other Waters

A. Prior to any water diversion, the contractor would be required to prepare and submit a Temporary Water Diversion System Plan to Caltrans for approval. Water generated from the diversion operations would be pumped and discharged according to the approved plan and applicable permits.

B. Construction activities performed above the ordinary high water mark of a watercourse that could potentially directly impact surface waters (i.e., soil disturbance that could lead to turbidity) would be performed during the dry season, typically between June through October, or as weather permits per the authorized contractor-prepared Storm Water Pollution Prevention Plan (SWPPP), Water Pollution Control Program (WPCP),) and/or project permit requirements.

C. See BR-4 for Temporary High Visibility Fencing (THVF) information.

Cultural Resources

CR-1: Caltrans would coordinate with the **Wilton Rancheria Tribe** and incorporate measures to protect tribal resources, including potential work windows associated with tribal ceremonies.

CR-2: An archaeological monitor and Wilton Rancheria tribal monitor would be used during ground-disturbing activities.

CR-3: If cultural materials are discovered during construction, work activity within a 60-foot radius of the discovery would be stopped and the area secured until a qualified archaeologist can assess the nature and significance of the find in consultation with the State Historic Preservation Officer (SHPO).

CR-4: If human remains and related items are discovered on private or State land, they would be treated in accordance with State Health and Safety Code § 7050.5. Further disturbances and activities would cease in any area or nearby area suspected to overlie remains, and the County Coroner contacted. Pursuant to California Public Resources Code (PRC) § 5097.98, if the remains are thought to be Native American, the coroner would notify the Native American Heritage Commission (NAHC) who would then notify the Most Likely Descendent (MLD).

Human remains and related items discovered on federally-owned lands would be treated in accordance with the Native American Graves Protection and Repatriation Act of 1990 (NAGPRA) (23 USC 3001). The procedures for dealing with the discovery of human remains, funerary objects, or sacred objects on federal land are described in the regulations that implement NAGPRA 43 CFR Part 10. All work in the vicinity of the discovery shall be halted and the administering agency's archaeologist would be notified immediately. Project activities in the vicinity of the discovery would not resume until the federal agency complies with the 43 CFR Part 10 regulations and provides notification to proceed.

Geology, Seismic/Topography, and Paleontology

GS-1: The project would be designed to minimize slope failure, settlement, and erosion using recommended construction techniques and Best Management Practices (BMPs). New earthen slopes would be vegetated to reduce erosion potential.

GS–2: In the unlikely event that paleontological resources (fossils) are encountered, all work within a 60-foot radius of the discovery would stop, the area would be secured, and the work would not resume until appropriate measures are taken.

Greenhouse Gas Emissions

GHG-1: Caltrans Standard Specification "Air Quality" requires compliance by the contractor with all applicable laws and regulations related to air quality (Caltrans Standard Specification [SS] 14-9).

GHG-2: Compliance with Title 13 of the California Code of Regulations, which includes restricting idling of diesel-fueled commercial motor vehicles and equipment with gross weight ratings of greater than 10,000 pounds to no more than 5 minutes.

GHG-3: Caltrans Standard Specification "Emissions Reduction" ensures that construction activities adhere to the most recent emissions reduction regulations mandated by the California Air Resources Board (CARB) (Caltrans SS 7-1.02C).

GHG-4: Use of a Transportation Management Plan (TMP) to minimize vehicle delays and idling emissions. As part of this, construction traffic would be scheduled and routed to reduce congestion and related air quality impacts caused by idling vehicles along the highway during peak travel times.

GHG-5: All areas temporarily disturbed during construction would be revegetated with appropriate native species. Landscaping reduces surface warming and, through photosynthesis, decreases CO_2. This replanting would help offset any potential CO_2 emissions increase.

Hazardous Waste and Material

HW-1: Per Caltrans requirements, the contractor(s) would prepare a project-specific Lead Compliance Plan (CCR Title 8, § 1532.1, the "Lead in Construction" standard) to reduce worker exposure to lead-impacted soil. The plan would include protocols for environmental and personnel monitoring, requirements for personal protective equipment, and other health and safety protocols and procedures for the handling of materials containing lead.

HW-2: When identified as containing hazardous levels of lead, traffic stripes would be removed and disposed of in accordance with Caltrans Standard Special Provision (SSP) "Remove Yellow Traffic Stripes and Pavement Markings with Hazardous Waste Residue" (SSP 14-11.12).

HW-3: If treated wood waste (such as removal of sign posts or guardrail) is generated during this project, it would be disposed of in accordance with Standard Specification "Treated Wood Waste."

HW-4: If asbestos-containing material is removed during this project, it would be removed and disposed of in accordance with SSP 14–11.16 Asbestos-containing Construction Materials in Bridges.

Hydrology and Floodplain

HF-1: The proposed bridge would maintain the same elevation above the ordinary high water mark (OHWM) as the existing bridge, and no new structures would be placed which would result in a substantial backflow during a flood event.

Utilities and Emergency Services

UE-1: All emergency response agencies in the project area would be notified of the project construction schedule and would have access to SR 99 throughout the construction period.

UE-2: Caltrans would coordinate with utility providers to plan for relocation of any utilities to ensure utility customers would be notified of potential service disruptions before relocation.

UE-3: The contractor would be required to submit a jobsite fire prevention plan as required by Cal/OSHA before starting job site activities. In the event of an emergency or wildfire, the contractor would cooperate with fire prevention authorities.

Water Quality and Stormwater Runoff

WQ-1: The project would comply with the provisions of the Caltrans Statewide National Pollutant Discharge Elimination System (NPDES) Permit (Order 2022-0033-DWQ), effective January 1, 2023. If the project results in a land disturbance of 10,000 square feet or greater, coverage under the Construction General Permit (CGP) (Order 2022-0057-DWQ) is also required.

Before any ground-disturbing activities, the contractor would prepare a Stormwater Pollution Prevention Plan (SWPPP) (per the Construction General Permit Order 2022-0057-DWQ) or Water Pollution Control Program (WPCP) (projects that result in a land disturbance of less than one acre) that includes erosion control measures and construction waste containment measures to protect Waters of the State during project construction. For SWPPP projects (which are governed according to both the Caltrans NPDES permit and the Construction General Permit), soil disturbance is permitted to occur year-round as long as the Caltrans NPDES and CGP and the corresponding requirements of those permits are adhered to. For WPCP projects

(which are governed according to the Caltrans NPDES permit), soil disturbance is permitted to occur year-round as long as the Caltrans NPDES permit is adhered to.

The SWPPP or WPCP would identify the sources of pollutants that may affect the quality of stormwater; include construction site Best Management Practices (BMPs) to control sedimentation, erosion, and potential chemical pollutants; provide for construction materials management; include non-stormwater BMPs; and include routine inspections and a monitoring and reporting plan. All construction site BMPs would follow the latest edition of the *Caltrans Storm Water Quality Handbooks: Construction Site BMPs Manual* to control and reduce the impacts of construction-related activities, materials, and pollutants on the watershed.

The project SWPPP or WPCP would be continuously updated to adapt to changing site conditions during the construction phase.

Construction may require one or more of the following temporary construction site BMPs:

- Any spills or leaks from construction equipment (e.g., fuel, oil, hydraulic fluid, and grease) would be cleaned up in accordance with applicable local, state, and/or federal regulations.
- Clean groundwater generated from the dewatering operations could be discharged on-site for dust control and/or to an infiltration basin if the quantity is below thresholds set by the local Regional Water Quality Control Board. Generated groundwater above acceptable thresholds or that comes into contact with a pollutant requires Waste Discharge Permit approval prior to discharging to land.
- Temporary sediment control and soil stabilization devices would be installed.
- Existing vegetated areas would be maintained to the maximum extent practicable.
- Clearing, grubbing, and excavation would be limited to specific locations, as delineated on the plans, to maximize the preservation of existing vegetation.
- Vegetation reestablishment or other stabilization measures would be implemented on disturbed soil areas, per the Erosion Control Plan.

- For SWPPP projects (which are governed according to both the Caltrans NPDES permit and the Construction General Permit), soil disturbance is permitted to occur year-round as long as the Caltrans NPDES and CGP and the corresponding requirements of these permits are adhered to. For WPCP projects (which are governed according to the Caltrans NPDES permit), soil disturbance is permitted to occur year-round as long as the Caltrans NPDES permit is adhered to.

WQ-2: The project would incorporate pollution prevention and design measures consistent with the *2016 Caltrans Storm Water Management Plan* (Caltrans 2016). This plan complies with the requirements of the Caltrans Statewide NPDES Permit (Order 2022-0033-DWQ).

The project design may include one or more of the following:

- Vegetated surfaces would feature native plants, and revegetation would use the seed mixture, mulch, tackifier, and fertilizer recommended in the Erosion Control Plan prepared for the project.
- Where possible, stormwater would be directed in such a way as to sheet flow across vegetated slopes, thus providing filtration of any potential pollutants.

Wildfire

WF-1: Caltrans 2018 revised Standard Specification 7-11.02M (2) mandates fire prevention procedures during construction, including a Fire Prevention Plan.

1.7 Discussion of the NEPA Categorical Exclusion

This document contains information regarding compliance with the California Environmental Quality Act (CEQA) and other state laws and regulations. Separate environmental documentation supporting a Categorical Exclusion determination will be prepared in accordance with the National Environmental Policy Act. 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 National Marine Fisheries Service and the United States Fish and Wildlife Service—in other words, species protected by the Federal Endangered Species Act).

Chapter 2. CEQA Environmental Checklist

Environmental Factors Potentially Affected

The environmental factors noted below would be potentially affected by this project. Please see the CEQA Environmental Checklist on the following pages for additional information.

Table 2. Environmental Factors Potentially Affected

Potential Impact Area	Impacted: Yes / No
Aesthetics	No
Agriculture and Forest Resources	No
Air Quality	No
Biological Resources	Yes
Cultural Resources	No
Energy	No
Geology and Soils	No
Greenhouse Gas Emissions	Yes
Hazards and Hazardous Materials	No
Hydrology and Water Quality	Yes
Land Use and Planning	No
Mineral Resources	No
Noise	No
Population and Housing	No
Public Services	No
Recreation	No
Transportation	No
Tribal Cultural Resources	No
Utilities and Service Systems	No
Wildfire	No
Mandatory Findings of Significance	No

The California Environmental Quality Act (CEQA) Environmental Checklist identifies physical, biological, social, and economic factors that might be affected by the proposed project. In many cases, background studies performed in connection with the project will indicate there are no impacts to a particular resource. A "NO IMPACT" answer in the last column of the checklist reflects this determination. The words "significant" and "significance" used throughout the CEQA Environmental Checklist are only related to potential impacts pursuant to CEQA. The questions in the CEQA Environmental 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, as well as standardized measures applied to all or most Caltrans projects (such as Best Management Practices [BMPs] and measures included in the Standard Plans and Specifications or as Standard Special Provisions [Section 1.6]), are considered to be an integral part of the project and have been considered prior to any significance determinations documented in the checklist or document.

Project Impact Analysis Under CEQA

CEQA broadly defines "project" to include "the whole of an action, which has a potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment" (14 California Code of Regulations [CCR] § 15378). Under CEQA, normally the baseline for environmental impact analysis consists of the existing conditions at the time the environmental studies began. However, it is important to choose the baseline that most meaningfully informs decision-makers and the public of the project's possible impacts. Where existing conditions change or fluctuate over time, and where necessary to provide the most accurate picture practically possible of the project's impacts, a lead agency may define existing conditions by referencing historic conditions, or conditions expected when the project becomes operational, or both, that are supported with substantial evidence. In addition, a lead agency may also use baselines consisting of both existing conditions and projected future conditions that are supported by reliable projections based on substantial evidence in the record. The CEQA Guidelines require a "statement of the objectives sought by the proposed project" (14 CCR § 15124(b)).

CEQA requires the identification of each potentially "significant effect on the environment" resulting from the project, and ways to mitigate each significant effect. Significance is defined as "Substantial or potentially substantial adverse change to any of the physical

conditions within the area affected by the project" (14 CCR § 15382). CEQA determinations are made prior to and separate from the development of mitigation measures for the project.

The legal standard for determining the significance of impacts is whether a "fair argument" can be made that a "substantial adverse change in physical conditions" would occur. The fair argument must be backed by substantial evidence including facts, reasonable assumption predicated upon fact, or expert opinion supported by facts. Generally, an environmental professional with specific training in an area of environmental review can make this determination.

Though not required, CEQA suggests Lead Agencies adopt thresholds of significance, which define the level of effect above which the Lead Agency will consider impacts to be significant, and below which it will consider impacts to be less than significant. Given the size of California and it's varied, diverse, and complex ecosystems, as a Lead Agency that encompasses the entire State, developing thresholds of significance on a state-wide basis has not been pursued by Caltrans. Rather, to ensure each resource is evaluated objectively, Caltrans analyzes potential resource impacts in the project area based on their location and the effect of the potential impact on the resource as a whole. For example, if a project has the potential to impact 0.10 acre of wetland in a watershed that has minimal development and contains thousands of acres of wetland, then a "less than significant" determination would be considered appropriate. In comparison, if 0.10 acre of wetland would be impacted that is located within a park in a city that only has 1.00 acre of total wetland, then the 0.10 acre of wetland impact could be considered "significant."

If the action may have a potentially significant effect on any environmental resource (even with mitigation measures implemented), then an Environmental Impact Report (EIR) must be prepared. Under CEQA, the lead agency may adopt a negative declaration (ND) if there is no substantial evidence that the project may have a potentially significant effect on the environment (14 CCR § 15070(a)). A proposed negative declaration must be circulated for public review, along with a document known as an Initial Study. CEQA allows for a "Mitigated Negative Declaration" in which mitigation measures are proposed to reduce potentially significant effects to less than significant (14 CCR § 15369.5).

Although the formulation of mitigation measures shall not be deferred until some future time, the specific details of a mitigation measure may be developed after project approval when it is impractical or infeasible to include those details during the project's environmental review.

The lead agency must (1) commit itself to the mitigation, (2) adopt specific performance standards the mitigation will achieve, and (3) identify the type(s) of potential action(s) that can feasibly achieve that performance standard and that will be considered, analyzed, and potentially incorporated in the mitigation measure. Compliance with a regulatory permit or other similar processes may be identified as mitigation if compliance would result in implementation of measures that would be reasonably expected, based on substantial evidence in the record, to reduce the significant impact to the specified performance standards (§ 15126.4(a)(1)(B)).

Per CEQA, measures may also be adopted, but are not required, for environmental impacts that are not found to be significant (14 CCR § 15126.4(a)(3)). Under CEQA, mitigation is defined as avoiding, minimizing, rectifying, reducing, and compensating for any potential impacts (CEQA 15370). Regulatory agencies may require additional measures beyond those required for compliance with CEQA. Though not considered "mitigation" under CEQA, these measures are often referred to in an Initial Study as "mitigation", Good Stewardship or Best Management Practices. These measures can also be identified after the Initial Study/Negative Declaration is approved.

CEQA documents must consider direct and indirect impacts of a project (California Public Resources Code [PRC] § 21065.3). They are to focus on significant impacts (14 CCR § 15126.2(a)). Impacts that are less than significant need only be briefly described (14 CCR § 15128). All potentially significant effects must be addressed.

No-Build Alternative

For each of the following CEQA Environmental Checklist questions, the "No-Build" Alternative has been determined to have "No Impact". Under the "No-Build" Alternative, no alterations to the existing conditions would occur and no proposed improvements would be implemented. The "No-Build" Alternative will not be discussed further in this document.

Definitions of Project Parameters

When determining the parameters of a project for potential impacts, the following definitions are provided:

Project Area: This is the general area where the project is located. This term is mainly used in the Environmental Setting section (e.g., watershed, climate type, etc.).

Project Limits: This is the beginning and ending post miles for a project. This is different than the ESL in that it sets the beginning and ending limits of a project along the highway. It is the limits programmed for a project, and every report, memo, etc. associated with a project should use the same post mile limits. In some cases, there may be areas associated with a project that are outside of the project limits, such as staging and disposal locations.

Project Footprint: The area within the Environmental Study Limits (ESL) the project is anticipated to impact, both temporarily and permanently. This includes staging and disposal areas.

Environmental Study Limits (ESL): The project engineer provides the Environmental team the ESL as an anticipated boundary for potential impacts. The ESL is *not* the project footprint. Rather, it is the area encompassing the project footprint where there could *potentially* be direct and indirect disturbance by construction activity. The ESL is larger than the project footprint in order to accommodate any future scope changes. The ESL is also used for identifying the various Biological Study Areas (BSAs) needed for different biological resources.

Biological Study Area (BSA): The BSA encompasses the ESL plus any areas outside of the ESL that could potentially affected by a project (e.g., noise, visual, Coastal Zone, etc.). Depending on resources in the area, a project could have multiple BSAs. Each BSA should be identified and defined. If the project is within the Coastal Zone, this area would also include the required 100-feet buffer. The Biological Study Area for the Willow Slough Bridge Replacement Project is the same as the Environmental Study Limits as no additional buffers for sensitive species were required.

2.1 Aesthetics

Except as provided in the Public Resources Code Section 21099:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project: a) Have a substantial adverse effect on a scenic vista?				✓
Would the project: b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				✓
Would the project: 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?				✓
Would the project: d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?				✓

The "No Impact" determinations in this section are based on the scope, description, and location of the proposed project, as well as the *Visual Impact Assessment (*VIA) dated May 16, 2023 (Caltrans 2023g). Potential impacts to scenic resources are not anticipated due to negligible visual changes to the environment.

2.2 Agriculture and Forest Resources

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California 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; the Forest Legacy Assessment Project; and the forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board (CARB).

Question	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project: 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?				✓
Would the project: b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				✓
Would the project: c) Conflict with existing zoning for, or cause rezoning of forest land (as defined by 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))?				✓

Question	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project: d) Result in the loss of forest land or conversion of forest land to non-forest use?				✓
Would the project: 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?				✓

The "No Impact" determinations in this section are based on the scope, description, and location of the proposed project, as well as the California Department of Conservation (CDC) Farmland Maps (CDC 2023a) and Natural Resources Conservation Service (NRCS) Soil Survey report (NRCS 2023). The project would require a Temporary Construction Easement to the property west of the project (see Section 1.3); however, no land use conversion to non-agricultural use, or any other use, would be required. The project would not require use of the property east of the project, which is encumbered by an active Williamson Act contract. There are no timberland areas within the project limits or adjacent to it.

2.3 Air Quality

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

Question	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project: a) Conflict with or obstruct implementation of the applicable air quality plan?				✓
Would the project: 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?				✓
Would the project: c) Expose sensitive receptors to substantial pollutant concentrations?				✓
Would the project: d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?				✓

The "No Impact" determinations in this section are based on the scope, description, and location of the proposed project, as well as the *Air Quality, GHG, and Energy Memo* dated March 20, 2023 (Caltrans 2023a). The project is consistent with the SACOG Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) air quality conformity. The project does not result in an increase in criteria pollutant, exposure to pollutants or result in adverse emissions.

2.4 Biological Resources

Question	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project: a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife, U.S. Fish and Wildlife Service, or NOAA Fisheries?			✓	
Would the project: 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?			✓	
Would the project: 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?			✓	
Would the project: 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?				✓

Question	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project: e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				✓
Would the project: 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?				✓

The "No Impact" determinations for Questions (d), (e), (f), and "Less Than Significant Impact" determinations for Questions (a), (b), and (c) in this section are based on the scope, description, and location of the proposed project, as well as the Natural Environment Study dated December 2023 (Caltrans 2023c).

Regulatory Setting

Within this section of the document (2.4 Biological Resources), the topics are separated into Sensitive Natural Communities, Wetlands and Other Waters, Plant Species, Animal Species, Threatened and Endangered Species, and Invasive Species. Plant and animal species listed as "threatened" or "endangered" are covered within the Threatened and Endangered Species sections. Other special status plant and animal species, including United States Fish and Wildlife Service (USFWS) and National Marine Fisheries Service (NMFS) candidate species, California Department of Fish and Wildlife (CDFW) Fully Protected (FP) species, Species of Special Concern (SSC), and California Native Plant Society (CNPS) rare plants are covered in the respective Plant and Animal sections.

Sensitive Natural Communities

CDFW maintains a list of sensitive natural communities (SNCs). SNCs are those natural communities that are of limited distribution statewide or within a county or region and are often vulnerable to environmental effects of projects. These communities may or may not contain special status taxa or their habitat.

Wetlands and Other Waters

Waters of the United States (including wetlands) and State are protected under several laws and regulations. The primary laws and regulations governing wetlands and other waters include:

- Federal: Clean Water Act (CWA)–33 United States Code (USC) 1344
- Federal: Executive Order for the Protection of Wetlands (Executive Order [EO] 11990)
- State: California Fish and Game Code (CFGC) Sections 1600–1607
- State: Porter-Cologne Water Quality Control Act Section 3000 et seq.

Plant Species

The U.S. Fish and Wildlife Service (USFWS) and California Department of Fish and Wildlife (CDFW) have regulatory responsibility for the protection of special status plant species. The primary laws governing plant species include:

- Federal Endangered Species Act (FESA)–USC 16 Section 1531, et seq. See also 50 Code of Federal Regulations (CFR) Part 402
- California Endangered Species Act (CESA)–California Fish and Game Code Section 2050, et seq.
- Native Plant Protection Act–California Fish and Game Code Sections 1900–1913
- National Environmental Policy Act (NEPA)–40 CFR Sections 1500 through 1508
- California Environmental Quality Act (CEQA)–California Public Resources Code (PRC) Sections 21000–21177

Animal Species

The USFWS, NMFS, and CDFW have regulatory responsibility for the protection of special status animal species. The primary laws governing animal species include:

- NEPA–40 CFR Sections 1500 through 1508
- CEQA–California Public Resources Code Sections 21000–21177
- Migratory Bird Treaty Act–16 USC Sections 703–712

- Fish and Wildlife Coordination Act–16 USC Section 661
- California Fish and Game Code–Sections 1600–1603
- California Fish and Game Code–Sections 4150 and 4152

Threatened and Endangered Species

The primary laws governing threatened and endangered species include:

- FESA–USC 16 Section 1531, et seq. See also 50 CFR Part 402
- CESA–California Fish and Game Code Section 2050, et seq.
- CESA–California Fish and Game Code Section 2080
- CEQA, California Public Resources Code, Sections 21000–21177
- Magnuson-Stevens Fishery Conservation and Management Act, 16 USC Section 1801

The California Endangered Species Act (CESA) states that all native species of fishes, amphibians, reptiles, birds, mammals, invertebrates, and plants, and their habitats, threatened with extinction and those experiencing a significant decline which, if not halted, would lead to a threatened or endangered designation, will be protected, and preserved.

CESA mandates that state agencies should not approve projects that would jeopardize the continued existence of these threatened or endangered species if reasonable and prudent alternatives are available.

The California Department of Fish and Wildlife (CDFW) regulates activities related to fish, wildlife, and plants in California and is responsible for administering the California Endangered Species Act (CESA). CESA emphasizes early coordination to avoid potential affects to state listed species and to develop appropriate mitigation planning to offset loss of listed species.

Invasive Species

The primary laws governing invasive species are Executive Order (EO) 13112 and NEPA. EO 13112, signed February 3, 1999, directs all federal agencies to prevent and control the introduction of invasive species in a cost-effective and environmentally sound manner. The EO established the National Invasive Species Council (NISC), which comprises federal agencies and departments and a supporting Invasive Species Advisory Committee (ISAC) which includes state, local, and private entities. In 2016, NISC released an updated national Invasive Species Management Plan (National Invasive Species Council 2016-2018) that recommends objectives and measures to implement the EO and to prevent the introduction and spread of invasive species. The EO requires consideration of invasive species in NEPA analyses, including their identification and distribution, their potential impacts, and measures to prevent or eradicate them.

Affected Environment

A Natural Environment Study (NES) (Caltrans 2023c) was prepared for the project. Caltrans coordinated with fisheries biologists and water quality specialists, as well as agency personnel from USFWS, NMFS, USACE, CDFW, and Central Valley Regional Water Quality Control Board (CVRWQCB). See Chapter 3 for a summary of these coordination efforts and professional contacts.

The proposed project is located on SR 99 between PMs 6.04 and 7.06, approximately 6 miles north of the Sacramento and San Joaquin county line and within the Galt U.S. Geological Survey 7.5-minute quadrangle. The 27.81-acre Biological Study Area (BSA) is located within the Sacramento Valley. The climate is characterized as Mediterranean, with hot, dry summers and cool, wet winters.

The topography within the BSA is mostly flat. The BSA elevation ranges from approximately 30 feet to 40 feet. Land uses within the BSA and the surrounding area are primarily agricultural. The project is adjacent to the Cosumnes River Preserve.

The BSA supports land cover types that can be categorized as non-wetland vegetation communities (annual grassland, ruderal, and agriculture), wetland plant communities (freshwater marsh), and non-wetland drainage communities (ephemeral drainage and ditch). The majority of the BSA consists of annual grassland with wetlands.

Sensitive Natural Communities

Natural communities of special concern are habitats considered sensitive because of their high species of diversity, high productivity, unusual nature, limited distribution, or declining status. Local, state, and federal agencies consider these habitats important, and compensation for loss of sensitive communities is generally required by agencies. The CNDDB contains a current list of rare natural communities throughout the state. The USFWS considers certain habitats, such as riparian communities, important to wildlife; and the USACE and EPA consider stream habitats important for water quality and wildlife. Waters of the United States and Waters of the State are regulated by USACE and the Regional Water Boards, respectively. Research on sensitive species that could potentially occur within the BSA was conducted using the CDFW–CNDDB, California Native Plant Society (CNPS), and the USFWS official species lists. Based on the search results, 4 plant species and 13 animal species considered sensitive by the CDFW, CNPS and USFWS were identified as occurring within 5 miles of the BSA.

Wetlands and Other Waters

Under Section 404 of the Clean Water Act, Waters of the U.S. (WOTUS) include the following: territorial seas, coastal and inland waters, lakes, rivers, and streams that are navigable and their adjacent wetlands, tributaries to navigable waters and their adjacent wetlands, interstate waters and their tributaries including adjacent wetlands, and all Other Waters of the U.S. (intermittent and ephemeral streams). According to the State Water Resources Control Board, Waters of the State include any surface water or groundwater, including saline waters, within the boundaries of the state. Aquatic resources regulated by California Fish and Game Code Section 1600 et seq. include areas of bed, bank, and channel of watercourses, in addition to the lateral extent of riparian vegetation associated with habitat and hydrology.

The USACE and U.S. Environmental Protection Agency (U.S. EPA) jointly define wetlands as areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.

The BSA contains a freshwater emergent wetland that would typically be considered a Waters of the United States and Waters of the State. A wetland delineation is pending appropriate rainy conditions, and will define the acreage of Waters present within the BSA. The proposed project would result in placement of fill in these waterbodies. Accordingly,

Caltrans would comply with the Clean Water Act by obtaining a 404 Permit from the USACE–Sacramento District, and by obtaining a 401 Water Quality Certification from the CVRWQCB before discharging fill into, or excavating within, federally and state-regulated waters and wetlands.

Plant Species

The plant species are 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 on site. Based on the queries made to USFWS, NMFS, CNDDB (CDFW) databases, and the CNPS rare plant inventory, 4 special status plants were identified as potentially occurring within the Biological Study Area (BSA). However, those species were either not observed, the species exists outside of the elevation and/or geographical range of the BSA, or there is no suitable habitat within the study area or related BSA. No special status plant species were found to be present within the Environmental Study Limits (ESL).

Animal Species

Animals are 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 on site. Bat calls were observed coming from inside the southbound bridge and guano was observed underneath the southbound lane bridge. No bats were observed utilizing the abutment joints. The California Fish and Game Code (Section 4150) prohibits take of bats.

Native birds protected under the Migratory Bird Treaty Act (MBTA), and similar provisions under the California Fish and Game Code, currently nest or have the potential to nest within the BSA. During biological surveys, habitat was determined to be favorable to canopy, cavity, and structural nesting birds. Evidence of swallows (*Hirundo rustica*) nesting was present under the bridge structures within the BSA at Willow Slough.

There is also potential habitat for Giant garter snake (GGS) within the ESL and habitat for vernal pool fairy shrimp and vernal pool tadpole shrimp adjacent to the ESL.

Threatened and Endangered Species

The California Endangered Species Act (CESA) states that all native species of fishes, amphibians, reptiles, birds, mammals, invertebrates, and plants, and their habitats, threatened with extinction and those experiencing a significant decline which, if not halted, would lead to a threatened or endangered designation, will be protected, and preserved. CESA mandates that state agencies should not approve projects that would jeopardize the continued existence of these threatened or endangered species if reasonable and prudent alternatives are available.

The California Department of Fish and Wildlife regulates activities related to fish, wildlife, and plants in California and is responsible for administering CESA. CESA emphasizes early coordination to avoid potential affects to state listed species and to develop appropriate mitigation planning to offset loss of listed species.

The following special status wildlife species could potentially occur within the BSA and be affected by the proposed project:

- Giant garter snake (*Thamnophis gigas*)–Federal and State Threatened
- Vernal pool fairy shrimp (*Branchinecta lynchi*)–Federal Threatened
- Vernal pool tadpole shrimp (*Lepidurus packardi*)–Federal Endangered

In addition to the permanent and temporary losses of habitat, the proposed project could result in the disturbance, injury, and mortality of special status wildlife listed above. No impacts on special status fish would occur because no habitat exists within the project area.

Fleshy Owl's-clover *(Castilleja campestris* ssp. *succulenta*), a federally threatened species, was not identified within the BSA; therefore, is presumed absent. There would be no impact to Fleshy Owl's-clover.

Invasive Species

The proposed project would create additional temporary disturbed areas within the ESL during construction due to staging of materials and equipment and access to the construction area. Areas where temporary disturbance occurs would be more susceptible to colonization or spread by invasive plants. Introduction and spread of invasive plants would be minimized through the implementation of project Standard Measures and Best Management Practices (BMPs) (Section 1.6).

Environmental Consequences

This section evaluates potential effects of project construction activities on sensitive biological resources within the BSA.

Sensitive Natural Communities

Habitats 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 plants or animals occurring on-site. The BSA supports a freshwater emergent wetland, a natural community of special concern. The discussion of impacts to wetlands is presented in the Wetlands and Other Waters section below.

Wetlands and Other Waters

A freshwater emergent wetland occurs within the BSA under the median, which is where the new bridge is proposed to be built. The wetland also runs along the west side of the highway and is entirely encompassed by the temporary construction easement (TCE) area needed for proposed staging and access. At the time of completion of the NES, a wetland delineation had not yet been conducted as permission for access had not yet been received. However, a wetland delineation for water resources within the BSA will be conducted during the project 1-Phase, including on property outside the ROW, which contains the majority of wetlands within the BSA. Pending this wetland delineation, all work planned within TCE areas and bridge replacement areas are assumed to reside below the OHWM of the wetland.

The freshwater emergent wetland may be considered jurisdictional Waters of the United States and Waters of the State, pending the wetland delineation. The proposed project would result in placement of fill in these waterbodies. The freshwater emergent wetland in the median would be permanently impacted by 0.16 acres of earthen fill necessary for bridge support. The freshwater emergent wetland to the west of the highway would be temporarily impacted due to staging and access activities, in the amount of 1.66 acres. Therefore, Caltrans will comply with the Clean Water Act by obtaining a 404 Permit from the USACE–Sacramento District, and by obtaining a 401 Water Quality Certification from the CVRWQCB before discharging fill into, or excavating within, federally and state-regulated waters and wetlands.

Onsite restoration of Waters of the U.S. and State would be implemented to the greatest extent possible. However, some permanent impacts would be unavoidable due to the installation of the new southbound lane bridge. To compensate for 0.16 acres of permanent impacts to wetlands, Caltrans proposes to participate in the National Fish and Wildlife Foundation's Sacramento District California In-Lieu Fee Program.

Vegetation surrounding the wetlands is sparse, and no riparian vegetation was observed within either area of permanent or temporary impacts. No impacts to riparian vegetation are anticipated.

Plant Species

There were no special status plant species observed within the BSA during the 2023 survey season. The project is not anticipated to have any impacts to special status plant species.

Animal Species

Bats were observed inhabiting the southbound lane bridge. Due to demolition of the southbound bridge, the project may result in impacts to bats. However, it is anticipated the use of an exclusion device would prevent any impacts to bats.

Favorable bird nesting habitat would be affected by the demolition and reconstruction of the southbound bridge. Trees and vegetation would be removed throughout construction activities. Bridge work would occur throughout project activities. If these activities occur during the nesting season, active nests may be impacted, and the project could result in the disturbance, injury, or mortality of migratory birds.

Potential habitat for Giant garter snake (GGS) occurs within the ESL and habitat for vernal pool fairy shrimp and vernal pool tadpole shrimp exists adjacent to the ESL. Impacts to these species are discussed in the Threatened and Endangered Species section below.

No impacts on special status fish would occur because no habitat exists within the project area.

Threatened and Endangered Species

Giant Garter Snake

The giant garter snake (GGS) (*Thamnophis gigas*) is a federal and state threatened species. No GGS were observed within the BSA. Sparse aquatic vegetation reduces GGS' ability to hide within potential habitat. Drainage is ephemeral, which would make it difficult for GGS to inhabit Willow Slough in dry periods. Banks of the slough are 2:1 slopes and largely rocky material which could impede GGS' ability to emerge. The slough west of the highway, north of the bridge, was also dry with no embankment, which could also inhibit GGS' ability to inhabit the potential habitat. Willow Slough is only seasonally inundated and is dry most of the year. Therefore, no potentially suitable GGS habitat exists within the BSA. No critical habitat exists within the BSA.

If GGS is present in the action area during construction, take of the species could occur. Additionally, GGS and nests containing hatchlings could be crushed and killed during the movement of construction equipment in upland habitats. However, as mentioned previously, the project location is found in an area unlikely to be inhabited by GGS due to low quality of potential habitat; therefore, the potential for direct injury or mortality is not likely.

Per FESA, Caltrans has determined this project ***may affect, is not likely to adversely affect*** GGS. Due to absence of critical habitat, no effects to critical habitat are anticipated.

Per CESA, Caltrans has determined there would be ***no "take"*** of giant garter snake.

Vernal Pool Fairy Shrimp

Vernal pool fairy shrimp (*Branchinecta lynchi*) is a federally listed threatened species. While no vernal pools were observed within the BSA, a freshwater emergent wetland does occur within the BSA which connects to a vernal pool complex east of the BSA, outside the work area. No work is planned within vernal pools. Vernal pools receive irrigation runoff as their principal water source and hold water for shorter periods of time and are often seasonally inundated during short periods throughout the year. This hydroperiod would not support suitable conditions for vernal pool fairy shrimp reproduction. Vernal pool fairy shrimp has documented occurrences within 1 mile of the project action area (CDFW 2023; Caltrans 2023c (NES Chapter 6)).

Because the project consists of modifying an existing roadway with established drainage patterns for stormwater runoff, the project will not indirectly affect hydrology within adjacent habitat since the existing drainage patterns will be maintained. Indirect effects associated with potential sediment and chemical runoff during construction would also be avoided through implementation of Caltrans Standard Measures and Best Management Practices that include installation of sediment control devices and implementation of a spill response plan.

Per FESA, Caltrans has determined this project ***may affect, is not likely to adversely affect*** vernal pool fairy shrimp.

Vernal Pool Tadpole Shrimp

Vernal pool tadpole shrimp (*Lepidurus packardi*) is a federally listed endangered species and is one of three most commonly found large branchiopods occurring in the Central Valley. No vernal pools were observed within the BSA. However, a freshwater emergent wetland occurs within the BSA which connects to a vernal pool complex east of the BSA, outside the work area. No work is planned within vernal pools. This wetland receives irrigation runoff as their principal water source and holds water for shorter periods of time than vernal pools and are often seasonally inundated for short periods throughout the year. This hydroperiod would not support suitable conditions for vernal pool fairy shrimp reproduction. Vernal pool tadpole shrimp have documented occurrences within 1 mile of project action area (CDFW 2023; Caltrans 2023c (NES Chapter 6)).

Because the project consists of modifying an existing roadway with established drainage patterns for stormwater runoff, it is presumed that if these drainage patterns are maintained the project will not indirectly affect hydrology within adjacent habitat. Indirect effects associated with potential sediment and chemical runoff during construction would also be avoided and minimized through implementation of Caltrans Standard Measures and Best Management Practices that include installation of sediment control devices and implementation of a spill response plan.

Per FESA, Caltrans has determined this project ***may affect, is not likely to adversely affect*** vernal pool tadpole shrimp.

Invasive Species

The proposed project would create additional temporary disturbed areas within the ESL during construction due to staging of materials and equipment and access to the construction area. Areas where temporary disturbance occurs would be more susceptible to colonization spread by invasive plants. Introduction and spread of invasive plants would be minimized through the implementation of Caltrans Standard Measures and Best Management Practices.

Avoidance, Minimization and Mitigation Measures

Implementation of Caltrans Standard Measures and Best Management Practices would avoid and minimize impacts from the proposed project.

Sensitive Natural Communities / Wetlands and Other Waters

Caltrans would implement appropriate Caltrans Standard Measures and Best Management Practices to minimize adverse effects to water quality, aquatic habitat, and aquatic species. The project has been designed to minimize temporary and permanent impacts to Willow Slough. Project avoidance and minimization measures, as well as BMPs, have been incorporated into the design to minimize effects of construction activities on the channel. The project would comply with the following avoidance and minimization measures:

- Prior to initiating construction, an ESA fence would be installed along the construction limits to prevent encroachment into sensitive areas adjacent to the construction site that are not targeted for clearing.
- Construction would be limited to the smallest practical footprint to minimize temporary, indirect, and any permanent impacts to jurisdictional wetlands and Waters of the United States confirmed with the wetland delineation.
- Work in the wetland would likely be limited to the driest/low flow season (approximate dates of May 1–October 15) pursuant to environmental permits.

Plant Species

There were no special status plant species observed within the BSA during the 2023 survey season. As the project is not anticipated to have any impacts to special status plant species, avoidance, minimization, and mitigation measures are not proposed.

Animal Species

Bats were observed within the ESL, inhabiting the southbound lane bridge. The use of an exclusion device would prevent any impacts to bats.

Favorable bird nesting habitat, including vegetation, bridge cavity, and bridge structural sections, would be affected by the demolition and reconstruction of the southbound bridge. Caltrans Standard Measures and Best Management Practices (Section 1.6) would be implemented to avoid and minimize impacts to migratory birds. The following additional measures will be utilized to ensure protection of migratory nesting birds:

- To ensure compliance with the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code, vegetation removal and initiation of construction activities should not occur during the nesting season (defined as February 1–September 30). If this is not possible and vegetation removal or initiation of work will occur during the nesting season, a pre-construction survey will be required. The pre-construction survey shall be performed by a qualified biologist to determine the presence of nesting birds and ensure active nests are not directly or indirectly impacted during construction. The pre-construction survey area will include the limits of the project impact area plus a 500-foot buffer. If work is planned to begin during the nesting season (February 1–September 30), all vegetation removal shall be completed within 5 days of the nesting survey where the survey determines no active nests are present. If the nest of a protected bird is found, the perimeter shall be flagged, and a qualified biologist will coordinate with USFWS and CDFW to determine an appropriate buffer distance from construction to ensure protection of the nest. The contractor shall stop work in the nesting area and is prohibited from conducting work that could disturb the nesting birds until the buffer is established. The nest shall remain in the protected area until the biologist has determined that nesting activities are complete.
- Construction activities shall not disturb nesting swallows. A qualified biologist shall coordinate with CDFW and USFWS to determine what construction activities, if any, can occur once nesting activities commence.
- A Bird Exclusion Plan would be prepared by a qualified biologist and implemented prior to construction. Exclusion devices would be designed so they would not trap or entangle birds or bats. Exclusion devices would be installed outside of the breeding season (October 1 through January 31) to eliminate the re-occupancy of existing structures by migratory bird species that may attempt to nest on the structure during construction. On structures or parts of structures where it is not feasible to install bird

exclusion devices, partially constructed and unoccupied nests within the construction area would be removed and disposed of on a regular basis throughout the breeding season (February 1 through September 30 with biologist discretion) to prevent their occupation. Nest removal would be repeated weekly under guidance of a qualified biologist to ensure nests are inactive prior to removal.

Threatened and Endangered Species

Giant Garter Snake

In addition to implementing Caltrans Standard Measures and Best Management Practices throughout the proposed project for the duration of construction, including erosion and sediment control, Caltrans has proposed the following measures to minimize effects to GGS. The following site restrictions be implemented to avoid or minimize effects on listed species and their habitats:

- Routes and boundaries of road work will be clearly marked before initiation of construction or grading.
- Hazardous materials, such as fuels, oils, and solvents, will be stored in sealable containers in a designated location that is at least 100 feet from wetlands and aquatic habitats.
- Before construction activities begin, the contractor, in consultation with a USFWS and CDFW qualified biologist, and in accordance with the project plans, will clearly demarcate environmentally sensitive areas, if any, adjacent to the project footprint. Temporary exclusion fencing will be installed along the perimeter of all Environmentally Sensitive Areas that are to be avoided so as not to be disturbed by construction activities. They will remain in place throughout the duration of construction and will be fully maintained and inspected daily when project activities are underway. Repairs to the fencing will be made within 24 hours of identifying the need for repair. Upon completion of construction, the fencing will be completely removed.
- All construction equipment will be restricted to operating within the designated work areas, staging areas, and access routes. The limits of designated work areas and staging areas (i.e., project footprint) will be clearly marked before beginning construction.

- Construction activity will be conducted between May 1 and October 1, which is the active season for GGS, in order to minimize impacts to the species. Snake exclusion fencing will be placed around the action area (fenced area) before construction during the active period for GGS (May 1–October 1) and be maintained throughout the construction period until completion of the project.
- On-site monitoring during ground disturbance activities of the project will be conducted by a USFWS/CDFW-approved biologist. If GGS is encountered during construction, activities will cease until appropriate corrective measures have been completed or it has been determined that the GGS will not be harmed. Any sightings and any incidental take will be reported to the USFWS and CDFW immediately by telephone at (916) 414-6600 or (916) 358-2900, respectively, and e-mail or written letter addressed to the Chief, Sacramento Division (USFWS) or North Central Region (CDFW), within one working day of the incident.
- A Worker Environmental Awareness Training Program for construction personnel will be conducted by USFWS/CDFW-approved biologist for all construction workers including contractors, prior to the start of construction activities. This training instructs workers to recognize GGS and their habitats.
- Twenty-four hours prior to construction activities, the project area will be surveyed for GGS by a USFWS/CDFW-approved biologist. Surveys of the project area should be repeated if a two-week or greater lapse in construction activity occurs.
- The canals and rice fields adjacent to the project area will be flagged and designated an Environmentally Sensitive Area during the construction period.
- Upon completion of the project, all disturbed areas within the action area will be revegetated using native plant species, and post-monitoring work and photographs will be reported to USFWS and CDFW showing that temporary impacts have been restored to pre-construction conditions.
- At the end of each work day, Caltrans shall place an escape ramp at each end of the open trench. This will allow any animals that may have been entrapped in the trench overnight to climb out. The escape ramp may be constructed of dirt fill, wood planking, or other suitable material and placed at an angle no greater than 30 degrees.

Vernal Pool Fairy Shrimp

Implementation of the following measures would ensure the proposed project minimizes effects on vernal pool fairy shrimp within and adjacent to the construction area. Additional avoidance and minimization measures may be agreed upon during Section 7 consultation.

- ***Measure 1: Install Fencing and/or Flagging to Protect Sensitive Biological Resources***
    - Prior to construction, high-visibility orange construction fencing or flagging, as depicted on final project layouts, will be installed along the perimeter of the work area adjacent to vernal pools. Temporary ESA fencing will be maintained throughout the duration of the construction period. If the fencing is removed, damaged, or otherwise compromised during the construction period, construction activities will cease until the fencing is repaired or replaced. The project's special provisions package will provide clear language regarding acceptable fencing material, installation, and maintenance requirements. All temporary fencing will be removed upon completion of construction.

- ***Measure 2: Conduct Mandatory Environmental Awareness Training for Construction Personnel***
    - Before any work occurs within the project limits, including grading and vegetation removal (grubbing), mandatory Contractor/Worker Environmental Awareness Training will be held for construction personnel. The Awareness Training will be provided to all construction personnel (contractors and subcontractors) to brief them on the need to avoid impacts to sensitive biological resources (e.g., wetlands, special status species, and nesting birds) adjacent to construction areas and the penalties for not complying with applicable state and federal laws and permit requirements. The biologist will inform all construction personnel about the life history and habitat requirements of special status species with potential for occurrence onsite, the importance of maintaining habitat, and the terms and conditions of applicable project permits. Proof of this instruction will be submitted to Caltrans and other overseeing agencies (i.e., CDFW, USFWS), as appropriate.

      The Environmental Awareness Training will also cover general restrictions and guidelines that must be followed by all construction personnel to reduce or avoid effects on sensitive biological resources during project construction. General

restrictions and guidelines that must be followed by construction personnel are listed below.

- Project-related vehicles will observe the posted speed limit on hard-surfaced roads and a 10 mile-per-hour speed limit on unpaved roads or access areas during travel within the project limits.
- Project-related vehicles and construction equipment will restrict off-road travel to the designated construction area.
- Vegetation clearing and construction operations will be limited to the minimum necessary in areas of temporary access to work areas and staging.
- All food-related trash will be disposed of in closed containers and removed from the project site at least once a week during the construction period. Construction personnel will not feed or otherwise attract wildlife to the project site.
- To prevent possible resource damage from hazardous materials (such as motor oil or gasoline), construction personnel will not service vehicles or construction equipment outside designated staging areas.

- ***Measure 3: Retain a Qualified Biologist to Conduct Periodic Monitoring During Construction in Sensitive Habitats***
  - The contractor will retain a qualified biologist to monitor all construction activities that involve ground disturbance (e.g., vegetation removal, grading, excavation) or adjacent to ESAs (e.g., wetlands, streams, special status species habitat, and active bird nests). At minimum, the monitor will conduct weekly site visits and will monitor construction activities in the vicinity of sensitive habitat for a minimum of 2 hours. The purpose of the monitoring is to ensure that measures identified in this report are properly implemented to avoid and minimize effects on sensitive biological resources and to ensure the project complies with all applicable permit requirements and agency conditions of approval. The biologist will ensure that fencing around ESAs remains in place during construction and that no construction personnel, equipment, or runoff of sediment from the construction area enters ESAs. The monitor will complete daily logs, and a final monitoring report will be prepared at the end of each construction season to be submitted to Caltrans and other overseeing agencies (i.e., CDFW, USFWS), as appropriate.

- ***Measure 4: Avoid and Minimize Potential Indirect Impacts on Habitat for Vernal Pool Branchiopods and Other Vernal Pool Species***
    - The following avoidance and minimization efforts will be implemented prior to and during construction adjacent to protect habitat for vernal pool fairy shrimp, vernal pool tadpole shrimp, and other vernal pool species outside the project footprint.
        - Ground disturbance within 250 feet of suitable vernal pool fairy shrimp and vernal pool tadpole shrimp habitat (i.e., vernal pools) will be avoided from the first day of the first significant rain (1 inch or greater) until June 1, or until suitable wetlands remain dry for 72 hours and no significant rain is forecast on the day of such ground disturbance.
        - Consistent with Measure 1 (*Install Fencing and/or Flagging to Protect Sensitive Biological Resources),* a qualified biologist will guide the installation of exclusion fencing prior to the start of ground-disturbing activities (including staging, grading, and vegetation removal). The exclusion fencing will be installed along the edge of the construction limits between the work area and aquatic resources to be avoided. The exclusion fencing will consist of orange construction barrier and erosion control fencing or combination fencing and will be installed by the construction contractor. The erosion control fencing will be buried a minimum of 6 inches to prevent sediment runoff into adjacent wetlands.
        - No herbicide will be applied within 100 feet of aquatic habitat, except when applied to cut stumps or frilled stems, or injected into stems. No broadcast applications will be used.

Vernal Pool Tadpole Shrimp

For measures that apply to vernal pool tadpole shrimp, please refer to the avoidance and minimization measures for vernal pool fairy shrimp.

Invasive Species

The proposed project would create additional temporary disturbed areas within the ESL. Introduction and spread of invasive plants would be minimized through the avoidance and minimization measures and implementation of Caltrans Standard Measures and BMPs listed in Section 1.6.

Wetlands Only Practicable Alternative Finding

Executive Order 11990, Protection of Wetlands, established a national policy to avoid adverse effects on wetlands wherever there is a practicable alternative.

The 'Build' and 'No-Build' alternatives were analyzed. It was determined that a 'No-Build' alternative would not meet the purpose and need of the project. There is no practicable alternative to the proposed project that would avoid impacts to wetlands due to the location and scope of the project (bridge replacement).

The project has been designed to minimize temporary and permanent impacts. Project avoidance and minimization measures, as well as BMPs, have been incorporated into the design to minimize effects of construction activities on the channel. The following measures would be implemented to minimize harm:

- Prior to initiating construction, an ESA fence would be installed along the construction limits to prevent encroachment into sensitive areas adjacent to the construction site that are not targeted for clearing.
- Construction would be limited to the smallest practical footprint to minimize temporary, indirect, and any permanent impacts to jurisdictional wetlands and Waters of the United States confirmed with the wetland delineation.
- Work in the wetland would likely be limited to the driest/low flow season (approximate dates of May 1–October 15) pursuant to environmental permits.

Based on the above considerations, it is determined that there is no practicable alternative to the proposed construction in wetlands and that the proposed action includes all practicable measures to minimize harm to wetlands that may result from such use.

Discussion of CEQA Environmental Checklist Question 2.4(a)—Biological Resources

a) Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife, U.S. Fish and Wildlife Service, or NOAA Fisheries/NMFS?

Less Than Significant Impact. Caltrans has determined the project would have a *Less Than Significant Impact* on species identified as candidate, sensitive or special status species based on the following:

Plant Species

There were no special status plant species observed within the BSA during the 2023 survey season. The project is not anticipated to have any impacts to special status plant species.

Animal Species

With the implementation of a bat exclusionary device to prevent bats from using the bridge, no impacts are expected to occur.

With the implementation of Caltrans Standard Measures and Best Management Practices (Section 1.6) and avoidance and minimization measures listed above in Section 2.4, impacts to migratory birds will be avoided or minimized.

No impacts on special status fish would occur because no habitat exists within the project area.

Threatened and Endangered Species

Giant Garter Snake

The proposed project is not expected to have an adverse effect on GGS. Avoidance measures will be implemented during project construction to avoid and minimize any impacts to GGS, as discussed in Section 2.4 above.

Vernal Pool Fairy Shrimp

The proposed project is not expected to have an adverse effect on vernal pool fairy shrimp. Avoidance measures will be implemented during project construction to avoid and minimize any impacts, as discussed in Section 2.4 above.

Vernal Pool Tadpole Shrimp

The proposed project is not expected to have an adverse effect on vernal pool tadpole shrimp. Avoidance measures will be implemented during project construction to avoid and minimize any impacts, as discussed in Section 2.4 above.

Discussion of CEQA Environmental Checklist Question 2.4(b)—Biological Resources

b) Would the project 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. Caltrans has determined the project would have a *Less Than Significant Impact* on any riparian habitat or other sensitive natural community based on the following:

As discussed in Section 2.4 above, the proposed project would have temporary and permanent impacts to a sensitive natural community consisting of a freshwater emergent wetland. The proposed project would result in the permanent impact of 0.16 acres of earthen fill necessary for bridge support and the temporary impact of 1.66 acres due to staging and access activities. The minor amount of impacts are not considered significant.

Caltrans will comply with the Clean Water Act by obtaining a 404 Permit from the USACE–Sacramento District, and by obtaining a 401 Water Quality Certification from the CVRWQCB before discharging fill into, or excavating within, federally and state-regulated waters and wetlands.

With the implementation of Caltrans Standard Measures and Best Management Practices, along with the additional avoidance and minimization measures discussed in Section 2.4, less than significant impacts would occur. Onsite restoration would be implemented to the greatest extent possible. However, some permanent impacts would be unavoidable due to the installation of the new southbound lane bridge. To compensate for 0.16 acres of permanent impacts to wetlands, Caltrans proposes to participate in the National Fish and Wildlife Foundation's Sacramento District California In-Lieu Fee Program.

Discussion of CEQA Environmental Checklist Question 2.4(c)—Biological Resources

c) Would the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, march, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Less Than Significant Impact. Caltrans has determined the project would have a *Less Than Significant Impact* on state or federally protected wetlands based on the following:

As discussed earlier in this section, the proposed project would have temporary and permanent impacts to a freshwater emergent wetland that is assumed to be jurisdictional Waters of the United States and Waters of the State, pending a wetland delineation.

The proposed project would result in the permanent impact of 0.16 acres of earthen fill necessary for bridge support and would have temporary impacts of 1.66 acres due to staging and access activities. The minor amount of impacts are not considered to be significant.

Caltrans will comply with the Clean Water Act by obtaining a 404 Permit from the USACE–Sacramento District, and by obtaining a 401 Water Quality Certification from the CVRWQCB before discharging fill into, or excavating within, federally and state-regulated waters and wetlands.

With the implementation of Caltrans Standard Measures and Best Management Practices, along with the additional avoidance and minimization measures discussed in Section 2.4, less than significant impacts would occur. Onsite restoration would be implemented to the greatest extent possible. However, some permanent impacts would be unavoidable due to the installation of the new southbound lane bridge. To compensate for 0.16 acres of permanent impacts to wetlands, Caltrans proposes to participate in the National Fish and Wildlife Foundation's Sacramento District California In-Lieu Fee Program.

Discussion of CEQA Environmental Checklist Question 2.4(d)—Biological Resources

d) Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

No Impact. Caltrans has determined the project would have no impact relative to CEQA Environmental Checklist Question 2.4(d) based on the scope, description, and location of the proposed project, as well as the Natural Environment Study dated December 2023 (Caltrans 2023c).

Discussion of CEQA Environmental Checklist Question 2.4(e)—Biological Resources

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

No Impact. Caltrans has determined the project would have no impact relative to CEQA Environmental Checklist Question 2.4(e) based on the scope, description, and location of the proposed project, as well as the Natural Environment Study dated December 2023 (Caltrans 2023c).

Discussion of CEQA Environmental Checklist Question 2.4(f)—Biological Resources

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

No Impact. Caltrans has determined the project would have no impact relative to CEQA Environmental Checklist Question 2.4(f) based on the scope, description, and location of the proposed project, as well as the Natural Environment Study dated December 2023 (Caltrans 2023c).

2.5 Cultural Resources

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

The "No Impact" determinations in this section are based on the scope, description, and location of the proposed project, as well as the *Historic Property Survey Report* (Caltrans 2023b), *Archaeological Survey Report/Extended Phase I Report* (Caltrans 2023i), and *Historical Resource Evaluation Report* (Caltrans 2023j), which determined a negative finding for cultural resources in the project area. Response to disturbed human remains are addressed as part of the Standard Measures and Best Management Practices (Section 1.6), in the event human remains are discovered during construction.

2.6 Energy

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

"No Impact" determinations in this section are based on the scope, description, and location of the proposed project, as well as the *Air Quality, GHG, and Energy Memo* dated March 30, 2023 (Caltrans 2023a). Implementation of Caltrans Standard Measures and Best Management Practices would avoid unnecessary consumption of energy resources during the construction of the bridge (Section 1.6). The project TMS elements (including a Type III-AF service equipment enclosure, a high-speed weigh-in-motion system controller and cabinet, and closed-circuit television camera on a 90-foot-tall pole) would help inform travelers of congested areas ahead and alternate routes to consider taking to reduce instances of idling vehicles in congestion. The project is consistent with the Sacramento Area Council of Governments (SACOG) Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) and regional energy plans.

2.7 Geology and Soils

Question	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project: a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.				✓
ii) Strong seismic ground shaking?				✓
iii) Seismic-related ground failure, including liquefaction?				✓
iv) Landslides?				✓
Would the project: b) Result in substantial soil erosion or the loss of topsoil?				✓
Would the project: c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?				✓
Would the project: 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?				✓

Question	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project: e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?				✓
Would the project: f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?				✓

"No Impact" determinations in this section are based on the scope, description, and location of the proposed project, as well as the *California Geological Surveys maps, U.S. Geological Survey Landside Inventory, Department of Conservation/Caltrans Highway Corridor Landslide Hazard Mapping program* (CDC 2016-2018*), California Geological Survey, and the District Preliminary Geotechnical Report* (Caltrans 2024). The proposed project location is not on a known fault. The new bridge would be built to current seismic standards anticipated to minimize adverse effects from seismic ground shaking. The project location is not in a liquefaction zone and is not in terrain conducive to landslides. The project includes drainage features and standard Best Management Practices for the operation of the highway to avoid soil erosion due to stormwater runoff. The bridge design and foundation are planned with the geologic make-up considered with recommendations to prevent instability. The project is not located on expansive soils.

2.8 Greenhouse Gas Emissions

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

Climate Change

Climate change refers to long-term changes in temperature, precipitation, wind patterns, and other elements of the Earth's climate system. The Intergovernmental Panel on Climate Change, established by the United Nations and World Meteorological Organization in 1988, is devoted to greenhouse gas (GHG) emissions reduction and climate change research and policy. Climate change in the past has generally occurred gradually over millennia, or more suddenly in response to cataclysmic natural disruptions. The research of the Intergovernmental Panel on Climate Change and other scientists over recent decades, however, has unequivocally attributed an accelerated rate of climatological changes over the past 150 years to GHG emissions generated from the production and use of fossil fuels.

Human activities generate GHGs consisting primarily of carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), tetrafluoromethane, hexafluoroethane, sulfur hexafluoride (SF_6), and various hydrofluorocarbons (HFCs). CO_2 is the most abundant GHG. While CO_2 is a naturally occurring and necessary component of Earth's atmosphere, fossil-fuel combustion is the main source of additional, human-generated CO_2 that is the main driver of climate change. In the U.S. and in California, transportation is the largest source of GHG emissions, mostly CO_2.

The impacts of climate change are already being observed in the form of sea level rise, drought, more intense heat, extended and severe fire seasons, and historic flooding from changing storm patterns. Both mitigation and adaptation strategies are necessary to address these impacts. The most important mitigation strategy is to reduce GHG emissions. In the context of climate change (as distinct from CEQA and NEPA), "mitigation" involves actions to reduce GHG emissions or to enhance the "sinks" that store them (such as forests and soils) to lessen adverse impacts. "Adaptation" is planning for and responding to impacts to reduce vulnerability to harm, such as by adjusting transportation design standards to withstand more intense storms, heat, and higher sea levels. This analysis will include a discussion of both in the context of this transportation project.

Regulatory Setting

For a full list of laws, regulations, and guidance related to climate change (GHGs and adaptation), please refer to Caltrans' Standard Environmental Reference (SER), Chapter 16, Climate Change.

FEDERAL

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

The National Environmental Policy Act (NEPA) (42 United States Code [USC] Part 4332) requires federal agencies to assess the environmental effects of their proposed actions prior to making a decision on the action or project. In January 2023, the White House Council on Environmental Quality (CEQ) issued updated and expanded interim National Environmental Policy Act Guidance on Consideration of Greenhouse Gas Emissions and Climate Change (88 Fed. Reg. 1196) (CEQ NEPA GHG Guidance), in accordance with EO 14057, *Catalyzing Clean Energy Industries and Jobs Through Federal Sustainability*, 86 FR 70935 (December 13, 2021) and EO 14008, *Tackling the Climate Crisis at Home and Abroad*. The CEQ guidance does not establish numeric thresholds of significance, but emphasizes quantifying reasonably foreseeable lifetime direct and indirect emissions whenever possible. This guidance also emphasizes resilience and environmental justice in project-level climate change and GHG analyses.

The Federal Highway Administration (FHWA) recognizes the threats that extreme weather, sea level change, and other changes in environmental conditions pose to valuable transportation infrastructure and those who depend on it. FHWA therefore supports a sustainability approach that assesses vulnerability to climate risks and incorporates resilience into planning, asset management, project development and design, and operations and maintenance practices (FHWA 2022). This approach encourages planning for sustainable highways by addressing climate risks while balancing environmental, economic, and social values— "the triple bottom line of sustainability" (FHWA n.d.). Program and project elements that foster sustainability and resilience also support economic vitality and global efficiency, increase safety and mobility, enhance the environment, promote energy conservation, and improve the quality of life.

Early efforts by the federal government to improve fuel economy and energy efficiency to address climate change and its associated effects include The Energy Policy and Conservation Act of 1975 (42 USC Section 6201); and Corporate Average Fuel Economy (CAFE) Standards. The U.S. Department of Transportation's National Highway Traffic and Safety Administration (NHTSA) sets and enforces corporate average fuel economy (CAFE) standards for on-road motor vehicles sold in the United States (NHTSA 2022). The Environmental Protection Agency (U.S. EPA) calculates average fuel economy levels for manufacturers, and also sets related GHG emissions standards for vehicles under the Clean Air Act (CAA). Raising CAFE standards leads automakers to create a more fuel-efficient fleet, which improves our nation's energy security, saves consumers money at the pump, and reduces GHG emissions (U.S. DOT 2014). These standards are periodically updated and published through the federal rulemaking process.

STATE

California has been innovative and proactive in addressing GHG emissions and climate change by passing multiple Senate and Assembly bills and executive orders (EOs).

In 2005, EO S-3-05 initially set a goal to reduce California's GHG emissions to 80 percent below year 1990 levels by 2050, with interim reduction targets. Later EOs and Assembly and Senate bills refined interim targets and codified the emissions reduction goals and strategies. The California Air Resources Board (ARB) was directed to create a climate change scoping plan and implement rules to achieve "real, quantifiable, cost-effective reductions of greenhouse gases." Ongoing GHG emissions reduction was also mandated in Health and Safety Code (H&SC) Section 38551(b). In 2022, the California Climate Crisis Act was passed, establishing state policy to reduce statewide human- caused GHG emissions by 85

percent below 1990 levels, achieve net zero GHG emissions by 2045, and achieve and maintain negative emissions thereafter.

Beyond GHG reduction, the State maintains a climate adaptation strategy to address the full range of climate change stressors, and passed legislation requiring state agencies to consider protection and management of natural and working lands as an important strategy in meeting the state's GHG reduction goals.

Environmental Setting

The proposed project is in a rural area, with a primarily agricultural economy. SR 99 extends over 400 miles through California's San Joaquin and Sacramento valleys. The highway links over 11 urbanized communities in 13 counties and provides critical connections between Chico, Yuba City, Sacramento, and Stockton. SR 99 is the main transportation route to and through the area for both passenger and commercial vehicles. SR 99 has high truck volumes with significant increases in truck traffic during peak agricultural seasons. The SACOG MTP/SCS guides transportation and housing development in the project area.

GHG INVENTORIES

A GHG emissions inventory estimates the amount of GHGs discharged into the atmosphere by specific sources over a period of time. Tracking annual GHG emissions allows countries, states, and smaller jurisdictions to understand how emissions are changing and what actions may be needed to attain emission reduction goals. U.S. EPA is responsible for documenting GHG emissions nationwide, and the CARB does so for the state of California, as required by H&SC Section 39607.4. Cities and other local jurisdictions may also conduct local GHG inventories to inform their GHG reduction or climate action plans.

NATIONAL GHG INVENTORY

The annual GHG inventory submitted by the U.S. EPA to the United Nations provides a comprehensive accounting of all human-produced sources of GHGs in the United States. Total national GHG emissions from all sectors in 2021 were 5,586.0 million metric tons (MMT), factoring in deductions for carbon sequestration in the land sector. (Land Use, Land Use Change, and Forestry provide a carbon sink equivalent to 12% of total U.S. emissions in 2021 [U.S. EPA 2023a].) While total GHG emissions in 2021 were 17% below 2005 levels, they increased by 6% over 2020 levels. Of these, 79.4% were CO_2, 11.5% were CH_4, and 6.2% were N_2O; the balance consisted of fluorinated gases. From 1990 to 2021, CO_2 emissions decreased by only 2% (U.S. EPA 2023a).

The transportation sector's share of total GHG emissions increased to 28% in 2021 and remains the largest contributing sector (Figure 3). Transportation fossil fuel combustion accounted for 92% of all CO_2 emissions in 2021. This is an increase of 7% over 2020, largely due to the rebound in economic activity following the COVID-19 pandemic (U.S. EPA 2023a, 2023b).

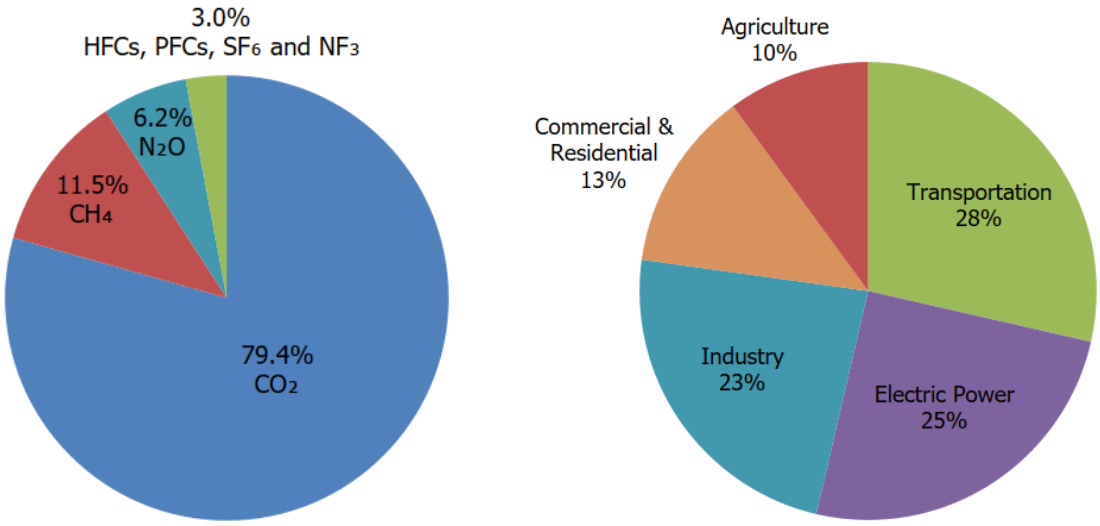


Figure 3. U.S. 2021 Greenhouse Gas Emissions

(Source: U.S. EPA 2023b)

STATE GHG INVENTORY

The CARB collects GHG emissions data for transportation, electricity, commercial/ residential, industrial, agricultural, and waste management sectors each year. It then summarizes and highlights major annual changes and trends to demonstrate the state's progress in meeting its GHG reduction goals. Overall statewide GHG emissions declined from 2000 to 2020 despite growth in population and state economic output (Figure 4) (CARB 2022a).

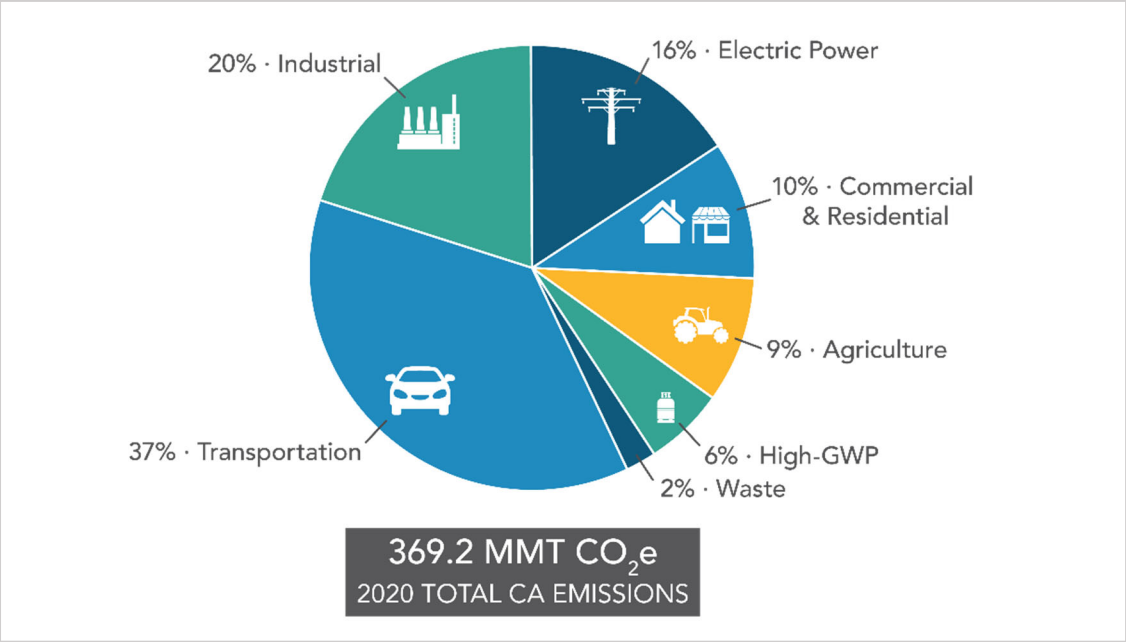


Figure 4. California 2020 Greenhouse Gas Emissions by Economic Sector

(Source: CARB 2022a)

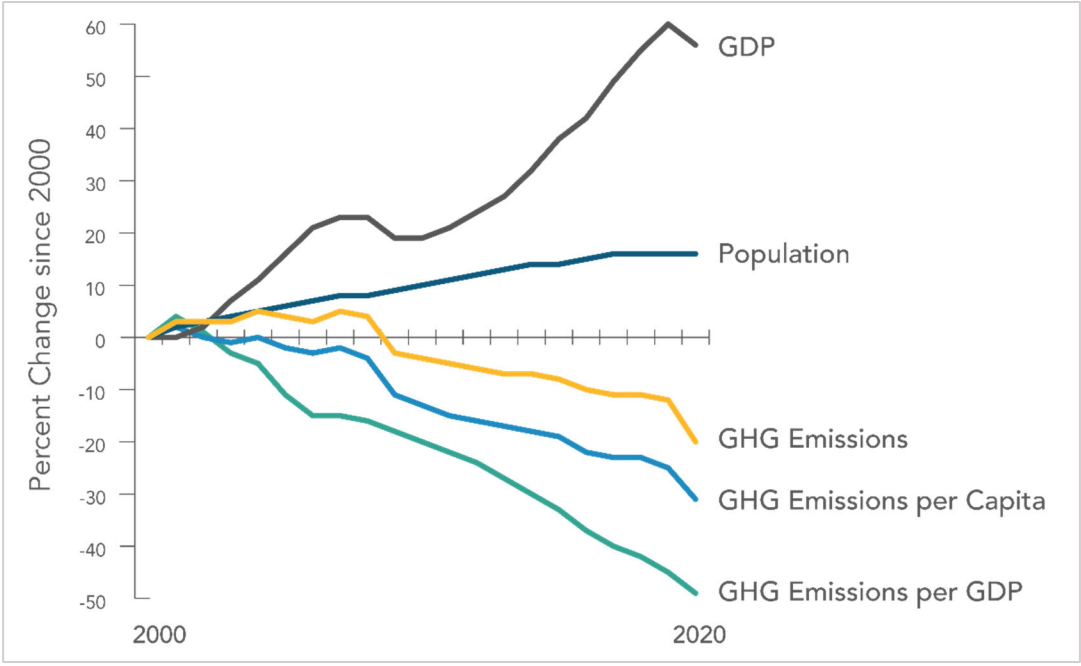


Figure 5. Change in California Gross Domestic Product (GDP), Population, and GHG Emissions since 2000

(Source: CARB 2022a)

AB 32 required the CARB to develop a Scoping Plan that describes the approach California will take to achieve the goal of reducing GHG emissions to 1990 levels by 2020, and to update it every 5 years. The AB 32 Scoping Plan and the subsequent updates contain the main strategies California will use to reduce GHG emissions. The CARB adopted the first scoping plan in 2008 (CARB 2008). The second updated plan, California's 2017 Climate Change Scoping Plan, adopted on December 14, 2017, reflects the 2030 target established in EO B-30-15 and SB 32. The *2022 Scoping Plan for Achieving Carbon Neutrality,* adopted September 2022, assesses progress toward the statutory 2030 reduction goal and defines a path to reduce human-caused emissions to 85 percent below 1990 levels and achieve carbon neutrality no later than 2045, in accordance with AB 1279 (CARB 2022b).

REGIONAL PLANS

As required by *The Sustainable Communities and Climate Protection Act of 2008*, the CARB sets regional GHG reduction targets for California's 18 Metropolitan Planning Organizations (MPOs) to achieve through planning future projects that will cumulatively achieve those goals, and reporting how they will be met in the Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). Targets are set at a percent reduction of passenger vehicle GHG emissions per person from 2005 levels. The proposed project is included in the SACOG RTP/SCS. The regional reduction target for SACOG is 19 percent by 2035 (CARB 2022c).

Table 3. Regional and Local Greenhouse Gas Reduction Plans

Title	GHG Reduction Policies or Strategies
2035 Sacramento Area Council of Governments (SACOG) Regional Transportation Plan (SACOG 2012)	• Increasing the availability of a variety of land uses and densities that support the attractiveness of active transportation and transit. • Increasing the capacity of existing roadways and interchanges. • Promoting commute alternatives that remove vehicles from the road (e.g., telecommuting, bicycling, transit); and, • Implementing bypasses that move traffic around congested areas and/or new roadways that connect growing residential areas to jobs.

Title	GHG Reduction Policies or Strategies
SACOG Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS) for Sacramento, Yolo, Yuba, Sutter, Placer, and El Dorado counties (adopted November 2019)	• Transit oriented development • Complete Streets • Innovative Transportation Demand Management (TDM) programs • Build and maintain a safe resilient and multimodal transportation system • Implement pilot projects aimed at micro transit and micro mobility
Sacramento County Air Pollution Control District Planning & Monitoring Sustainability	• Improve the air quality in the Sacramento County Region by obtaining Ambient Air Quality Standards for public health • Reduce greenhouse gas (GHG) emissions by monitoring facilities and verifying compliance to meet AB 32 goals • Reduce particulate matter and improve outdoor air quality from wood burning appliances • Reduce criteria air pollutants from mobile sources and other non-regulated sources

Project Analysis

GHG emissions from transportation projects can be divided into those produced during operation of the State Highway System (SHS) (operational emissions) and those produced during construction. The primary GHGs produced by the transportation sector are CO_2, CH_4, N_2O, and HFCs. CO_2 emissions are a product of burning gasoline or diesel fuel in internal combustion engines, along with relatively small amounts of CH_4 and N_2O. A small amount of HFC emissions related to refrigeration is also included in the transportation sector. (GHGs differ in how much heat each traps in the atmosphere, called global warming potential, or GWP. CO_2 is the most important GHG, so amounts of other gases are expressed relative to CO_2, using a metric called "carbon dioxide equivalent", or CO_2e. The global warming potential of CO_2 is assigned a value of 1, and the GWP of other gases is assessed as multiples of CO_2.)

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

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

Operational Emissions

The purpose of the proposed project is to bring the southbound Willow Slough Bridge to current design standards, maintain mainline geometry, provide sufficient shoulder space, and install TMS elements (including a Type III-AF service equipment enclosure, a high-speed weigh-in-motion system controller and cabinet, and closed-circuit television camera on a 90-foot-tall pole) to better capture traffic data and assist with corridor capacity management plans. The project would not increase vehicle capacity and would not increase the number of travel lanes on SR 99; no increase in vehicle miles traveled (VMT) would occur. While some GHG emissions during the construction period would be unavoidable, no increase in operational GHG emissions is expected.

Construction Emissions

Construction GHG emissions would result from material processing and transportation, on-site 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.

Use of long-life pavement, improved Transportation Management Plans, and changes in materials can also help offset emissions produced during construction by allowing longer intervals between maintenance and rehabilitation activities.

Construction is expected to begin in 2025 and last approximately 200 working days. The proposed project would result in generation of short-term construction-related GHG emissions. Construction GHG emissions consist of emissions produced because of material processing, emissions produced by on-site construction equipment, and emissions arising from traffic delays and detours due to construction. These emissions would be generated at different levels throughout the construction phase.

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

CEQA Conclusion

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

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

Greenhouse Gas Reduction Strategies

STATEWIDE EFFORTS

In response to Assembly Bill 32, the Global Warming Solutions Act, California is implementing measures to achieve emission reductions of GHGs that cause climate change. Climate change programs in California are effectively reducing GHG emissions from all sectors of the economy. These programs include regulations, market programs, and incentives that will transform transportation, industry, fuels, and other sectors, to take California into a sustainable, low-carbon and cleaner future, while maintaining a robust economy (CARB 2022c).

Major sectors of the California economy, including transportation, will need to reduce emissions to meet 2030 and 2050 GHG emissions targets. The Governor's Office of Planning and Research (OPR) identified five sustainability pillars in a 2015 report: (1) Increasing the share of renewable energy in the State's energy mix to at least 50 percent by 2030; (2) Reducing petroleum use by up to 50 percent by 2030; (3) Increasing the energy efficiency of existing buildings by 50 percent by 2030; (4) Reducing emissions of short-lived climate pollutants; and (5) Stewarding natural resources, including forests, working lands, and wetlands, to ensure that they store carbon, are resilient, and enhance other environmental benefits (California Governor's OPR 2015).

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

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

Subsequently, Governor Gavin Newsom issued Executive Order N-82-20 to combat the crises in climate change and biodiversity. It instructs state agencies to use existing authorities and resources to identify and implement near- and long-term actions to accelerate natural removal of carbon and build climate resilience in our forests, wetlands, urban greenspaces, agricultural soils, and land conservation activities in ways that serve all communities and in particular low-income, disadvantaged, and vulnerable communities. To support this order, the California Natural Resources Agency released *Natural and Working Lands Climate Smart Strategy* (California Natural Resources Agency 2022).

CALTRANS ACTIVITIES

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

Climate Action Plan For Transportation Infrastructure

The *California Action Plan for Transportation Infrastructure* (CAPTI) builds on executive orders signed by Governor Newsom in 2019 and 2020 targeted at reducing GHG emissions in transportation, which account for more than 40 percent of all polluting emissions, to reach the state's climate goals. Under CAPTI, where feasible and within existing funding program structures, the state will invest discretionary transportation funds in sustainable infrastructure projects that align with its climate, health, and social equity goals (California State Transportation Agency 2021).

California Transportation Plan

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

Caltrans Strategic Plan

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

Caltrans Policy Directives And Other Initiates

Caltrans Director's Policy 30 (DP-30) Climate Change (June 22, 2012) established a policy to ensure coordinated efforts to incorporate climate change into Caltrans decisions and activities. Other Director's policies promote energy efficiency, conservation, and climate change, and commit Caltrans to sustainability practices in all planning, maintenance, and operations. *Caltrans Greenhouse Gas Emissions and Mitigation Report* (Caltrans 2020b) provides a comprehensive overview of Caltrans' emissions and current Caltrans procedures and activities that track and reduce GHG emissions. It identifies additional opportunities for further reducing GHG emissions from Department-controlled emission sources, in support of Caltrans and State goals.

Project-Level Greenhouse Gas Reduction Strategies

The following measures will also be implemented to reduce greenhouse gas emissions and potential climate change impacts from the project.

- The construction contractor must comply with the 2022 Caltrans Standard Specifications in Section 14-9. Section 14-9.02 specifically requires compliance by the contractor with all applicable laws and regulations related to air quality, including Sacramento Metropolitan Air Quality Management District regulations and local ordinances.
- Compliance with Title 13 of the California Code of Regulations, which includes idling restrictions of construction vehicles and equipment to no more than 5 minutes.
- Caltrans 2022 Standard Specification 7-1.02C "Emissions Reduction" ensures that construction activities adhere to the most recent emissions reduction regulations mandated by the California Air Resource Board.
- Utilize a Transportation Management Plan to minimize vehicle delays.

- To the extent feasible, construction traffic will be scheduled and routed to reduce congestion and related air quality impacts caused by idling vehicles along local roads during peak travel times.
- Alternative fuels, such as renewable diesel, should be used for construction equipment.
- Limit idling to 5 minutes for delivery and dump trucks and other diesel-powered equipment.
- Schedule truck trips outside of peak morning and evening commute hours.
- Reduce construction waste and maximize the use of recycled materials (reduces consumption of raw materials, reduces landfill waste, and encourages cost savings).
- Encourage improved fuel efficiency from construction equipment.
- Maintain equipment in proper tune and working condition.
- Use right size equipment for the job.
- Use equipment with new technologies.
- Apply Construction Environmental Training: supplement existing training with information regarding methods to reduce GHG emissions related to construction.

Adaptation

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

FEDERAL EFFORTS

Under NEPA Assignment, Caltrans is obligated to comply with all applicable federal environmental laws and FHWA NEPA regulations, policies, and guidance. Caltrans practices generally align with the 2023 CEQ interim Guidance on Consideration of Greenhouse Gas Emissions and Climate Change, which offers recommendations for additional ways of evaluating project effects related to GHG emissions and climate change. These recommendations are not regulatory requirements.

The *Fifth National Climate Assessment*, published in 2023, presents the most recent science and "analyzes the effects of global change on the natural environment, agriculture, energy production and use, land and water resources, transportation, human health and welfare, human social systems, and biological diversity; [It] analyzes current trends in global change, both human-induced and natural, and projects major trends for the subsequent 25 to 100 years … to support informed decision-making across the United States." Building on previous assessments, it continues to advance "an inclusive, diverse, and sustained process for assessing and communicating scientific knowledge on the impacts, risks, and vulnerabilities associated with a changing global climate" (U.S. Global Change Research Program 2023).

The U.S. Department of Transportation recognizes the transportation sector's major contribution of GHGs that cause climate change and has made climate action one of the department's top priorities (U.S. DOT 2023). FHWA's policy is to strive to identify the risks of climate change and extreme weather events to current and planned transportation systems. FHWA has developed guidance and tools for transportation planning that fosters resilience to climate effects and sustainability at the federal, state, and local levels (FHWA 2022).

The National Oceanic and Atmospheric Administration provides sea level rise projections for all U.S. coastal waters to help communities and decision makers assess their risk from sea level rise. Updated projections through 2150 were released in 2022 in a report and online tool (NOAA 2022).

STATE EFFORTS

Climate change adaptation for transportation infrastructure involves long-term planning and risk management to address vulnerabilities in the transportation system. A number of state policies and tools have been developed to guide adaptation efforts.

California's Fourth Climate Change Assessment (Fourth Assessment) (State of California 2018) provides information to help decision makers across sectors and at state, regional, and local scales protect and build the resilience of the state's people, infrastructure, natural systems, working lands, and waters. The Fourth Assessment reported that if no measures are taken to reduce GHG emissions by 2021 or sooner, the state is projected to experience an up to 8.8 degrees Fahrenheit increase in average annual maximum daily temperatures; a two-thirds decline in water supply from snowpack resulting in water shortages; a 77% increase in average area burned by wildfire; and large-scale erosion of up to 67% of Southern California beaches due to sea level rise. These effects will have profound impacts on infrastructure, agriculture, energy demand, natural systems, communities, and public health (State of California 2018).

Sea level rise is a particular concern for transportation infrastructure in the coastal zone. Major urban airports will be at risk of flooding from sea level rise combined with storm surge as early as 2040; San Francisco Airport is already at risk. Miles of coastal highways vulnerable to flooding in a 100-year storm event will triple to 370 by 2100, and 3,750 miles will be exposed to temporary flooding. The Fourth Assessment's findings highlight the need for proactive action to address these current and future impacts of climate change.

To help actors throughout the state address the findings of California's Fourth Climate Change Assessment, AB 2800's multidisciplinary Climate-Safe Infrastructure Working Group published *Paying it Forward: The Path Toward Climate-Safe Infrastructure in California*. This report provides guidance on assessing risk in the face of inherent uncertainties still posed by the best available climate change science. It also examines how state agencies can use infrastructure planning, design, and implementation processes to respond to the observed and anticipated climate change impacts (Climate-Safe Infrastructure Working Group 2018).

EO S-13-08, issued in 2008, directed state agencies to consider sea level rise scenarios for 2050 and 2100 during planning to assess project vulnerabilities, reduce risks, and increase resilience to sea level rise. It gave rise to the 2009 *California Climate Adaptation Strategy*, the Safeguarding California Plan, and a series of technical reports on statewide sea level rise

projections and risks, including the *State of California Sea-Level Rise Guidance Update* in 2018. The reports addressed the full range of climate change impacts and recommended adaptation strategies. The current *California Climate Adaptation Strategy* incorporates key elements of the latest sector-specific plans such as the *Natural and Working Lands Climate Smart Strategy*, *Wildfire and Forest Resilience Action Plan*, *Water Resilience Portfolio,* and the CAPTI (described above). Priorities in the 2023 *California Climate Adaptation Strategy* include acting in partnership with California Native American Tribes, strengthening protections for climate-vulnerable communities that lack capacity and resources, implementing nature-based climate solutions, using best available climate science, and partnering and collaboration to best leverage resources (California Natural Resources Agency 2023).

EO B-30-15 recognizes that effects of climate change threaten California's infrastructure and requires state agencies to factor climate change into all planning and investment decisions. Under this EO, the Office of Planning and Research published *Planning and Investing for a Resilient California: A Guidebook for State Agencies*, to encourage a uniform and systematic approach to building resilience.

SB 1 Coastal Resources: Sea Level Rise (Atkins 2021) established statewide goals to "anticipate, assess, plan for, and, to the extent feasible, avoid, minimize, and mitigate the adverse environmental and economic effects of sea level rise within the coastal zone." As the legislation directed, the Ocean Protection Council collaborated with 17 state planning and coastal management agencies to develop the *State Agency Sea-Level Rise Action Plan for California* in February 2022. This plan promotes coordinated actions by state agencies to enhance California's resilience to the impacts of sea level rise (California Ocean Protection Council 2022).

CALTRANS ADAPTATION EFFORTS

Caltrans Vulnerability Assessments

Caltrans completed climate change vulnerability assessments to identify segments of the State Highway System vulnerable to climate change effects of precipitation, temperature, wildfire, storm surge, and sea level rise.

The climate change data in the assessments were developed in coordination with climate change scientists and experts at federal, state, and regional organizations at the forefront of climate science. The findings of the vulnerability assessments guide analysis of at-risk assets

and development of Adaptation Priority Reports as a method to make capital programming decisions to address identified risks.

Caltrans Sustainability Programs

The Director's Office of Equity, Sustainability and Tribal Affairs supports implementation of sustainable practices at Caltrans. The *Sustainability Roadmap* is a periodic progress report and plan for meeting the Governor's sustainability goals related to EOs B-16-12, B-18-12, and B-30-15. The Roadmap includes designing new buildings for climate change resilience and zero-net energy, and replacing fleet vehicles with zero-emission vehicles (Caltrans 2023).

Project Adaptation Efforts

Sea Level Rise

The proposed project is outside the Coastal Zone and not in an area subject to sea level rise. Accordingly, direct impacts to transportation facilities due to projected sea level rise are not expected.

Precipitation and Flooding

The Caltrans *Climate Change Vulnerability Assessment for District* 3 (Caltrans 2020a) assessed the potential climate impacts to the district's portion of the State Highway System (SHS) and created a database comprising climate stressors and their relative geospatial data to gauge the vulnerability of the SHS and other Caltrans assets to these stressors. To determine impacts to the SHS due to precipitation and flooding, the 100-year storm event was modeled to help explain how 100-year storm rainfall is predicted to change. For the proposed project area, the 100-year storm rainfall event was utilized for considering infrastructure needs that can accommodate heavier storm events as it is often applied in designing transportation facilities and is a design consideration in the 2020 Caltrans Highway Design Manual. The proposed project is being designed to incorporate future raised elevation needs of the road surface.

Wildfire

The project is located in a Local Responsible Area (LRA), as identified in the CAL FIRE Hazard Severity Zone mapping tool (CAL FIRE 2020). Caltrans Standard Specifications mandate fire prevention procedures, including a Fire Prevention Plan, to avoid accidental fire starts during construction (Caltrans 2018). The project features and scope do not include adaptations to fire vulnerability.

Temperature

The *Caltrans Climate Change Vulnerability Assessment for District 3* (Caltrans 2020a) uses climate data provided by the Scripps Institution of Oceanography to project average maximum temperature increases over the course of seven consecutive days throughout District 3. The project area reflects an average weekly temperature increase of approximately ten to eleven degrees through year 2085. Average minimum temperature increase was also projected with minimum temperature increasing four to five degrees through 2055 and seven to eight degrees through 2085.

Design aspects for this project that were chosen due to temperature considerations include pavement binder (PG 64-16) selection based on climate region which ensures performance grading designed to withstand specific temperature ranges within the project location:

- Rubberized hot mix asphalt (RHMA) pavement utilized to resist thermal stresses created by wide temperature fluctuations; however this can only be used at elevations below 3,000 feet.
- Joint Plain Concrete Pavement (JPCP) for the higher elevations, which is dowelled at the joints to account for blowups from high temperatures. Additionally, thick asphalt layers (comprising varying layers) provide greater flexibility because they can be easily modified over time to accommodate climate change impacts without affecting the underlying structure.

2.9 Hazards and Hazardous Materials

Question	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project: a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?				✓
Would the project: 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?				✓
Would the project: c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				✓
Would the project: 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?				✓
Would the project: 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?				✓

Question	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project: f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				✓
Would the project: g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?				✓

The "No Impact" determinations in this section are based on the scope, description, and location of the proposed project, as well as the *Initial Site Assessment* dated August 3, 2022 (Caltrans 2023d). The project would not routinely transport, use or dispose of hazardous materials. Caltrans Standard Measures and Best Management Practices (Section 1.6) would be applied for construction of the project to address any lead, naturally occurring asbestos, or treated wood waste in compliance with local, state and federal laws, including response to accidental release of these materials. The project would not emit hazardous emissions, handle hazardous materials, substance or waste within any existing schools. The nearest school is approximately 3.5 miles southeast of the project location in the Twin Cities community. The project site is not listed on the Cortese or California Superfund site list. The project is not located within an airport land use plan. The project would not interfere with emergency response or evacuation; a Transportation Management Plan during construction of the project would be implemented to address emergency response. The project would not expose people or structures to loss, injury or death involving wildland fire.

2.10 Hydrology and Water Quality

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

Question	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project: d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?				✓
Would the project: e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?			✓	

The "No Impact" and "Less Than Significant Impact" determinations in this section are based on the scope, description, and location of the proposed project, the *Water Quality Assessment* dated May 23, 2023 (Caltrans 2023e), *Draft Final Hydraulic Report* dated April 14, 2023 (Caltrans 2023h), and the *Floodplain Hydraulic Study* dated November 28, 2022 (Caltrans 2022). The proposed project would raise the profile of the left Willow Slough Bridge to match the existing right bridge.

The project location is within the 100-year floodplain Zone A, and is considered a transverse floodplain encroachment. There would be no site changes that would impede or redirect flood flows. The bridge replacement is not a longitudinal floodplain encroachment and would not release pollutants in the event of a 100-year flood. The project is not located in a tsunami or seiche zone. The project would be constructed implementing measures described in the SWPPP.

Regulatory Setting

The primary laws and regulations governing hydrology and water quality include:

- Federal: Clean Water Act (CWA)–33 USC 1344
- Federal: Executive Order for the Protection of Wetlands–EO 11990
- State: California Fish and Game Code (CFGC)–Sections 1600–1607
- State: Porter-Cologne Water Quality Control Act– Sections 13000 et seq.

Affected Environment

The proposed project location is in a climate with cool, rainy winter weather, averaging about 20 inches, with 75% occurring during the rainy season, November through March. Areas adjacent to the existing bridge embankment slopes become inundated annually. There are no existing treatment BMPs within the project limits.

Environmental Consequences

The discharge of stormwater runoff from construction sites has the potential to affect water quality standards, water quality objectives and beneficial uses. Potential pollutants and sources include sediment; non-stormwater discharges (groundwater, waters from cofferdams, dewatering, water diversions); vehicle and equipment cleaning agents, fueling, and maintenance; and waste materials and materials handling and storage activities.

Avoidance and Minimization Measures

Treatment BMPs are required for projects initiated prior to January 1, 2023, under the National Pollutant Discharge Elimination System (NPDES) Statewide Storm Water Permit Waste Discharge Requirements (Order 2022-0033-DWQ, NPDES Number CAS000003) when new impervious surface area reaches and exceeds 10,000 square feet. The project will add Treatment BMP features to the final design during 1-Phase.

Discussion of CEQA Environmental Checklist Question 2.10—Hydrology and Water Quality

a) Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

Less Than Significant Impact. Construction-related activities would result in surface disturbances with the potential to violate water quality standards and Waste Discharge Requirements (WDRs) if sediment or contaminant-laden runoff from work areas enters storm drains or other pathways leading to receiving waters. However, it is anticipated the project will be regulated under the Construction General Permit (CGP) and appropriate compliance measures will be implemented to avoid discharges and potential water quality threats within the project area. As an example, compliance with the CGP requires a risk level analysis based on the project's potential erosion and transport to receiving waters. The results of this analysis will be utilized to determine standard water quality protection measures (to be implemented) in order to avoid surface and ground water quality degradation during

construction operations. It is anticipated that BMP usage, placement, field implementation and effectiveness will be monitored, adjusted, and modified (accordingly) for the duration of the project. Compliance with all applicable NPDES Permits, in addition to coordination with the Regional Water Quality Board, is expected to ensure the protection of water resources in the area.

For projects having 1 acre or more of new impervious area, Caltrans' MS4 Permit requires the implementation of stormwater design features and a strategy to treat runoff and manage impervious and pervious areas within the project limits. Specific design features will be vetted, and stormwater-related decisions will be documented within project design and environmental technical studies.

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

Less Than Significant Impact. The intended use of the facility and potential pollutants that will be encountered in stormwater runoff after the project is constructed are not anticipated to change from its current condition. The groundwater elevation within this corridor historically fluctuates but is not anticipated to permanently impact proposed drainage appurtenances, stormwater treatment, or other design features. Additionally, due to excavation occurring on a temporary and short-term basis during the construction period, groundwater resources should not be affected and it is not anticipated that the project would negatively impact regional sustainable groundwater management (within the project vicinity).

c) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

i. result in substantial erosion or siltation on- or off-site?

Less Than Significant Impact. Compliance with the Construction General Permit (GCP) is anticipated to address the implementation of minimization and avoidance measures. It is expected that standard construction erosion control measures will be utilized to avoid erosion and siltation for the duration of project activities. BMP measures and field implementation strategies will be outlined in the Contractor prepared and Caltrans approved SWPPP. These will likely include temporary soil stabilization measures, linear sediment barriers (i.e., silt fence, gravel bag berms, fiber rolls), and construction site waste management (i.e., concrete

washout, construction materials storage, litter/ waste management) among other approved controls.

ii. substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?

Less Than Significant Impact. It is anticipated that the drainage system design will focus on perpetuating existing highway drainage conditions to the greatest extent feasible. New drainage features will be designed to perpetuate flow in the existing direction and will have similar or greater capacity than what currently exists in support of current design standards and the proposed design features for the project.

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?

Less Than Significant Impact. The project includes additional impervious surface from the proposed project features. There will be 1.66 acres of temporary impervious surface added, which will be removed upon completion of construction. The completed bridge will include an estimated 1.5 acres additional impervious surface area. Drainage appurtenances within the project limits will be designed to accommodate the anticipated change in flow. In compliance with Caltrans' MS4 Permit, treatment BMPs will be incorporated into the project design, where applicable and feasible, to treat the new impervious area anticipated for the project. The implementation of Caltrans Standard Measures and Best Management Practices (Section 1.6) meant to treat general pollutants will be evaluated and an analysis of site characteristics to optimize water quality volume/water quality flow and maximize site perviousness will be performed.

iv. Impede or redirect flood flows?

No Impact. The "No Impact" determination in this section is based on the scope, description, and location of the proposed project, the *Water Quality Assessment* dated May 23, 2023 (Caltrans 2023e), *Draft Final Hydraulic Report* dated April 14, 2023 (Caltrans 2023i), and the *Floodplain Hydraulic Study* dated November 28, 2022.

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

No Impact. The "No Impact" determination in this section are based on the scope, description, and location of the proposed project, the *Water Quality Assessment* dated May 23, 2023 (Caltrans 2023e), *Draft Final Hydraulic Report* dated April 14, 2023 (Caltrans 2023i), and the *Floodplain Hydraulic Study* dated November 28, 2022.

e) Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Less Than Significant Impact. It is expected that temporary impacts to localized water quality and groundwater that may occur will be minimized and/or avoided through the use of Caltrans Standard Measures and Best Management Practices and adherence to the NPDES Permit (i.e., CGP and Caltrans' MS4) compliance practices. Water quality measures, meant to promote stormwater infiltration practices and low impact development, would be implemented. Additionally, due to excavation occurring on a temporary and short-term basis during the construction period, groundwater resources should not be affected to any great extent or degree.

2.11 Land Use and Planning

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

The "No Impact" determinations in this section are based on the scope, description, and location of the proposed project as well as the Sacramento County General Plan (SCGP) (Sacramento General Plan 2005-2030) and the South Sacramento Habitat Conservation Plan (SSHCP). The proposed project is consistent with the SCGP which aims to promote efficient inter-regional goods movement on SR 99 and to accommodate through-truck traffic. Potential impacts to land use and planning are not anticipated because the proposed project would not change the alignment of SR 99 and therefore would not physically divide any established community. The proposed project would also not conflict with any existing land use plan, policy, or regulation, as the highway alignment remains within the transportation zone.

The project is consistent with the SSHCP, as the proposed scope of work is located on an established highway that is straddled by the existing conservation preserve and does not change the alignment of the road, nor create a new division in the SSHCP preserves, wildlife corridors or linkages. The proposed project does not conflict with the SSHCP because the scope is similar to covered plan activities which "…include in-stream activities for transportation improvements at stream/creek crossings, including bridges…" and transportation construction actions identified within the SSHCP as "…initial vegetation clearing, grading, pouring concrete or asphalt, excavation, staging equipment and materials, compacting soil, landscaping…" (SSHCP 2018).

2.12 Mineral Resources

Question:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project: 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?				✓
Would the project: b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				✓

The "No Impact" determinations in this section are based on the scope, description, and location of the proposed project, as well as the lack of valued mineral resources within the project limits, as identified from the California Department of Conservation (CDC 2023b). The project does not modify availability or access to mineral resources, as there are none within the project area.

2.13 Noise

Question	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project result in: 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?				✓
Would the project result in: b) Generation of excessive groundborne vibration or groundborne noise levels?				✓
Would the project result in: 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?				✓

The "No Impact" determinations in this section are based on the scope, description, and location of the proposed project, as well as the *Noise Study Report* dated June 2, 2023 (Caltrans 2023k). The completed project is not expected to result in changes to ambient noise levels and would not generate groundborne vibration or noise. The project location is approximately 5.25 miles from the Franklin Field Airport and would not expose residents or workers to excessive noise levels.

2.14 Population and Housing

Question	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project: 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)?				✓
Would the project: b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				✓

The "No Impact" determinations in this section are based on the scope, description, and location of the proposed project. Impacts to population and housing are not anticipated because the project would not increase/add or change highway access and would not extend any roads or other infrastructure associated with land use developments. There are no residences within the project area, and no permanent right of way acquisition would be required for the project construction or operation. Therefore, the project would have no impact on population and housing.

2.15 Public Services

Question	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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?				✓
Police protection?				✓
Schools?				✓
Parks?				✓
Other public facilities?				✓

The "No Impact" determinations in this section are based on the scope, description, and location of the proposed project. No schools, parks, or other public facilities were identified in the project area; therefore, public services ratios would not be impacted.

2.16 Recreation

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

The "No Impact" determinations in this section are based on the scope, description, and location of the proposed project. The proposed project would not increase the use of existing neighborhood parks, regional parks, or other recreational facilities as there is no change in access to the surrounding areas, which are not managed as recreational facilities. The project would not require the construction or expansion of recreational facilities.

2.17 Transportation

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

The "No Impact" determinations in this section are based on the scope, description, and location of the proposed project, which is included in the SACOG Regional Transportation Plan/Sustainable Communities Strategy (SACOG 2012). The project has been screened pursuant to CEQA Guidelines § 15064.3, subdivision (b) and has been determined to be a project not likely to induce travel (induced travel occurs when lanes are added to a system). The proposed project does not change the geometrics of the highway. Emergency access will remain open during construction to keep the highway use consistent with local emergency and evacuation plans.

2.18 Tribal Cultural Resources

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

The “No Impact” determinations in this section are based on the scope, description, and location of the proposed project, as well as the *Historical Property Survey Report* (Caltrans 2023b), cultural resources studies, and consultation with local Native American Tribes beginning in December 2022, which will remain ongoing throughout the life of the project. Consultation with the Native American Heritage Commission and Native American tribes, groups, and individuals was conducted by the District Native American Coordinator (DNAC) Katherine Abernathy. In addition, letters and project information were sent to local historical societies, including the Sacramento County Historical Society. Wilton Rancheria provided a map of areas of concern that include the project and surrounding area. They have requested monitoring for all ground-disturbing activities.

2.19 Utilities and Service Systems

Question	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project: a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities—the construction or relocation of which could cause significant environmental effects?				✓
Would the project: b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?				✓
Would the project: 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?				✓
Would the project: 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?				✓
Would the project: e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?				✓

The “No Impact” determinations in this section are based on the scope, description, and location of the proposed project. Potential impacts are not anticipated due to the proposed project not requiring utility relocation or newly constructed utilities. The highway use does not require water supply or wastewater treatment and does not generate solid waste.

2.20 Wildfire

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

Senate Bill 1241 required the Office of Planning and Research, the Natural Resources Agency, and the California Department of Forestry and Fire Protection (CAL FIRE) to develop amendments to the "CEQA Environmental Checklist" for the inclusion of questions related to fire hazard impacts for projects located on lands classified as *very high* Fire Hazard Severity Zones. The 2018 updates to the CEQA Guidelines expanded this to include projects "near" these *very high* Fire Hazard Severity Zones.

The "No Impact" determinations in this section are based on the scope, description, and location of the proposed project, as well as the CAL FIRE Fire Hazard Severity Zone map (CAL FIRE 2020) and the California Landslide Inventory map (California Department of Conservation 2016-2018). The project is not located in an area of high landslide risk, so no impact is anticipated from fire-related landslides. The project would comply with all regulations and would not expose people or structures to fire- related flooding.

CAL FIRE's Fire Hazard Severity Zone mapping tool indicates the project area is not exposed to wildfire concern. While the project area is outside the Local Responsibility Area and within the State Responsibility Area for wildfire, the project would not have an impact on wildfire due to:

- The addition of wider shoulders and median would increase the width of the road as a firebreak and provide additional areas for emergency response vehicles.
- TMS elements, including Changeable Message Signs, would provide critical information during an emergency and can be used to alert the public during times of high fire danger.

Additionally, prior to construction, Caltrans would develop a Transportation Management Plan that would be required during construction to keep the highway use consistent with local emergency and evacuation plans.

2.21 Mandatory Findings of Significance

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

The California Environmental Quality Act of 1970 (CEQA) requires preparation of an Environmental Impact Report (EIR) when certain specific impacts may result from construction or implementation of a project. Project analyses indicated the potential impacts associated with this project would not require an EIR because of the minimal impacts incurred by the project scope and temporary construction activities discussed herein. Mandatory Findings of Significance are not required for projects where an EIR has not been prepared.

2.22 Cumulative Impacts

Cumulative impacts are those that result from past, present, and reasonably foreseeable future actions, combined with the potential impacts of this proposed project. A cumulative impact assessment looks at the collective impacts posed by individual land use plans and projects. Cumulative impacts can result from individually minor but collectively substantial impacts taking place over a period of time (CEQA § 15355).

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

Per Section 15130 of CEQA, a Cumulative Impact Analysis (CIA) discussion is only required in "…situations where the cumulative effects are found to be significant." The proposed project does not have impacts that are cumulatively considerable when viewed with the effects of past and future projects. Given this, an EIR and CIA were not required for this project.

Chapter 3. Agency and Public 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 Project Development Team (PDT) meetings, interagency coordination meetings, and interagency coordination. This chapter summarizes the results of Caltrans' efforts to identify, address, and resolve project-related issues through early and continuing coordination.

The following agencies, organizations, and individuals were consulted in the preparation of this environmental document.

Coordination with Resource Agencies

The following agencies/resources were consulted regarding potential impacts of the project.

Table 4. Agency Coordination and Professional Contacts

Date	Personnel	Notes
June 7, 2023	Eric Hansen (Independent Consultant)	Consultation on Giant garter snake (GGS).
June 9, 2023	Mary Xiong (CDFW)	Discussed potential direct and indirect effects on Waters of the United States and potential suitable habitat.
June 21, 2023	Adam Stewart (USFWS)	Discussed the potential effects on giant garter snake and vernal pool habitat.

Coordination with Property Owners

Consent from property owners of APN 134-0270-017-0000 was obtained via a Permit To Enter for evaluation of cultural and biological resources within their property, which is overlapped by the Environmental Study Limits. A Temporary Construction Easement for 1.02 acres will be required from the property owners for access to and construction activities on the same property.

Circulation

The Initial Study/proposed Negative Declaration (IS/ND) was available for public and agency review and comment for 30 days from its posting on the Office of Planning and Research–State Clearinghouse website, from January 9, 2024 to February 9, 2024. Caltrans provided a Notice of Intent (NOI) to adopt this proposed ND to the public, responsible agencies, trustee agencies, and the county clerk of Sacramento County, as well as the adjacent property owners. A printed copy of the Initial Study/Proposed ND was also available at the Elk Grove Library, located at 8900 Elk Grove Boulevard, Elk Grove, CA 95624.

During the public circulation period, four comment letters were received. The comment letters and responses to comments can be found in Appendix D.

Chapter 4. List of Preparers

The following individuals performed the environmental work and contributed to the preparation of the Initial Study/Proposed Negative Declaration for this project:

California Department of Transportation–District 3

Danielle Claus	Associate Environmental Planner/Archaeology Contribution: Historical Properties Survey Report
Sean Cross	Water Quality Specialist Contribution: Water Quality Report
Erin Damm	Senior Environmental Planner Contribution: Environmental Branch Chief
Jonathan Edwards	Associate Environmental Planner/Project Biologist Contribution: Natural Environment Study
Katherine Jorgensen-Abernathy	Associate Environmental Planner/Archaeology Contribution: Native American Consultation
Jason Lee	Air Specialist Contribution: Air Quality, Energy and Greenhouse Gas Emission Analysis
Alamjit Mangat	Hazardous Waste Specialist Contribution: Initial Site Assessment
Masum Patwary	Environmental Scientist/Coordinator Contribution: Document Author
Ryan Pommerenck	Noise Specialist Contribution: Noise Study Report
Yige Sunn	Landscape Architect Contribution: Visual Impact Assessment

Chapter 5. Distribution List

Federal and State Agencies

U.S. Army Corps of Engineers
Sacramento District
Attn: Regulatory Branch
1325 J Street
Sacramento, CA 95814-2922

State Historic Preservation Officer
Office of Historic Preservation
P.O. Box 942896
Sacramento, CA 94296

California Department of Fish and Wildlife
North Central Region
1701 Nimbus Road
Rancho Cordova, CA 95670

California Highway Patrol
50 Canyon Creek Road
Gold Run, CA 95717

Regional/County/Local Agencies

Native American Heritage Commission
1550 Harbor Blvd, Suite 100
West Sacramento, CA 95691

County of Sacramento, Department of Transportation
Director's Office
4111 Branch Center Road
Sacramento, CA 95827

Regional Water Quality Control Board
11020 Sun Center Drive, #200
Rancho Cordova, CA 95670

Local Elected Officials

District 5 Supervisor Pat Hume
700 H Street, Suite 2450
Sacramento, CA 95814

Property Owners

Nature Conservancy Sacramento
830 South Street
Sacramento, CA 95811

California Department of Fish and Wildlife
Administrative Division, Business Management
1416 9th Street, 12th Floor
Sacramento, CA 95814

Chapter 6. References

California Air Resources Board (CARB). 2008. *Climate Change Scoping Plan Appendices. Volume II: Analysis and Documentation*. Appendix I, p. I-19. December. https://ww3.arb.ca.gov/cc/scopingplan/document/scopingplandocument.htm. Accessed: November 13, 2023.

_____. 2021. *SB 375 Regional Plan Climate Targets*. https://ww2.arb.ca.gov/our-work/programs/sustainable-communities-program/regional-plan-targets. Accessed: November 13, 2023.

_____. 2022a. *Greenhouse Gas Emissions Inventory Data-2022 Edition, 2000-2020.* https://ww2.arb.ca.gov/ghg-inventory-data. Accessed: November 13, 2023.

_____. 2022b. *2022 Scoping Plan for Achieving Carbon Neutrality*. Executive Summary. https://ww2.arb.ca.gov/our-work/programs/ab-32-climate-change-scoping-plan/2022-scoping-plan-documents. Accessed: November 13, 2023.

_____. 2022c. *Climate Change*. https://ww2.arb.ca.gov/our-work/topics/climate-change. Accessed: November 13, 2023.

California Department of Conservation (CDC). 2016-2018. California Landslide Inventory. https://maps.conservation.ca.gov/cgs/lsi/app/. Accessed September, 2023.

_____. 2023a. Farmland Maps. https://www.conservation.ca.gov/dlrp/fmmp

_____. 2023b. California's Minerals. 2023. https://www.conservation.ca.gov/cgs/mineral

California Department of Fish and Wildlife (CDFW). 2016. Northern Region California Department of Fish and Wildlife Aquatic Invasive Species Decontamination Protocol. https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=92821&inline.

_____. 2023. Biogeographic Branch Data. California Natural Diversity Database (Government Version). Retrieved November 3, 2023, from http://map.dfg.ca.gov/rarefind/view/RareFind.aspx

California Department of Forestry and Fire Protection (CAL FIRE). 2020. https://egis.fire.ca.gov/FHSZ/

California Department of Transportation (Caltrans). 2018. https://dot.ca.gov/programs/design/2018-ccs-standard-plans-and-standard-specifications

_____. 2020a. *Caltrans Climate Change Vulnerability Assessments. District 03 Technical Report*. December. Prepared by WSP. https://dot.ca.gov/-/media/dot-media/programs/transportation-planning/documents/2020-adaption-priorities-reports/d3-adaptation-priorities-report-2020-a11y.pdf

_____. 2020b. *Caltrans Greenhouse Gas Emissions and Mitigation Report*. Final. August. Prepared by ICF, Sacramento, CA. https://dot.ca.gov/programs/public-affairs/mile-marker/summer-2021/ghg. Accessed: November 13, 2023.

_____. 2021a. *California Transportation Plan 2050*. February. https://dot.ca.gov/programs/transportation-planning/state-planning/california-transportation-plan. Accessed: November 13, 2023.

_____. 2021b. *Caltrans 2020-2024 Strategic Plan*. https://dot.ca.gov/-/media/dot-media/programs/risk-strategic-management/documents/sp-2020-16p-web-a11y.pdf. Accessed: November 13, 2023.

_____. 2022. Floodplain Hydraulic Study. Dated November 28, 2022.

_____. 2023. *Sustainable Operations at Caltrans*. Sustainable Roadmap. https://dot.ca.gov/programs/esta/sustainable-caltrans. Accessed: November 13, 2023.

_____. 2023a. Environmental Impact Evaluation Air Quality, GHG, and Energy Analysis Memo. Dated March 30, 2023. Accessed October 10, 2023.

_____. 2023b. Historical Property Survey Report. Dated October 2023. Accessed October 14, 2023.

_____. 2023c. Natural Environment Study. Dated December 2023. Accessed November 10, 2023.

_____. 2023d. Initial Site Assessment Memo. Dated August 03, 2022. Accessed October 2023.

_____. 2023e. Water Quality Assessment Memo. Dated May 23, 2023. Accessed October 1, 2023.

_____. 2023f. Traffic Management Plan Data Sheet. Dated July 14, 2023. Accessed: September 16, 2023.

_____. 2023g. Visual Impact Assessment. Dated May 16, 2023. Accessed September 27, 2023.

_____. 2023h. Draft Final Hydraulic Report. Dated April 14, 2023. Accessed October 1, 2023.

_____. 2023i. Archaeological Survey Report/Extended Phase I Report. Dated September 2023.

_____. 2023j. Historical Resource Evaluation Report. February 2023.

_____. 2023k. Noise Study Report. June 2, 2023.

_____. 2024. Preliminary Foundation Report for Willow Slough Bridge Replacement (Geotechnical Report).

California Environmental Protection Agency. 2015. *California Climate Strategy*. https://calepa.ca.gov/wp-content/uploads/sites/6/2016/10/Climate-Documents-2015yr-CAStrategy.pdf. Accessed: November 2, 2022.

California Governor's Office of Planning and Research (OPR). 2015. *A Strategy for California @ 50 Million.* November. https://opr.ca.gov/docs/EGPR_Nov_2015.pdf. Accessed: November 13, 2023.

California Natural Resources Agency. 2022. Nature-Based Climate Solutions: *Natural and Working Lands Climate Smart Strategy*. https://resources.ca.gov/Initiatives/Expanding-Nature-Based-Solutions. Accessed: November 13, 2023.

_____. 2023. *California Climate Adaptation Strategy*. https://resources.ca.gov/Initiatives/Building-Climate-Resilience/2021-State-Adaptation-Strategy-Update. Accessed: November 13, 2023

California Ocean Protection Council. 2022. *State Agency Sea-Level Rise Action Plan for California*. February. https://www.opc.ca.gov/climate-change/sea-level-rise-2/. Accessed: November 13, 2023.

California State Transportation Agency. 2021. *Climate Action Plan for Transportation Infrastructure (CAPTI)*. Adopted July 2021. https://calsta.ca.gov/subject-areas/climate-action-plan. Accessed: November 13, 2023.

Climate-Safe Infrastructure Working Group. 2018. *Paying it Forward: The Path Toward Climate-Safe Infrastructure in California*. September. https://files.resources.ca.gov/climate/climate-safe-infrastructure-working-group/. Accessed: November 13, 2023.

Federal Highway Administration (FHWA). 2022. *Sustainability*. https://www.fhwa.dot.gov/environment/sustainability/resilience/. Last updated July 29, 2022. Accessed: November 13, 2023.

_____. No date. *Sustainable Highways Initiative*. https://www.fhwa.dot.gov/environment/sustainability/initiative. Accessed: November 13, 2023.

National Highway Traffic Safety Administration (NHTSA). 2022. *USDOT Announces New Vehicle Fuel Economy Standards for Model Year 2024–2026*. Press release. April 21. https://www.nhtsa.gov/press-releases/usdot-announces-new-vehicle-fuel-economy-standards-model-year-2024-2026. Accessed: November 2, 2022.

National Invasive Species Council. 2016-2018. July 11, 2016. https://www.doi.gov/sites/doi.gov/files/uploads/2016-2018-nisc-management-plan.pdf

National Oceanic and Atmospheric Administration (NOAA). 2022. *2022 Sea Level Rise Technical Report*. https://oceanservice.noaa.gov/hazards/sealevelrise/sealevelrise-tech-report.html. Accessed: November 13, 2023.

Natural Resources Conservation Service. 2023. *Natural Resources Conservation Service Soil Survey Report*. https://www.nrcs.usda.gov/. Accessed: August 8, 2023.

State of California. 2018. *California's Fourth Climate Change Assessment*. https://climateassessment.ca.gov/. Accessed: November 13, 2023.

Sacramento General Plan 2005 to 2030. November 9, 2011. https://planning.saccounty.gov/PlansandProjectsInProgress/Pages/GeneralPlan.aspx

Sacramento Area Council of Governments (SACOG). April 2012. Metropolitan Transportation Plan/ Sustainable Communities Strategy 2035. https://www.ca-ilg.org/sites/main/files/file-attachments/mtpscs_web_2.pdf

South Sacramento Habitat Conservation Plan (SSHCP). 2018. *Final South Sacramento Habitat Conservation Plan*. https://planning.saccounty.gov/PlansandProjectsIn-Progress/Pages/SSHCPPlan.aspx. Accessed February 21, 2024.

U.S. Department of Transportation (U.S. DOT). 2014. *Corporate Average Fuel Economy (CAFE) Standards*. https://www.transportation.gov/mission/sustainability/corporate-average-fuel-economy-cafe-standards. Accessed: November 13, 2023.

_____. 2023. *Climate Action. January.* https://www.transportation.gov/priorities/climate-and-sustainability/climate-action. Accessed: November 13, 2023.

U.S. Environmental Protection Agency (U.S. EPA). 2023a. *Data Highlights*. Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2021. https://www.epa.gov/ghgemissions/inventory-us-greenhouse-gas-emissions-and-sinks. Accessed: November 13, 2023.

_____. 2023b. *Inventory of U.S. Greenhouse Gas Emissions and Sinks 1990-2021*. https://www.epa.gov/ghgemissions/inventory-us-greenhouse-gas-emissions-and-sinks. Accessed: November 13, 2023.

U.S. Global Change Research Program. 2023. *Fifth National Climate Assessment*. https://nca2023.globalchange.gov/chapter/front-matter/. Accessed: November 21, 2023.

Appendix A. Project Layouts

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Sac	99	6.04/7.06		

PRELIMINARY PLANS

REGISTERED CIVIL ENGINEER xxxx DATE xxx

PLANS APPROVAL DATE

KIDIANGA TSHIUNZA No. C 67572 Exp. 6-30-25 CIVIL — REGISTERED PROFESSIONAL ENGINEER — STATE OF CALIFORNIA

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

NOTE:

1. DIMENSIONS OF THE PAVEMENT STRUCTURES (STRUCTURAL SECTIONS) ARE SUBJECT TO TOLERANCES SPECIFIED IN THE STANDARD SPECIFICATIONS.
2. SUPERELEVATION ARE SHOWN ON THE SUPERELEVATION DIAGRAM
3. FOR MIDWEST GUARD RAILING, AND CONCRETE BARRIER SEE LAYOUTS.

PAVEMENT CLIMATE REGION
INLAND VALLEY

ROUTE 99
DESIGN DESIGNATION

ADT (2022)	85,800	D	59%
ADT (2037)	107,800	T	8%
DHV	7,036	V	65 mph
ESLA	47,394,772	TI_{20}	14.0

ABBREVIATION:

UB - UNTREATED BASE
AS - AGGREGATE SUBBASE
STBB - SINGLE THRIE BEAM BARRIER

TYPICAL PAVEMENT STRUCTURE SECTIONS

1 — 0.35' COLD PLANE AC Pvmt; 0.10' HMA-O; 0.25' HMA-A

2 — 0.10' HMA-O; 1.00' HMA-A; 0.65' AB CLASS II; SEG_B (Biaxial)

3 — 0.80' HMA-A; 0.50' AB CLASS II

A — EXIST; 0.15' AC (TYPE A, ¾" Max GRADING); 0.80' AC (TYPE A, 1½" Max GRADING); 0.25' AC OVERLAY; 0.67' AC; 0.50' AC

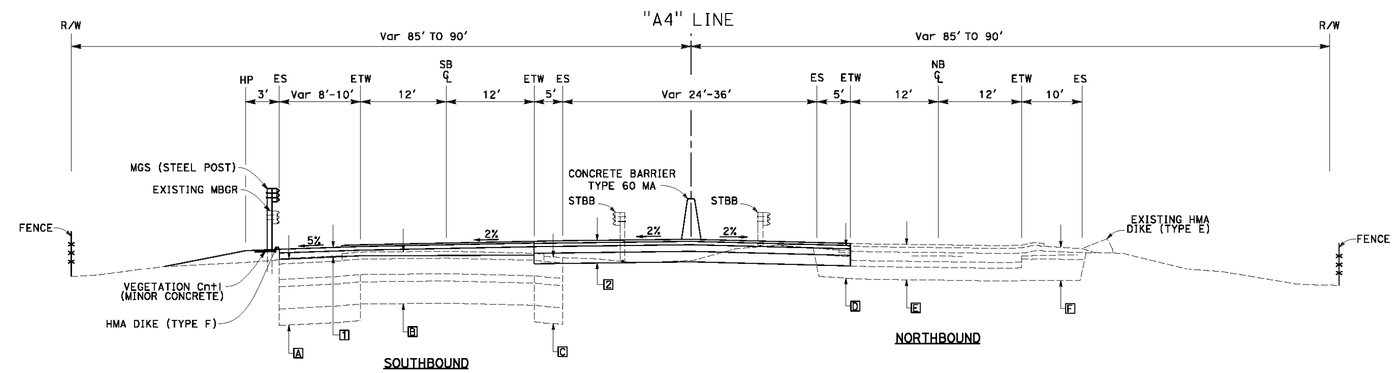
B — EXIST; 0.00' - 0.06' OGAC; 0.15' AC (TYPE A, ¾" Max GRADING); 0.80' AC (TYPE A 1½" Max GRADING); 0.25' AC; 0.67' PCC

C — EXIST; 0.15' AC (TYPE A, ¾" Max GRADING); 0.80' AC (TYPE A, 1½" Max GRADING); 0.25' AC OVERLAY; 0.67' AC; 0.58' AC

D — EXIST; 0.15' AC (TYPE A, ¾" Max GRADING); 0.25' AC (TYPE A, 1½" Max GRADING); 0.25' AC; 0.50' UB; 0.75' AS

E — EXIST; 0.00' - 0.06' OGAC; 0.15' AC (TYPE A, ¾" Max GRADING); 0.25' AC (TYPE A 1½" Max GRADING); 0.33' CTB; 0.50' AS

F — EXIST; 0.15' AC (TYPE A, ¾" Max GRADING); 0.25' AC (TYPE A, 1½" Max GRADING); 0.25' AC; 0.50' UB; 0.75' AS



"A4" 345+93.70 TO "A4" 351+50.00
"A4" 339+75.20 TO "A4" 345+31.20

ROUTE 99

TYPICAL CROSS SECTIONS

NO SCALE

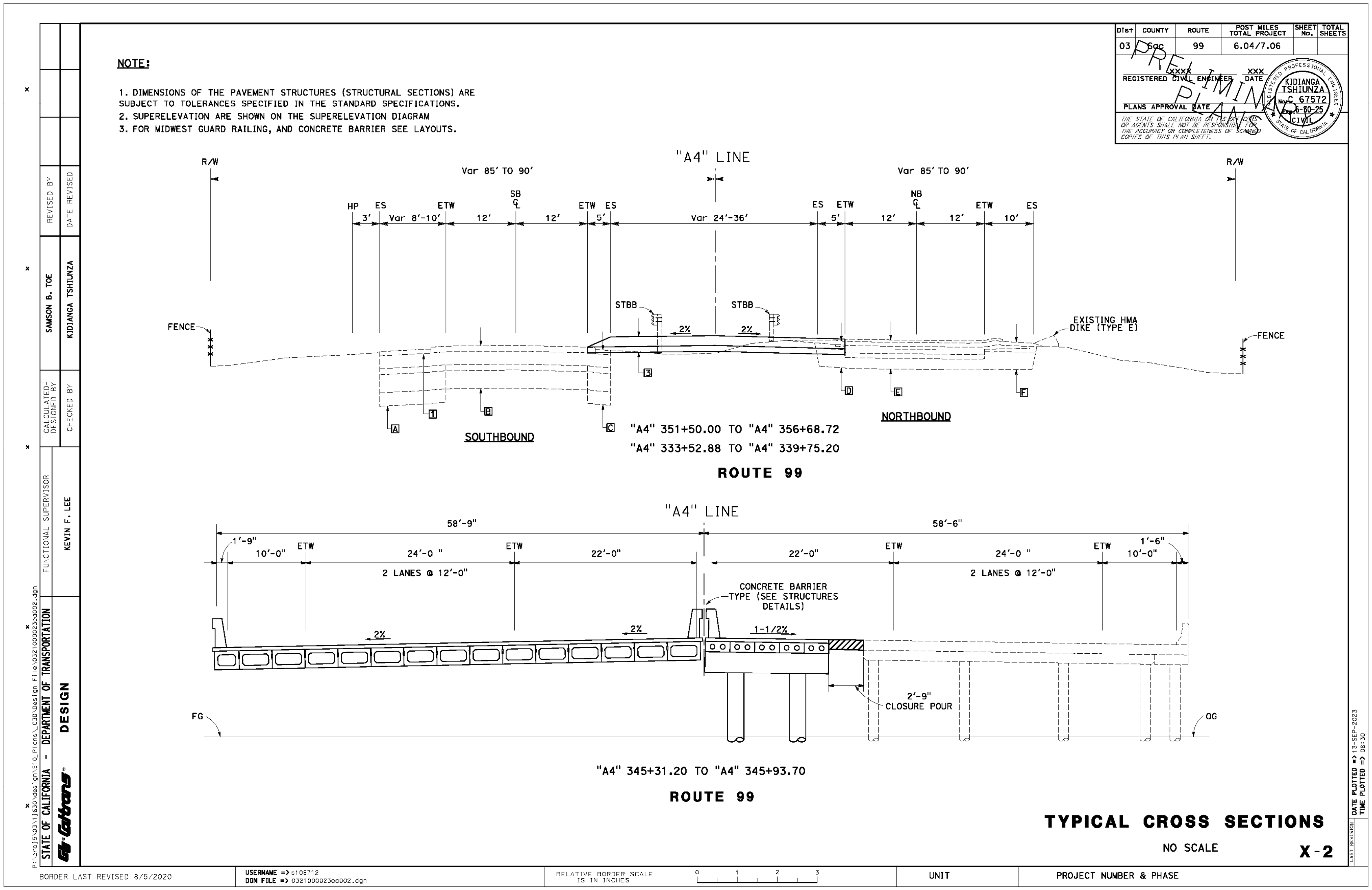
X-1

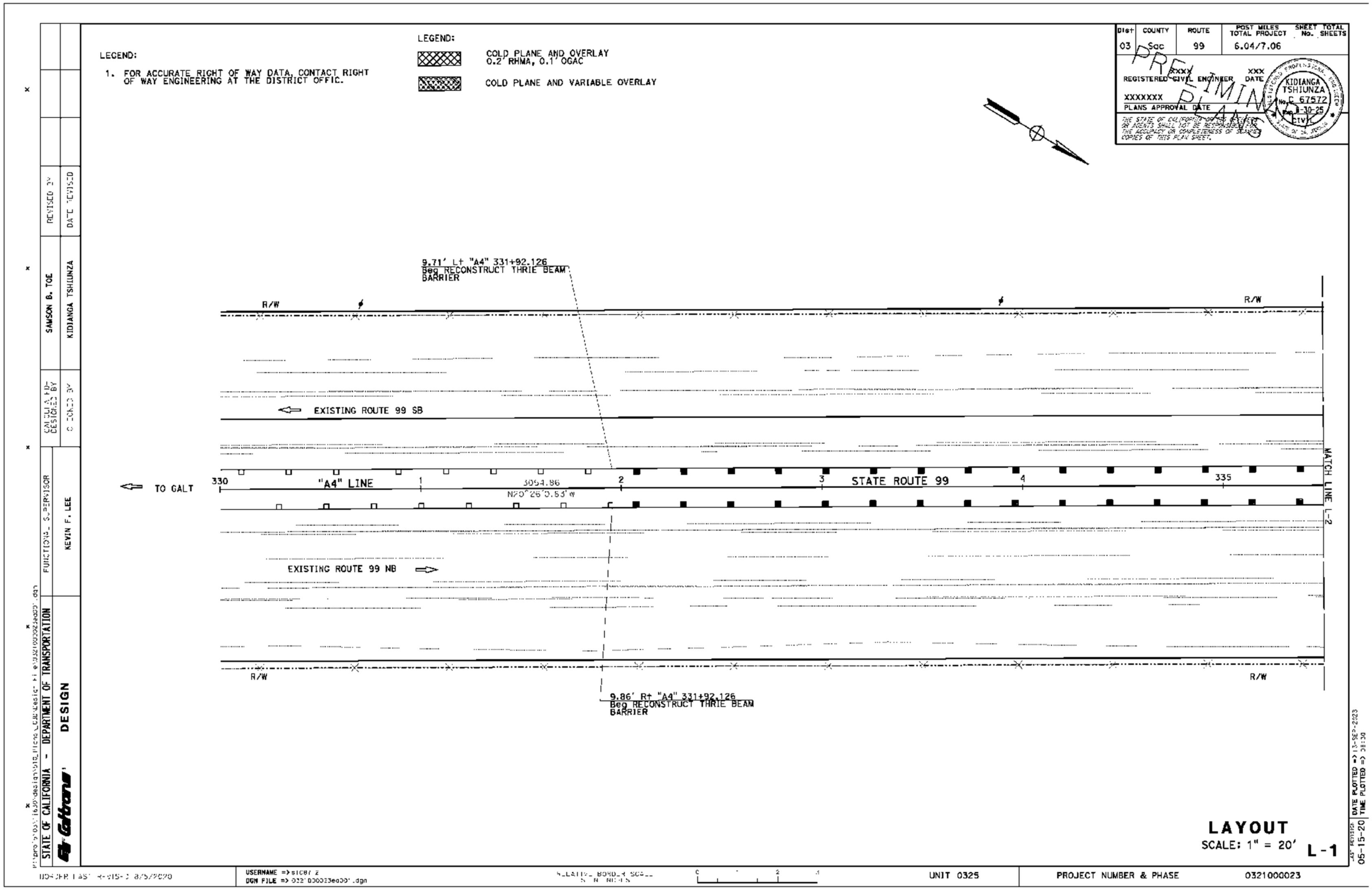
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION — DESIGN

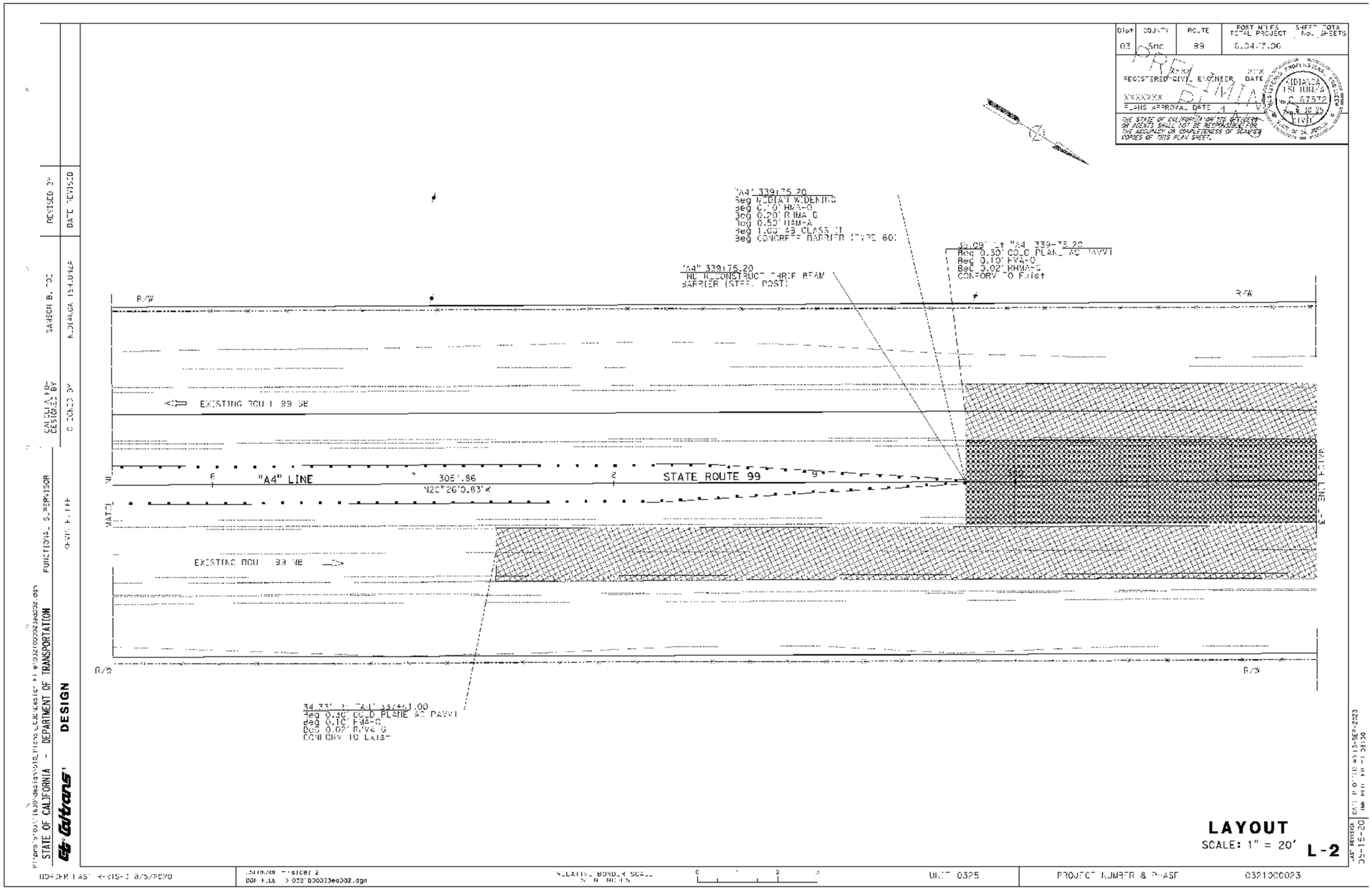
FUNCTIONAL SUPERVISOR: KEVIN F. LEE — CALCULATED-DESIGNED BY: SAMSON B. TOE — CHECKED BY: KIDIANGA TSHIUNZA — REVISED BY — DATE REVISED

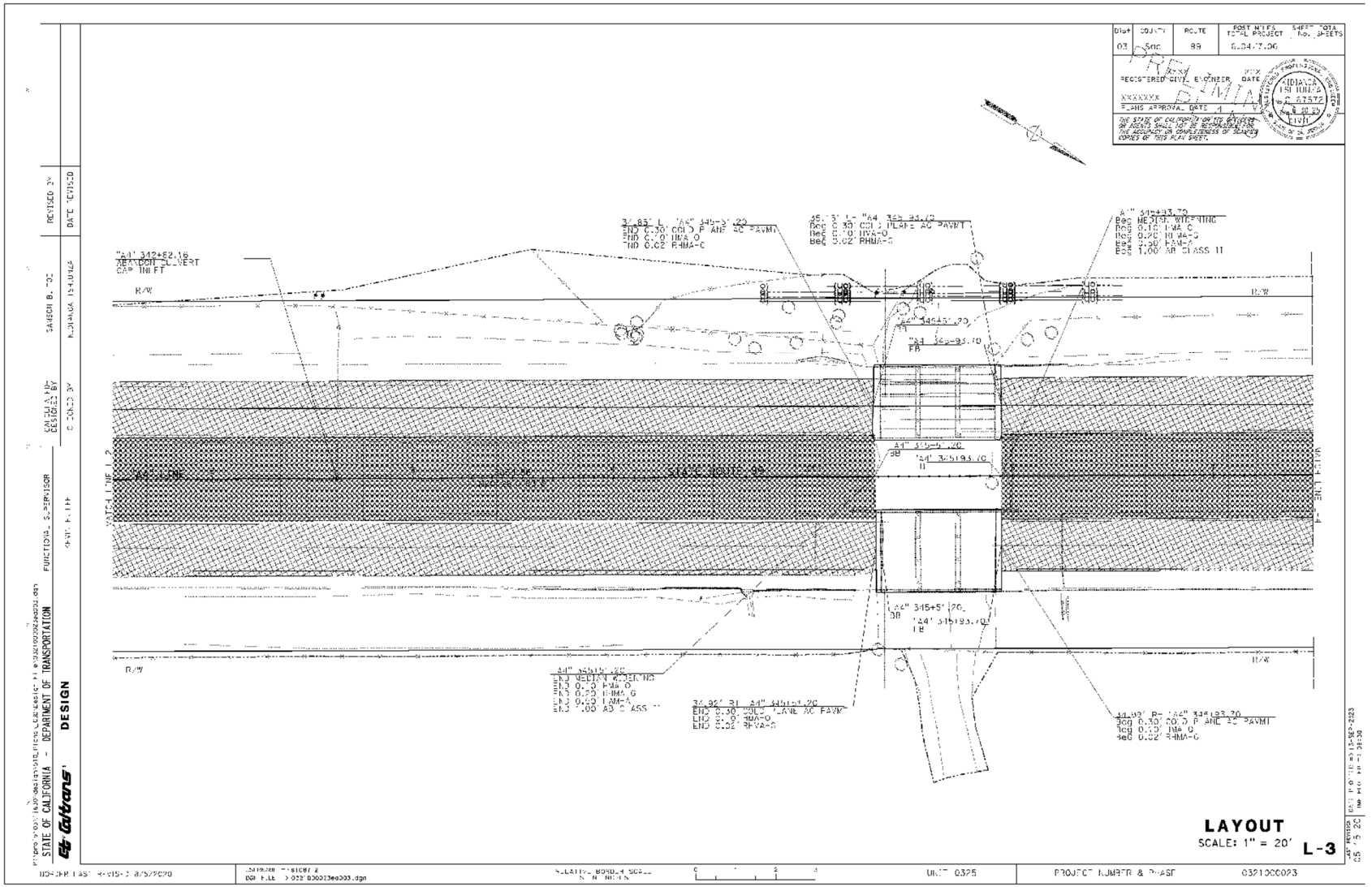
BORDER LAST REVISED 8/5/2020 — USERNAME => s108712 — DGN FILE => 0321000023ca001.dgn — RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 — UNIT — PROJECT NUMBER & PHASE

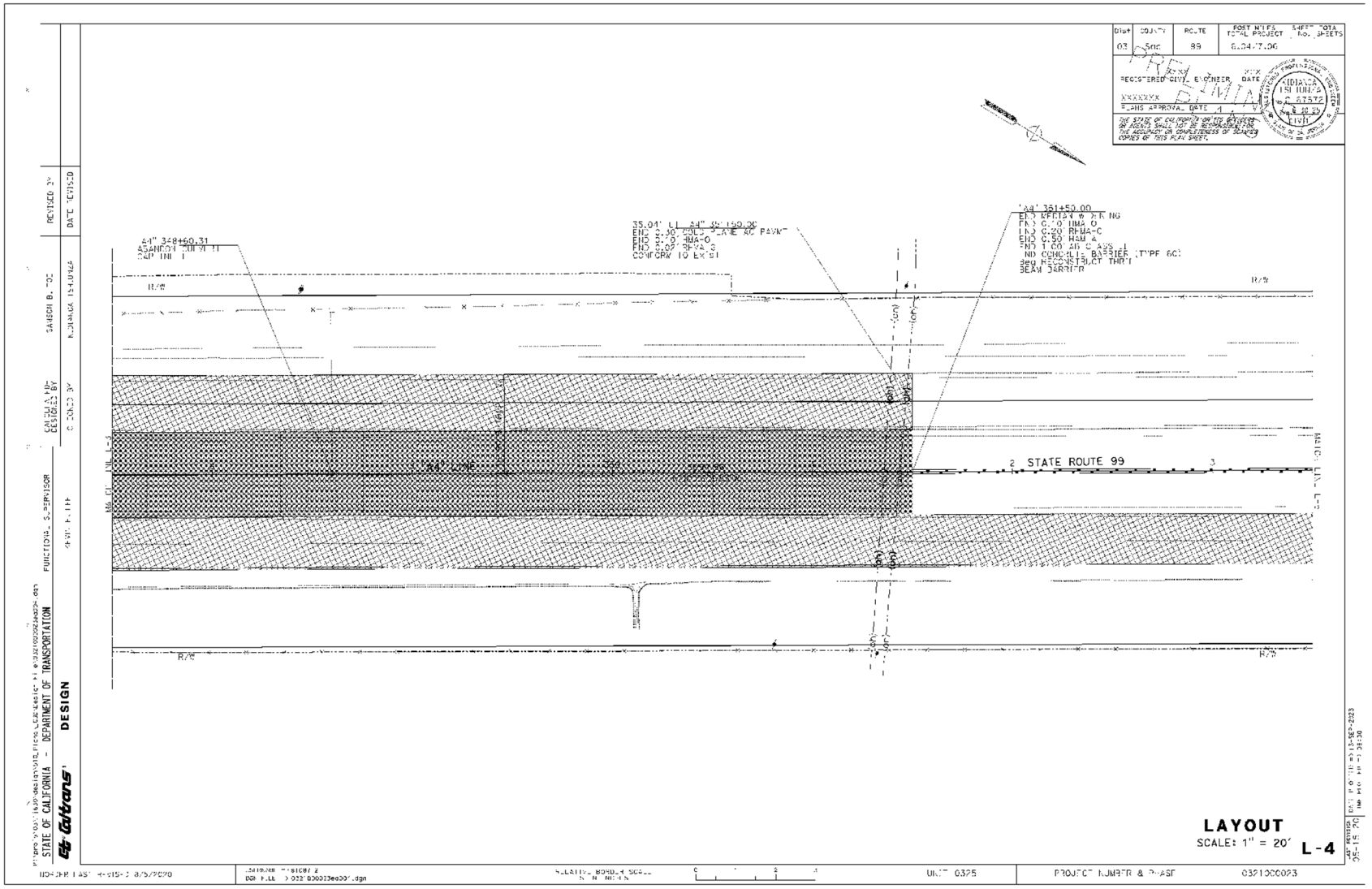
DATE PLOTTED => 13-SEP-2023 TIME PLOTTED => 08:30

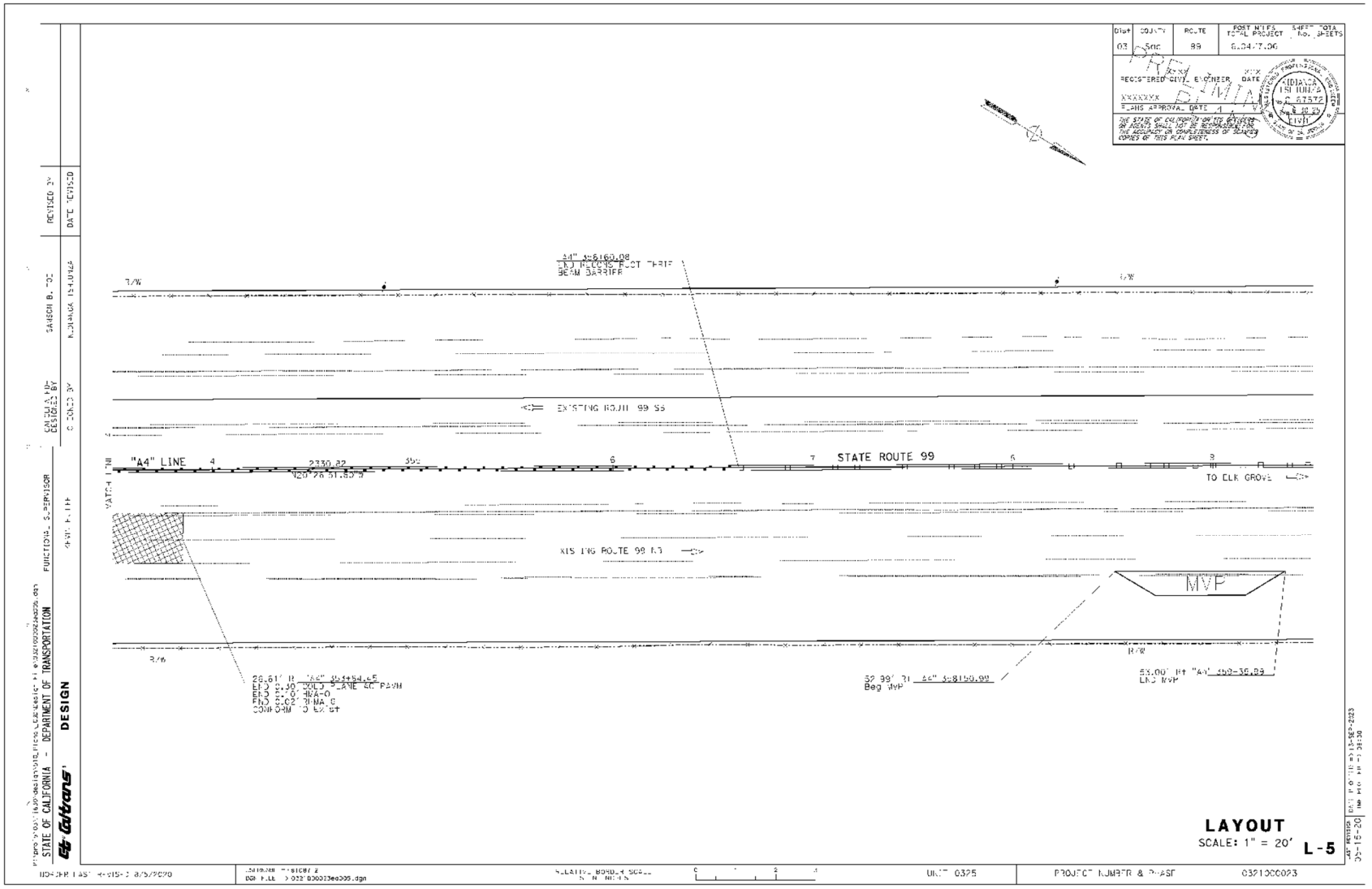

NOTE:
1. DIMENSIONS OF THE PAVEMENT STRUCTURES (STRUCTURAL SECTIONS) ARE SUBJECT TO TOLERANCES SPECIFIED IN THE STANDARD SPECIFICATIONS.
2. SUPERELEVATION ARE SHOWN ON THE SUPERELEVATION DIAGRAM
3. FOR MIDWEST GUARD RAILING, AND CONCRETE BARRIER SEE LAYOUTS.
"A4" LINE
R/W
Var 85' TO 90'
SOUTHBOUND
NORTHBOUND
"A4" 351+50.00 TO "A4" 356+68.72
"A4" 333+52.88 TO "A4" 339+75.20
ROUTE 99
58'-9"
58'-6"
2 LANES @ 12'-0"
CONCRETE BARRIER TYPE (SEE STRUCTURES DETAILS)
2'-9" CLOSURE POUR
"A4" 345+31.20 TO "A4" 345+93.70
ROUTE 99
TYPICAL CROSS SECTIONS
NO SCALE
X-2
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
DESIGN
SAMSON B. TOE
KIDIANGA TSHIUNZA
KEVIN F. LEE
PRELIMINARY PLANS
BORDER LAST REVISED 8/5/2020
USERNAME => s108712
DGN FILE => 0321000023ca002.dgn
UNIT
PROJECT NUMBER & PHASE


LEGEND:
1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFIC.
LEGEND:
COLD PLANE AND OVERLAY 0.2' RHMA, 0.1' OGAC
COLD PLANE AND VARIABLE OVERLAY
9.71' Lt "A4" 331+92.126 Beg RECONSTRUCT THRIE BEAM BARRIER
EXISTING ROUTE 99 SB
TO GALT
"A4" LINE
STATE ROUTE 99
EXISTING ROUTE 99 NB
9.86' Rt "A4" 331+92.126 Beg RECONSTRUCT THRIE BEAM BARRIER
MATCH LINE L-2
LAYOUT
SCALE: 1" = 20'
L-1
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
DESIGN
SAMSON B. TOE
KIDIANGA TSHIUNZA
KEVIN F. LEE
UNIT 0325
PROJECT NUMBER & PHASE
0321000023
03 Sac 99 6.04/7.06
REGISTERED CIVIL ENGINEER
PLANS APPROVAL DATE


STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
DESIGN
EXISTING ROUTE 99 SB
EXISTING ROUTE 99 NB
"A4" LINE
STATE ROUTE 99
R/W
LAYOUT
SCALE: 1" = 20'
L-2


STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
DESIGN
LAYOUT
SCALE: 1" = 20'
L-3


STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
DESIGN
STATE ROUTE 99
LAYOUT
SCALE: 1" = 20'
L-4


STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
DESIGN
"A4" LINE
STATE ROUTE 99
TO ELK GROVE
EXISTING ROUTE 99 SB
EXISTING ROUTE 99 NB
MVP
R/W
LAYOUT
SCALE: 1" = 20'
L-5

NOTE:

FOR ACCURATE RIGHT OF WAY DATA, CONTACT
RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

LEGEND (THIS SHEET ONLY):

1 EXISTING TYPE III-AF SERVICE EQUIPMENT ENCLOSURE CTID No. 03240990006851 -ADJUST TO GRADE AND LEVEL.

2 EXISTING HIGH SPEED WEIGH-IN-MOTION SYSTEM CONTROLLER CABINET.

3 INSTALL HMCCTV-90 POLE, NB PM 6.816.
SEE DETAIL SHEET SES-X.
INSTALL POLE MOUNTED ENCLOSURE AND EQUIPMENT AS SHOWN ON SHEET ED-XX.

CONDUIT AND CONDUCTORS (THIS SHEET ONLY):

1 1½"C,3#8, ADD 2#6

2 2"C,2#6 (HM90 POLE)

3 3"C,2#6 (HM90 POLE)

4 EXISTING 3"C, 8 SENSOR WIRES, 4 DLC

SYMBOLS:

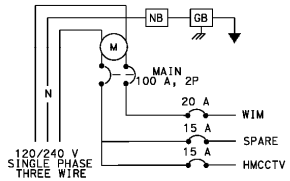
Exist WIM SCALE

WIRING DIAGRAM LEGEND:

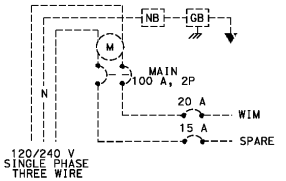
NB NEUTRAL BUS

GB GROUND BUS

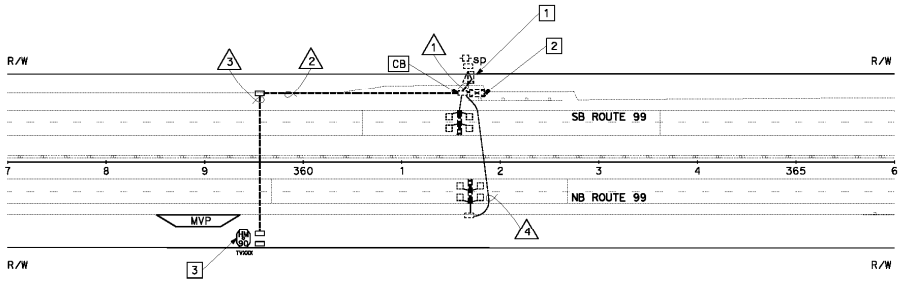
(M) METER SOCKET



MODIFIED SERVICE WIRING DIAGRAM
Ctid No. 03240990006851



EXISTING SERVICE WIRING DIAGRAM
Ctid No. 03240990006851



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	SAC	99	6.04/7.06		

PRELIMINARY PLANS

REGISTERED ELECTRICAL ENGINEER DATE

DAMON JENKINS
E24527
03-31-25
ELECTRICAL

PLANS APPROVAL DATE

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

CAMERA SYSTEMS

SCALE: 1" = 50'

E- 1

APPROVED FOR ELECTRICAL WORK ONLY

REVISED BY	DATE REVISED
YING LOR	DAMON JENKINS
CALCULATED-DESIGNED BY	CHECKED BY
FUNCTIONAL SUPERVISOR	STEVEN S LEE

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
ELECTRICAL DESIGN

DATE PLOTTED => 13-SEP-2023
TIME PLOTTED => 08:30

SEC. REVISED
10-14-22

BORDER LAST REVISED 7/2/2010

USERNAME => s108712
DGN FILE => 03210000023uo001.dgn

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

UNIT 0403

PROJECT NUMBER & PHASE 03190000231

Appendix B. 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 2022

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.

TONY TAVARES
Director

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

Appendix C. USFWS, NMFS, CNDDB, CNPS Species Lists

Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: Quad IS (Galt (3812133))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Agelaius tricolor tricolored blackbird	ABPBXB0020	None	Threatened	G1G2	S2	SSC
Ambystoma californiense pop. 1 California tiger salamander - central California DPS	AAAAA01181	Threatened	Threatened	G2G3T3	S3	WL
Ardea alba great egret	ABNGA04040	None	None	G5	S4	
Ardea herodias great blue heron	ABNGA04010	None	None	G5	S4	
Athene cunicularia burrowing owl	ABNSB10010	None	None	G4	S2	SSC
Bombus pensylvanicus American bumble bee	IIHYM24260	None	None	G3G4	S2	
Branchinecta lynchi vernal pool fairy shrimp	ICBRA03030	Threatened	None	G3	S3	
Branchinecta mesovallensis midvalley fairy shrimp	ICBRA03150	None	None	G2	S2S3	
Buteo swainsoni Swainson's hawk	ABNKC19070	None	Threatened	G5	S4	
Desmocerus californicus dimorphus valley elderberry longhorn beetle	IICOL48011	Threatened	None	G3T3	S3	
Downingia pusilla dwarf downingia	PDCAM060C0	None	None	GU	S2	2B.2
Elanus leucurus white-tailed kite	ABNKC06010	None	None	G5	S3S4	FP
Emys marmorata western pond turtle	ARAAD02030	None	None	G3G4	S3	SSC
Great Valley Valley Oak Riparian Forest Great Valley Valley Oak Riparian Forest	CTT61430CA	None	None	G1	S1.1	
Legenere limosa legenere	PDCAM0C010	None	None	G2	S2	1B.1
Lepidurus packardi vernal pool tadpole shrimp	ICBRA10010	Endangered	None	G3	S3	
Linderiella occidentalis California linderiella	ICBRA06010	None	None	G2G3	S2S3	
Northern Hardpan Vernal Pool Northern Hardpan Vernal Pool	CTT44110CA	None	None	G3	S3.1	
Nycticorax nycticorax black-crowned night heron	ABNGA11010	None	None	G5	S4	
Oncorhynchus mykiss irideus pop. 11 steelhead - Central Valley DPS	AFCHA0209K	Threatened	None	G5T2Q	S2	

Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Sagittaria sanfordii Sanford's arrowhead	PMALI040Q0	None	None	G3	S3	1B.2
Thamnophis gigas giant gartersnake	ARADB36150	Threatened	Threatened	G2	S2	
Valley Oak Woodland Valley Oak Woodland	CTT71130CA	None	None	G3	S2.1	

Record Count: 23

From: Edwards, Jonathan@DOT
To: nmfs.wcrca.specieslist@noaa.gov
Subject: project willow slough needs updated species list
Date: Friday, November 3, 2023 4:33:00 PM

Quad Name **Galt**

Quad Number **38121-C3**

ESA Anadromous Fish

SONCC Coho ESU (T) -
CCC Coho ESU (E) -
CC Chinook Salmon ESU (T) -
CVSR Chinook Salmon ESU (T) - **X**
SRWR Chinook Salmon ESU (E) -
NC Steelhead DPS (T) -
CCC Steelhead DPS (T) -
SCCC Steelhead DPS (T) -
SC Steelhead DPS (E) -
CCV Steelhead DPS (T) - **X**
Eulachon (T) -
sDPS Green Sturgeon (T) -

ESA Anadromous Fish Critical Habitat

SONCC Coho Critical Habitat -
CCC Coho Critical Habitat -
CC Chinook Salmon Critical Habitat -
CVSR Chinook Salmon Critical Habitat -
SRWR Chinook Salmon Critical Habitat -
NC Steelhead Critical Habitat -
CCC Steelhead Critical Habitat -
SCCC Steelhead Critical Habitat -
SC Steelhead Critical Habitat -
CCV Steelhead Critical Habitat -
Eulachon Critical Habitat -
sDPS Green Sturgeon Critical Habitat -

ESA Marine Invertebrates

Range Black Abalone (E) -
Range White Abalone (E) -

ESA Marine Invertebrates Critical Habitat

Black Abalone Critical Habitat -

ESA Sea Turtles

East Pacific Green Sea Turtle (T) -
Olive Ridley Sea Turtle (T/E) -

Leatherback Sea Turtle (E) -
North Pacific Loggerhead Sea Turtle (E) -

ESA Whales

Blue Whale (E) -
Fin Whale (E) -
Humpback Whale (E) -
Southern Resident Killer Whale (E) -
North Pacific Right Whale (E) -
Sei Whale (E) -
Sperm Whale (E) -

ESA Pinnipeds

Guadalupe Fur Seal (T) -

Essential Fish Habitat

Coho EFH -
Chinook Salmon EFH - X
Groundfish EFH -
Coastal Pelagics EFH -
Highly Migratory Species EFH -

MMPA Species (See list at left)

ESA and MMPA Cetaceans/Pinnipeds

See list at left and consult Monica DeAngelis
monica.deangelis@noaa.gov
562-980-3232

MMPA Cetaceans -
MMPA Pinnipeds -

Jonathan (John) Edwards
Associate Environmental Planner, N.S.
Jonathan.Edwards@dot.ca.gov
Caltrans Environmental M5
703 B Street
Marysville, CA 95901
(530) 720-3945 (Work Cell)

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Sacramento Fish And Wildlife Office
Federal Building
2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846
Phone: (916) 414-6600 Fax: (916) 414-6713

In Reply Refer To:
Project Code: 2023-0121065
Project Name: Willow Slough Bridge Replacement Project

November 03, 2023

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)

(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

https://www.fws.gov/sites/default/files/documents/endangered-species-consultation-handbook.pdf

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts, see https://www.fws.gov/program/migratory-bird-permit/what-we-do.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures, see https://www.fws.gov/library/collections/threats-birds.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit https://www.fws.gov/partner/council-conservation-migratory-birds.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Sacramento Fish And Wildlife Office
Federal Building
2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846
(916) 414-6600

PROJECT SUMMARY

Project Code: 2023-0121065
Project Name: Willow Slough Bridge Replacement Project
Project Type: Bridge - Replacement
Project Description: The proposed project is located on State Route (SR) 99 in Sacramento County, approximately 6 miles north of the Sacramento and San Joaquin County line at Willow Slough Bridge (Br. No. 24-0046 L/R). The project occurs on SR 99 from post mile (PM) 6.4 to 7.06 (figure 1). and within the Galt U.S. Geological Survey 7.5 - minute quadrangle.

The project proposes to replace existing bridge (BR. No. 24-0046L) and close the median gap between the southbound (Br. No. 24-0046L) and northbound (Br. No. 24-0046R) bridges at Willow Slough on SR 99. In addition, this project will upgrade roadway safety by providing standard shoulder width, upgrade Metal Beam Guardrail (MBGR), and install Traffic Management System (TMS).

Construction Sequence

The proposed sequence of construction has been separated into 2 stages. Refer to the outline and diagrams below illustrating the 2 stages.

Stage 1 proposes to construct a right widening and utilize the right widening and about 10 feet of the existing northbound bridge by restriping and placing barriers in preparation for southbound traffic in Stage 2.

Stage 2 In stage 2, the existing southbound bridge will be removed and replaced with a single-span bridge at a higher elevation to match the existing northbound bridge elevation, with no closure pour between the bridges to allow future profile to raise for the left bridge.

Proposed Construction Elements

• Construct temporary pavement for tapers in the southbound direction before and after the bridge to accommodate stage construction.
• Construct access road on both west and east sides of the existing bridges.
• Raise southbound roadway profile to match existing right bridge elevation.
• Remove existing 1’2” widening on the left edge of the right bridge.
• Construct bridge foundation.
• Connect right bridge widening to the existing right bridge structure with a closure pour.
• Place concrete deck on precast slab bridge for the left bridge replacement and
left/right bridge widening.
• Place approach slabs to the left bridge replacement and left/right bridge widening.
• Place concrete median barrier at the center of the proposed bridge.
• Remove and replace existing metal beam guardrail with steel post

Midwest
Guardrail Systems (MGS) and install end treatment as needed.
• Remove existing bridge railing on the left edge of the right bridge.
• Install bridge railing on the left edge of the left bridge replacement.
• Restripe lanes and shoulders with standard 6” thermoplastic traffic stripe.
• Install a 90’ CCTV Pole and a Maintenance Vehicle Pullouts (MVP) on Northbound at PM 6.82.

Project Location:

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@38.33339195,-121.3310337,14z

Counties: Sacramento County, California

ENDANGERED SPECIES ACT SPECIES

There is a total of 8 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

REPTILES

NAME	STATUS
Giant Garter Snake *Thamnophis gigas* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4482	Threatened
Northwestern Pond Turtle *Actinemys marmorata* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1111	Proposed Threatened

AMPHIBIANS

NAME	STATUS
California Tiger Salamander *Ambystoma californiense* Population: U.S.A. (Central CA DPS) There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/2076	Threatened

INSECTS

NAME	STATUS
Monarch Butterfly *Danaus plexippus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743	Candidate
Valley Elderberry Longhorn Beetle *Desmocerus californicus dimorphus* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/7850	Threatened

CRUSTACEANS

NAME	STATUS
Vernal Pool Fairy Shrimp *Branchinecta lynchi* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/498	Threatened
Vernal Pool Tadpole Shrimp *Lepidurus packardi* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/2246	Endangered

FLOWERING PLANTS

NAME	STATUS
Fleshy Owl's-clover *Castilleja campestris ssp. succulenta* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8095	Threatened

CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

IPAC USER CONTACT INFORMATION

Agency: California Department of Transportation District 3
Name: Jonathan Edwards
Address: 703 B street
City: Marysville
State: CA
Zip: 95901
Email jonathan.edwards@dot.ca.gov
Phone: 5307203945

Appendix D. Response to Comments

The Initial Study with proposed Negative Declaration (IS/ND) was circulated for public review from January 9, 2024 to February 9, 2024. During the public circulation period four comment letters were received. The comment letters and responses to comments can be found on the following pages.

COMMENT LETTER 1

Central Valley Regional Water Quality Control Board

Central Valley Regional Water Quality Control Board

9 February 2024

Veronica Wilson
California Department of Transportation, District 3
703 B Street
Marysville, CA 95901
veronica.wilson@dot.ca.gov

COMMENTS TO REQUEST FOR REVIEW FOR THE NEGATIVE DECLARATION, WILLOW SLOUGH BRIDGE REPLACEMENT PROJECT, SCH#2024010128, SACRAMENTO COUNTY

Pursuant to the State Clearinghouse's 8 January 2024 request, the Central Valley Regional Water Quality Control Board (Central Valley Water Board) has reviewed the *Request for Review for the Negative Declaration* for the Willow Slough Bridge Replacement Project, located in Sacramento County.

Our agency is delegated with the responsibility of protecting the quality of surface and groundwaters of the state; therefore our comments will address concerns surrounding those issues.

I. Regulatory Setting

Basin Plan

The Central Valley Water Board is required to formulate and adopt Basin Plans for all areas within the Central Valley region under Section 13240 of the Porter-Cologne Water Quality Control Act. Each Basin Plan must contain water quality objectives to ensure the reasonable protection of beneficial uses, as well as a program of implementation for achieving water quality objectives with the Basin Plans. Federal regulations require each state to adopt water quality standards to protect the public health or welfare, enhance the quality of water and serve the purposes of the Clean Water Act. In California, the beneficial uses, water quality objectives, and the Antidegradation Policy are the State's water quality standards. Water quality standards are also contained in the National Toxics Rule, 40 CFR Section 131.36, and the California Toxics Rule, 40 CFR Section 131.38. 1

The Basin Plan is subject to modification as necessary, considering applicable laws, policies, technologies, water quality conditions and priorities. The original Basin Plans were adopted in 1975, and have been updated and revised periodically as required, using Basin Plan amendments. Once the Central Valley Water Board has adopted a Basin Plan amendment in noticed public hearings, it must be approved by

the State Water Resources Control Board (State Water Board), Office of Administrative Law (OAL) and in some cases, the United States Environmental Protection Agency (USEPA). Basin Plan amendments only become effective after they have been approved by the OAL and in some cases, the USEPA. Every three (3) years, a review of the Basin Plan is completed that assesses the appropriateness of existing standards and evaluates and prioritizes Basin Planning issues. For more information on the *Water Quality Control Plan for the Sacramento and San Joaquin River Basins*, please visit our website: http://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/ 1.

Antidegradation Considerations

All wastewater discharges must comply with the Antidegradation Policy (State Water Board Resolution 68-16) and the Antidegradation Implementation Policy contained in the Basin Plan. The Antidegradation Implementation Policy is available on page 74 at: https://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/sacsjr_201805.pdf

In part it states:

Any discharge of waste to high quality waters must apply best practicable treatment or control not only to prevent a condition of pollution or nuisance from occurring, but also to maintain the highest water quality possible consistent with the maximum benefit to the people of the State. 2.

This information must be presented as an analysis of the impacts and potential impacts of the discharge on water quality, as measured by background concentrations and applicable water quality objectives.

The antidegradation analysis is a mandatory element in the National Pollutant Discharge Elimination System and land discharge Waste Discharge Requirements (WDRs) permitting processes. The environmental review document should evaluate potential impacts to both surface and groundwater quality.

II. Permitting Requirements

Clean Water Act Section 404 Permit

If the project will involve the discharge of dredged or fill material in navigable waters or wetlands, a permit pursuant to Section 404 of the Clean Water Act may be needed from the United States Army Corps of Engineers (USACE). If a Section 404 permit is required by the USACE, the Central Valley Water Board will review the permit application to ensure that discharge will not violate water quality standards. If the project requires surface water drainage realignment, the applicant is advised to contact the Department of Fish and Game for information on Streambed Alteration Permit requirements. If you have any questions regarding the Clean Water Act Section 404 permits, please contact the Regulatory Division of the Sacramento District of USACE at (916) 557-5250. 3.

Clean Water Act Section 401 Permit – Water Quality Certification

If an USACE permit (e.g., Non-Reporting Nationwide Permit, Nationwide Permit, Letter of Permission, Individual Permit, Regional General Permit, Programmatic General Permit), or any other federal permit (e.g., Section 10 of the Rivers and Harbors Act or Section 9 from the United States Coast Guard), is required for this project due to the disturbance of waters of the United States (such as streams and wetlands), then a Water Quality Certification must be obtained from the Central Valley Water Board prior to initiation of project activities. There are no waivers for 401 Water Quality Certifications. For more information on the Water Quality Certification, visit the Central Valley Water Board website at: https://www.waterboards.ca.gov/centralvalley/water_issues/water_quality_certification/ 4.

Waste Discharge Requirements – Discharges to Waters of the State

If USACE determines that only non-jurisdictional waters of the State (i.e., "non-federal" waters of the State) are present in the proposed project area, the proposed project may require a Waste Discharge Requirement (WDR) permit to be issued by Central Valley Water Board. Under the California Porter-Cologne Water Quality Control Act, discharges to all waters of the State, including all wetlands and other waters of the State including, but not limited to, isolated wetlands, are subject to State regulation. For more information on the Waste Discharges to Surface Water NPDES Program and WDR processes, visit the Central Valley Water Board website at:https://www.waterboards.ca.gov/centralvalley/water_issues/waste_to_surface_water/ 5.

Projects involving excavation or fill activities impacting less than 0.2 acre or 400 linear feet of non-jurisdictional waters of the state and projects involving dredging activities impacting less than 50 cubic yards of non-jurisdictional waters of the state may be eligible for coverage under the State Water Resources Control Board Water Quality Order No. 2004-0004-DWQ (General Order 2004-0004). For more information on the General Order 2004-0004, visit the State Water Resources Control Board website at: https://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2004/wqo/wqo2004-0004.pdf

Dewatering Permit

If the proposed project includes construction or groundwater dewatering to be discharged to land, the proponent may apply for coverage under State Water Board General Water Quality Order (Low Threat General Order) 2003-0003 or the Central Valley Water Board's Waiver of Report of Waste Discharge and Waste Discharge Requirements (Low Threat Waiver) R5-2018-0085. Small temporary construction dewatering projects are projects that discharge groundwater to land from excavation activities or dewatering of underground utility vaults. Dischargers seeking coverage under the General Order or Waiver must file a Notice of Intent with the Central Valley Water Board prior to beginning discharge. 6.

For more information regarding the Low Threat General Order and the application process, visit the Central Valley Water Board website at: http://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2003/wqo/wqo2003-0003.pdf

For more information regarding the Low Threat Waiver and the application process, visit the Central Valley Water Board website at: https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/waivers/r5-2018-0085.pdf

Limited Threat General NPDES Permit

If the proposed project includes construction dewatering and it is necessary to discharge the groundwater to waters of the United States, the proposed project will require coverage under a National Pollutant Discharge Elimination System (NPDES) permit. Dewatering discharges are typically considered a low or limited threat to water quality and may be covered under the General Order for *Limited Threat Discharges to Surface Water* (Limited Threat General Order). A complete Notice of Intent must be submitted to the Central Valley Water Board to obtain coverage under the Limited Threat General Order. For more information regarding the Limited Threat General Order and the application process, visit the Central Valley Water Board website at: https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/general_orders/r5-2016-0076-01.pdf

7.

NPDES Permit

If the proposed project discharges waste that could affect the quality of surface waters of the State, other than into a community sewer system, the proposed project will require coverage under a National Pollutant Discharge Elimination System (NPDES) permit. A complete Report of Waste Discharge must be submitted with the Central Valley Water Board to obtain a NPDES Permit. For more information regarding the NPDES Permit and the application process, visit the Central Valley Water Board website at: https://www.waterboards.ca.gov/centralvalley/help/permit/

8.

If you have questions regarding these comments, please contact me at (916) 464-4684 or Peter.Minkel2@waterboards.ca.gov.

Peter Minkel
Engineering Geologist

cc: State Clearinghouse unit, Governor's Office of Planning and Research, Sacramento

Responses to Central Valley Regional Water Quality Control Board (Comment Letter 1):

Response to Comment 1:

Thank you for your comments on the Draft IS/ND for the Willow Slough Bridge Replacement Project. The proposed project would comply with the provisions of the Caltrans Statewide National Pollutant Discharge Elimination System (NPDES) Permit (Order 2022-0033-DWQ), effective January 1, 2023.

Caltrans shall comply with all discharge prohibitions contained in the Water Quality Control Plan (Basin Plan) for the California Regional Water Quality Control Board. No revisions to the Draft IS/ND are necessary.

Response to Comment 2:

Antidegradation Considerations:
It is anticipated the Caltrans will meet this compliance requirement.

Response to Comment 3:

Clean Water Act Section 404 Permit: The proposed project would require a Section 404 Permit. The permit is listed in Section 1.5 Permits and Approvals Needed, Table 1.

Response to Comment 4:

Clean Water Act Section 401 Permit- Water Quality Certification: The proposed project would require a Section 401 Permit. The permit is listed in Section 1.5 Permits and Approvals Needed, Table 1.

Response to Comment 5:

Waste Discharge Requirements-Discharges to Waters of the State: It is anticipated the Caltrans will meet this compliance requirement. Please refer to Section 1.6 regarding Standard Measures and Best Management Practices and Section 2.10 Hydrology and Water Quality.

Response to Comment 6:

Dewatering Permit: The project will likely require a dewatering permit which is required prior to the start of dewatering and discharge activities.

Caltrans NPDES coordinator will coordinate with the Regional Board to facilitate the approval of this permit prior to construction. This permit is necessary prior to the start of dewatering and discharging to land.

Response to Comment 7:

Limited Threat General NPDES Permit: Caltrans acknowledges the permits and requirements listed. Please refer to Section 1.6 regarding Standard Measures and Best Management Practices.

Response to Comment 8:

NPDES Permit: The proposed project will comply with requirements of Caltrans Statewide MS4 NPDES Permit. Please refer to Section 1.6 regarding Standard Measures and Best Management Practices.

COMMENT LETTER 2

California Department of Fish and Wildlife (CDFW)

From:	Stanfield, Melissa@Wildlife
To:	Willow Slough ED@DOT
Cc:	Sheya, Tanya@Wildlife; Kilgour, Morgan@Wildlife; Lopatin, Irina@Wildlife; Xiong, Mary@Wildlife; Wildlife R2 CEQA
Subject:	CDFW"s Comments on the IS/ND for the Willow Slough Bridge Replacement Project - EA 03-1J630
Date:	Friday, February 9, 2024 4:25:09 PM
Attachments:	image001.png

EXTERNAL EMAIL. Links/attachments may not be safe.

The California Department of Fish and Wildlife (CDFW) received and reviewed the Notice of Intent to Adopt an ND from State of California Department of Transportation (Caltrans) for the Willow Slough Bridge Replacement Project (Project) pursuant the California Environmental Quality Act (CEQA) statute and guidelines.

Thank you for the opportunity to provide comments and recommendations regarding those activities involved in the Project that may affect California fish, wildlife, native plants, and their habitat. Likewise, we appreciate the opportunity to provide comments regarding those aspects of the Project that CDFW, by law, may need to exercise its own regulatory authority under the Fish and Game Code.

CDFW ROLE

CDFW is California's Trustee Agency for fish and wildlife resources and holds those resources in trust by statute for all the people of the State (Fish & G. Code, §§ 711.7, subd. (a) & 1802; Pub. Resources Code, § 21070; CEQA Guidelines § 15386, subd. (a)). CDFW, in its trustee capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species. (Fish & G. Code, § 1802.) Similarly for purposes of CEQA, CDFW provides, as available, biological expertise during public agency environmental review efforts, focusing specifically on projects and related activities that have the potential to adversely affect fish and wildlife resources.

CDFW may also act as a Responsible Agency under CEQA. (Pub. Resources Code, § 21069; CEQA Guidelines, § 15381.) CDFW expects that it may need to exercise regulatory authority as provided by the Fish and Game Code. As proposed, for example, the Project may be subject to CDFW's lake and streambed alteration regulatory authority. (Fish & G. Code, § 1600 et seq.) Likewise, to the extent implementation of the Project as proposed may result in "take" as defined by State law of any species protected under the California Endangered Species Act (CESA) (Fish & G. Code, § 2050 et seq.), the project proponent may seek related take authorization as provided by the Fish and Game Code.

PROJECT DESCRIPTION SUMMARY

The Project site is located along State Route 99 (SR-99) between Dillard Road and Arno Road, in Sacramento County, from post miles 6.04 to 7.06, approximately six (6) miles north of the Sacramento and San Joaquin County line.

The Project consists of replacing the southbound Willow Slough Bridge with a new bridge, at a higher elevation. The existing center guardrail separating the northbound and southbound bridges will be removed and replaced with a concrete barrier. A new concrete barrier will also be placed on the west side of the southbound bridge. Type-III AF Service enclosure (TMS) elements will also be installed, including a service enclosure, a high-speed system controller and cabinet, and a closed-circuit television (CCTV) element on a 90-foot pole. Approximately 0.16 acre of permanent fill will be added to the slough to provide bridge support in the center median between the southbound and northbound bridges. Temporary fill will be added to 1.66 acres to the east and west of southbound SR-99 to provide access roads during construction. One (1) culvert will be removed for construction and replaced after access roads are removed.

COMMENTS AND RECOMMENDATIONS

CDFW offers the comments and recommendations below to assist Caltrans in adequately identifying and, where appropriate, mitigating the Project's significant, or potentially significant, direct and indirect impacts on fish and wildlife (biological) resources. Based on the potential for the Project to have a significant impact on biological resources, CDFW concludes that a Mitigated Negative Declaration is appropriate for the Project.

Comment 1: *Chapter 1.6 Standard Measures and Best Management Practices Included in All Alternatives,* Page 7 1.

Section 15370 of the CEQA Guidelines defines mitigation as:

a. Avoiding the impact altogether by not taking a certain action or parts of an action;
b. Minimizing impacts by limiting the degree or magnitude of the action and its implementation;
c. Rectifying the impact by repairing, rehabilitating, or restoring the impacted environment;
d. Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action; and

e. Compensating for the impact by replacing or providing substitute resources or environments, including through permanent protection of such resources in the form of conservation easements.

Issue: This section of the ND states the standard measures and best management practices for biological resources and water quality, among other environmental factors, included in this document are not considered mitigation measures because they are prescriptive and sufficiently standardized to be generally applicable. However, the measures are also referred to as avoidance and minimization measures in the second paragraph of this section. The ND also states these general measures resulted from laws, permits, agreements, guidelines, and resource management plans that predate the Project's proposal. General measures in documents like these,

including, but not limited to Lake and Streambed Alteration (LSA) Agreements and California Endangered Species Act (CESA) Incidental Take Permits (ITP), are typically required to avoid, minimize, and/or mitigate impacts caused by projects that could significantly affect the environment.

Recommendation: CDFW believes that these measures should be considered mitigation under CEQA when the ND analyzes the effects of the Project with these measures in place. CDFW also recommends this document be identified as a "Mitigated Negative Declaration" considering the incorporation of measures that serve to avoid, minimize, and reduce/eliminate the effects of the Project to a point where no significant effect on the environment would occur. Subsequently, the Initial Study/Negative Declaration checklist should be updated to reflect which environmental factors would have impacts determined to be less than significant with mitigation incorporated.

COMMENT 2: *Chapter 2.4 Biological Resources, Animal Species* - Bats, pages 32 and 35. *Discussion of CEQA Environmental Checklist Question 2.4(d)—Biological Resources,* page 47. 2.

Issue: Bats are considered non-game mammals and are protected by state law from take and/or harassment (Fish and Game Code §4150, CCR §251.1). The ND also does not have sufficient and enforceable avoidance measures to reduce impacts to bats to a less than significant level. For mitigation measures to be effective, they must be specific, enforceable, and feasible actions that will reduce the environmental impacts from the project to a less than significant level. As currently proposed, the Project will have a significant and unmitigated impact on a known bat maternity colony both during and post-construction.

<u>Insufficient Impact Analysis</u>
The ND does not provide information on the bat species present or the type or quantity of roosts in the southbound or northbound bridge structures. The biological resources present must be known in order to effectively analyze Project impacts to them and incorporate appropriate mitigation measures.

The Animal Species section acknowledges the presence of a known bat colony within the southbound bridge structure and states that "bats were observed inhabiting the southbound bridge. Due to demolition of the southbound lane bridge the project may result in impacts to bats. However, the use of an exclusion device would prevent any impacts to bats." The installation of exclusion devices is the only measure included in the ND to mitigate impacts to bats; however, excluding bats from their roosting habitat through the installation of bat exclusion devices is itself an impact as it will cause significant disruption to the colony. Exclusion devices will force individuals to expend their energy searching for new roosting habitat and will potentially be exposed to predators that they would otherwise be able to avoid had they not been excluded.

It's unclear from the analysis whether a bat colony is present in the northbound bridge, but if present, impacts to the colony may result during construction from increased noise, lighting, and vibrations. It is well documented that construction

related disturbance has the potential to impact day roosting bats (Johnston et. al 2004, Johnston et. al 2019). Disturbance that results in post-construction roost abandonment should be considered a permanent impact (Johnston et. al, 2019). Any direct or indirect artificial lighting has the potential to degrade or eliminate roosts or potential roosting habitat (Johnston et. al 2019). Noise disturbance and displacement of bats from roosts or important foraging areas can potentially result in reduced survivability of individuals from increased susceptibility to predation, reduced quality of thermal and social environments, and decreased foraging efficiencies (Johnston et. al, 2019).

The ND does not have sufficient and enforceable avoidance measures to reduce impacts to the colony to a less than significant level. For mitigation measures to be effective, they must be specific, enforceable, and feasible actions that will reduce the environmental impacts from the project to a less than significant level.

Impacts to Native Wildlife Nursery Sites

The Project will impede the use of a native wildlife nursery site by permanently 1) excluding the maternity colony from the southbound bridge during construction, 2) permanently removing the southbound maternity roost, and 3) disturbing any potential roosts in the northbound structure during multiple construction seasons. The single span design of the replacement bridge offers no suitable replacement roost habitat for bat maternity colonies. The ND does not prescribe compensatory mitigation for the loss of the southbound maternity roost or disturbances to roosts in the northbound bridge.

Disturbance of roost sites during the maternity and hibernation seasons are considered primary factors that may negatively impact bats and have the potential to result in take. During the hibernation period, bats are very slow to respond to disturbance and can lose fat stores needed to survive the winter while pups in the maternity colony may not have the ability to fly.

Recommendation: CDFW recommends Caltrans refer to *Caltrans Bat Mitigation: A Guide to Developing Feasible and Effective Solutions (Johnston et. al, 2019)* when analyzing and mitigating Project impacts to bats and their habitat. To reduce Project impacts to bats and native nursery sites to a less than significant level, CDFW recommends the following mitigation measures be incorporated into the ND:

Compensatory Mitigation for the Loss of Day Roosting Habitat

The Designated Bat Biologist shall determine the species of bats roosting in the bridge and quantify the available roosting habitat on the northbound and southbound bridges. Replacement roost habitat shall be designed to accommodate the displaced and impacted bat species. To mitigate Project impacts to nursery sites to a less than significant level, Caltrans shall 1) incorporate roosting habitat into the new bridge design; 2) create and install bat boxes on the northbound bridge structure, and 3) create and install one (1) free-standing bat condo on the adjacent Cosumnes River Ecological Reserve.

Impacted roost habitat on the southbound and northbound bridges shall be mitigated

for at a ratio sufficient to compensate for the significant impacts to the colony. Bat replacement habitat shall be designed generally following the guidelines in *Caltrans Bat Mitigation: A Guide to Developing Feasible and Effective Solutions (Johnston et. al, 2019)*, which provides a review of mitigation options for bats in relation to Caltrans projects. Final plans for bat habitat replacement will be approved by Caltrans and CDFW.

The project proponent shall be responsible for monitoring replacement bat habitat over a 5-year period for a minimum of three (3) years (e.g., years 2, 3, and 5) to determine whether bats are using the habitat, determine whether the habitat is functioning as intended, and identify any corrective actions that need to be made to the habitat to improve its use by bats. Bat use shall be documented through a combination of visual observation (bats and bat sign), which could be conducted during the day when roosting bats are visible or at night during an emergence survey. Acoustic recordings shall be used in combination with emergence surveys to attempt to identify the species of bat(s) using the replacement habitat. The locations and amount of occupied habitat shall be recorded. Recommendations for corrective actions shall be presented to the project proponent and CDFW for approval. Annual monitoring reports shall be sent to the project proponent and CDFW.

Bat Pre-Construction Surveys

CDFW recommends that the Avoidance, Minimization, and Mitigation section be revised to include pre-construction surveys and ensure they are conducted prior to the start of construction activities in all previously undisturbed areas or areas where no construction has occurred for 14 days or longer. In addition, pre-construction survey methods consistent with *Caltrans Bat Mitigation: A Guide to Developing Feasible and Effective Solutions (Johnston et. al, 2019)* should be included in the mitigation measures. The qualified biologists performing pre-construction surveys should be approved by CDFW prior to initiating surveys. The survey results shall identify: 1) the exact location of all roosting sites (location shall be adequately described and shown on a digital map with GPS coordinates), 2) the number of bats present at the time of visit (count or estimate), 3) species of bat detected, if known (include how the species was identified), and 4) the type of roost(s) [i.e., maternity, hibernaculum, night roost (rest at night while out feeding), or day roost (resting during the day)]. Survey results should be provided to CDFW no later than 10 days following the survey and prior to the start of construction.

Bat Avoidance or Exclusion Plan (BAEP)

The Designated Bat Biologist shall develop and submit to CDFW for review and approval a BAEP. The BAEP shall include, at minimum, the following:

a. Bat Roost Buffer. The Project proponent shall establish an appropriate no-disturbance buffer around bat roosts, in coordination with CDFW, during maternity (April 15 to August 31) or hibernation (October 15 to March 1) seasons. The Project proponent shall maintain the buffer until the Designated Bat Biologist determines the roost is no longer occupied. The Project proponent shall clearly delineate habitat and bat roosts within the Project Area with posted signs demarking the avoidance areas using stakes, flags, and/or

rope or cord. The Project proponent shall delineate bat roosts with different materials than those used to delineate the Project Area. The Project proponent shall remove all materials used for delineation upon completion of the Project.

b. Exclusion Devices. Exclusion devices shall be installed either (1) between approximately March 1 (or when evening temperatures are above 45°F and rainfall less than ½-inch in 24 hours occurs) and April 15, prior to parturition of pups; or (2) between September 1 and October 15 (or prior to evening temperatures dropping below 45°F and onset of rainfall greater than ½-inch in 24 hours). CDFW does not support eviction of bats during the maternity or hibernation periods. Specific exclusion devices may include one-way doors, lights and fans, or steel wool or other site-specific methods determined in coordination with CDFW. The Designated Bat Biologist shall monitor the roost prior to exclusion to confirm that it is not occupied.

If a lapse in project activities of six (6) months or longer occurs, the Designated Bat Biologist shall complete another habitat assessment before Project activities can be reinitiated. If the subsequent habitat assessment identifies bat habitat, the Project proponents shall: 1) conduct pre-construction surveys and 2) develop a BAEP, if applicable and in accordance with the parameters described above.

COMMENT 3: COMMENT 3: *Chapter 1, Plant Species, Sensitive Natural Communities, and ESHA*, page 10 3.

Issue: As currently written, the ND does not provide adequate and enforceable measures for the control of invasive non-native plant species. The project site abuts the CDFW-owned Cosumnes River Ecological Reserve (Reserve). The introduction of invasive and/or non-native plant species has the potential to have a devastating effect on the efforts made to protect the Preserve. Invasive plant species outcompete the native flora by restricting the availability of resources for the native plant community, such as light, water, nutrients, and space (CDFW 2024). Invasive plant taxa can also change the biodiversity of a community, altering nutrient cycling and greatly diminish the ability for native plant species to thrive (Mack et al. 2000).

Recommendation: In order to ensure the proper minimization and prevention of the spread of invasive plant species, Caltrans should prepare and implement a plan for invasive plant control and eradication as part of its revegetation plan.

COMMENT 4: *Chapter 1*, pages 24-27; *Chapter 2*, pages 26-47 4.

Issue: Throughout the ND, the document acknowledges a qualified biologist will be retained for the project and will conduct various necessary activities such as surveys and biological monitoring. However, the document fails to define and address the qualifying criteria that the biologist(s) must have in order to properly complete the necessary work laid out in the biological measures. In an effort to best protect the natural environment and species inhabiting the Project area, only a CDFW-approved Designated Biologist should be involved in activities that call for a qualified biologist to

perform work.

Recommendation: CDFW recommends that all instances in the document that make reference to a "qualified biologist" be changed to "CDFW-approved Designated Biologist".

COMMENT 5: *Chapter 1, Plant Species, Sensitive Natural Communities, and ESHA BR-4 B,* page 10 5.

Issue: Section B in this measure states that Temporary High Visibility Fencing (THVF) and/or flagging will be installed around sensitive communities, sensitive habitats, rare plants, and water features. However, it does not address the appropriate entity responsible for ensuring that the THVF is placed appropriately and in the best interest of the species or natural community it is meant to protect. A CDFW-approved Designated Biologist should oversee these activities and monitor regularly to ensure that necessary measures are taken to protect sensitive species and their community.

Recommendation: CDFW recommends that this measure be revised to include a CDFW-approved Designated Biologist to oversee the installation and monitoring of all THVF.

COMMENT 6: *Chapter 2, Animal Species – Giant Garter Snake*, page 24-26; *Chapter 2, Affected Environment,* pages 33-39 6.

Issue: In the Affected Environment section, the ND identifies Willow Slough within the Project area as suitable giant garter snake (GGS) (*Thamnophis gigas*) habitat. Giant garter snakes are known to occupy the nearby Badger Creek, which is hydrologically connected to the project area, as evidenced by a 2017 California Natural Diversity Database (CNDDB) occurrences of GGS overlapping the Project site. The GGS is a highly aquatic, wetland obligate species endemic to California. They typically occur in slow-moving, warm aquatic environments like marshes, sloughs, and ponds and have adapted to using irrigation canals and rice fields as wetlands have been reduced in the Central Valley (Halstead et al. 2010). Small mammal burrows in upland habitat are generally used for cover and retreat during the active season and for refuge from flood waters during the dormant season (Halstead et al. 2015). Causes of decline are largely related to habitat loss and fragmentation of wetland habitat. Up to 98% of historic giant garter snake habitat in the Central Valley has been lost to development, including agricultural lands (Ellis 1987).

GGS is listed as a threatened species under CESA and as such it is afforded full protection under the act. It is unlawful to take a State-listed endangered or threatened species (Fish & G. Code §2050 et seq.). Take is defined as "hunt, pursue, catch, capture or kill or attempt to hunt, pursue, catch, capture or kill" (Fish & G. Code §86).

The Animal Species section states that the Project will result in temporary and permanent loss of habitat, and could result in the disturbance, injury, and mortality of the CESA listed and threatened giant garter snake. As previously stated, there are

known CNDDB occurrences of GGS with a direct hydrologic connection to the Project. In particular GGS are known to occur in the wetland area between Arno Road and the Union Pacific Railroad. Additionally, the Project will have temporary and permanent impacts to suitable upland and aquatic GGS habitat. During a June 2023 visit to the Project site with CDFW and Caltrans staff, most of the Project site was inundated with several feet of standing water. Historic aerials show the Project site contains aquatic habitat for GGS throughout the entire summer from a combination of natural flows and irrigation runoff. Furthermore, because this project will extend through multiple seasons, all impacts to GGS aquatic habitat are considered permanent. Regardless, the ND repeatedly states that there will be no significant impacts to GGS because the species was not observed within the BSA. Because suitable upland and aquatic GGS habitat will be impacted by the Project and there are known occurrences of GGS immediately adjacent to the Project, CDFW cannot support the conclusion that this project will have no significant impact on these species.

In addition to the habitat onsite and known occurrences adjacent to the Project, local management plans also address the assumed presence of GGS in this marshland. According to the 2022 Cosumnes River Ecological Reserve Management Plan (MP), Willow Slough falls within the Cosumnes River Ecological Reserve property boundaries and is a natural wetland with hydrological connectivity to the rest of the aquatic resources and sensitive habitat (2022 MP, pg. 66, 144). The MP also includes goals for restoring and maintaining the ponds to optimize available GGS foraging habitat and provide perennial wetland habitat for GGS west of Highway 99 (Goal 4.2.6, 2022 MP, page 134).

CDFW liaison staff participated in pre-consultation site visits and correspondence with Caltrans on the issue of Project impacts to GGS and their habitat. The recommendations provided by CDFW to Caltrans during the pre-consultation process are not included in the ND.

Recommendation: CDFW recommends the project be re-evaluated for impacts to GGS and if necessary, revise the CEQA document. If during Project analysis it is determined that the project may result in take of GGS, CDFW recommends that an Incidental Take Permit (ITP) is obtained prior to starting construction activities. If the project has the potential to result in take of species listed under CESA, either during construction or over the life of the Project, a CESA permit must be obtained. Issuance of a CESA Permit is subject to CEQA documentation; therefore, the CEQA document must specify impacts, mitigation measures, and a mitigation monitoring and reporting program.

Furthermore, permanent unmitigated impacts to GGS upland and aquatic habitat and potential take of the species from construction activities are considered significant Project impacts. To mitigate Project impacts to GGS to a less than significant level, CDFW recommends Caltrans provide compensatory mitigation for all GGS habitat impacts.

COMMENT 7: *Chapter 2, Avoidance, Minimization and Mitigation Measures*, page 38 7.

Issue: *Plant Species*: The ND acknowledges that there are four (4) species of special status plants that have the potential to exist within the BSA. However, it fails to identify these species, and does not provide any avoidance, minimization, or mitigation measures, stating that "there were no special status plant species observed within the BSA during the 2023 survey season". No details are provided within the ND on whether survey conducted were protocol level or the qualifications of the botanist who performed them. In addition, a copy of the Natural Environment Study (NES) was not provided for review and comment with the ND. Drought and other adverse conditions may mean that some plant taxa will not be evident or identifiable in a given year. This may be particularly true for annual and short-lived perennial plant taxa and plants with persistent long-lived seed banks that are known not to germinate every year. Because of these conditions, the failure to locate a plant during the floristic surveys of one season does not constitute evidence that the plant is absent from the surveyed location. The timing and number of visits necessary to conduct floristic surveys should be determined by geographic location, the natural communities present and the weather patterns of the year, with the understanding that more than one field visit or field season may be necessary to accurately survey the floristic diversity of a site and detect the presence of special status plant taxa.

Recommendation: CDFW recommends protocol-level surveys be conducted by a qualified botanist per CDFW's *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities (2018)*. Surveys should be conducted at the appropriate time of year with proper weather conditions and the results incorporated into the ND for review and comment. Both future and past survey results should be used to provide an accurate assessment of special-status plants that may be impacted by the project (CEQA Guidelines, § 15126.4, subd. (a)(1)(B).). The ND should also discuss, in depth, the avoidance, minimization, and mitigation measures that will be taken in an effort to minimize impact to special status plant taxa.

COMMENT 8: *Chapter 2, Animal Species – Nesting Birds,* page 38-39 8.

Issue: The ND acknowledges the presence of a nesting swallow colony on the Willow Slough bridge structure, as well as other nesting birds within the BSA. The ND states that there will be no significant impact to nesting birds and their nests due to the avoidance and minimization measures that will be taken during construction. However, the only minimization measures offered are the installation of bird exclusion devices and "on structures or parts of the structure where it's not feasible to install bird exclusion devices, partially constructed and unoccupied nests within the construction area will be removed and disposed of on a regular basis". CDFW does not support the ongoing removal of unoccupied nests during the nesting season. Egg laying often begins before the nest is finished, occasionally in nests only half completed. In addition, swallows have high site fidelity. They will continue nesting attempts well into the nesting season regardless of partial nest removal, resulting in reduced survivability of individuals from increased energetic cost, decreased reproductive success, decreased foraging efficiencies, increased territorial aggression within the colony, and depletion of fat reserves that may last throughout the

incubation and nestling periods (Gauthier et al. 1994).

Recommendation: CDFW recommends the continuous removal of partially constructed nests be removed as an exclusion method. Bridge demolition should be timed to avoid the bird nesting season, or bird and bat friendly wildlife exclusion devices should be installed on the structure outside of the bird nesting season and bat hibernation and maternity season.

COMMENT 9: *Consistency with Regional, and Local Plans and Programs*, Page 47. *CEQA Environmental Checklist Question 2.4(f) – Biological Resources.* 9.

Issue: In the Section titled "Discussion of CEQA Environmental Checklist Question 2.4(f) – Biological Resources", the ND concludes that the Project will not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional or state habitat conservation plan. The Project occurs within the South Sacramento Habitat Conservation Plan (SSHCP) area, the Cosumnes River Preserve, and within the Cosumnes River Ecological Reserve (Reserve). CEQA Guidelines section 15125(d) states that the ND must discuss any inconsistencies between projects and applicable plans (including habitat conservation plans/natural community conservation plans). The ND does not currently contain such a discussion.

Recommendation:

SSHCP
Because the SSHCP is currently being implemented, the ND must include a discussion of the Project's consistency with the SSHCP and how Caltrans will ensure that Project implementation does not impede with the SSHCP's ability to meet its biological goals and objectives. Furthermore, CDFW recommends that Caltrans coordinate with the implementing agency/plan of the respective plan to ensure significant environmental impacts assessed in the ND are adequately investigated. Particular focus in the ND's analysis should be directed to:

- Analysis of all SSHCP Covered Species,

- Assessment of habitat types identified in the SSHCP,

- Identification of applicable SSHCP avoidance, minimization, or mitigation measures; and

Reserve
CDFW recommends that the ND include a discussion of the Project's direct habitat and potential management impacts on the Reserve. Staging, access, and construction easements should be analyzed as potential impacts. If feasible, the Reserve should be fully avoided. If full avoidance is not possible, mitigation measures should be developed to mitigate impacts to the Reserve to a less than significant level.

COMMENT 10: *Chapter 1, Biological Resources*, page 9 10.

Issue: Temporary artificial night lighting is proposed as part of the ongoing construction activities. The Project will also include the installation of Transportation Management System (TMS) elements, stating that TMS elements will include "including a Type III-AF service equipment enclosure, a high-speed weigh-in-motion system controller and cabinet, and closed-circuit television camera on a 90-foot-tall pole." However, it does not provide a full list of these elements and does not analyze impacts to biological resources resulting from temporary and permanent light pollution.

New lighting, especially in areas where no lighting or low levels of lighting currently exist, has potential for significant impacts to occur that could result in a finding of significance. Artificial light spillage beyond the prism of the roadway into natural areas may result in a potentially significant impact through substantial degradation of the quality of the environment. Artificial light pollution also has the potential to significantly and adversely affect biological resources and the habitat that supports them. Unlike the natural brightness created by the monthly cycle of the moon, the permanent and continuously powered lighting fixtures create an unnatural light regime that produces a constant light output. Continuous light output for 365 days a year can also have cumulatively significant impacts on fish and wildlife populations.

Artificial night lighting can disrupt the circadian rhythms of many wildlife species. Many species use photoperiod cues for communication (e.g., bird song), determining when to begin foraging (Stone et al. 2009), behavior thermoregulation (Beiswenger 1977), and migration (Longcore and Rich 2004). For nocturnally migrating birds, direct mortality resulting from collisions with anthropogenic structures due to attraction to light (Gauthreux, 2006) is another direct effect of artificial light pollution. There are also more subtle effects, such as disrupted orientation (Poot et al. 2008) and changes in habitat selection (McLaren et al. 2018). There is also growing evidence that light pollution alters behavior at regional scales, with migrants occupying urban centers at higher-than-expected rates as a function of urban illumination (La Sorte et al. 2021). While artificial light pollution can act as an attractant at both regional (La Sorte et al. 2021) and local (Van Doren et al. 2017) scales, there is also evidence of migrating birds avoiding strongly lit areas when selecting critical resting sites needed to rebuild energy stores (McLaren et al. 2018).

Recommendation:
Due to the high potential for songbirds, marsh-birds, migratory birds, bats, and nocturnally active State listed and special status species to occur within and adjacent to the Project, CDFW strongly recommends that no new or replacement artificial lighting is installed as a result of Project completion. If the installation of artificial lighting is unavoidable, CDFW recommends the following mitigation measures be incorporated into the ND:

Light Output Analysis: Isolux Diagrams that note current light levels present during pre-Project conditions and the predicted Project light levels that will be created upon completion of the Project shall be included in the ND. If an increase in light output

from current levels to the projected future levels is evident, additional avoidance, minimization or mitigation measures shall be developed in coordination with the natural resource agencies to offset indirect impacts to special status species. Within 60 days of Project completion, the lead agency shall conduct a ground survey that compares projected future light levels with actual light levels achieved upon completion of the Project through comparison of Isolux diagrams. If an increase from the projected levels to the actual levels is discovered, additional avoidance, minimization or mitigation measures may also be required in coordination with the natural resource agencies. This analysis should be conducted across all potential alternatives and compared in table and map format.

Light Output Limits: All LED's or bulbs installed as a result of the Project shall be rated to emit or produce light at or under 2700 kelvin that results in the output of a warm white color spectrum.

Reflective Signs and Road Striping: Retro-reflectivity of signs and road striping should be implemented throughout the Project to reduce the need for electrical lighting.

COMMENT 11: *Potential Significant Impacts to Tricolored Blackbird* 11.

Issue: Tricolored blackbird (TRBL) (*Agelaius tricolor*) is CESA listed as threatened. Much of the area surrounding the Project area contains suitable foraging and nesting habitat for TRBL. There are 9 CNDDB occurrences of TRBL within three (3) miles of the Project area. The Project has the potential to significantly impact TRBL by directly and indirectly impacting suitable nesting and foraging habitat both during construction and through long-term habitat conversion. However, TRBL are not addressed in the ND nor are avoidance, minimization, or mitigation measures proposed.

Construction generated noise from road use, generators, and other equipment may disrupt TRBL mating calls or songs which could impact their reproductive success (Patricelli and Blickley 2006, Halfwerk et al. 2011). Noise has been shown to reduce the density of nesting birds (Francis et al. 2009). Bayne et al. (2008) found that songbird abundance and density was significantly reduced in areas with high levels of noise. Water diversions can also create an impact through dewatering of wetland habitats (Bauer et al. 2015, Carah et al. 2015). Artificial light may attract or disorient TRBL, disrupting their navigation (Ogden 1996, Longcore and Rich 2004, 2016). It can also suppress the immune system of birds (Moore and Siopes 2000). Additionally, songbirds that live in areas with artificial lights often begin morning choruses during night hours (Derrickson 1988, Miller 2006, Fuller et al. 2007).
Recommendation: To reduce impacts to TRBL to a less than significant level, CDFW recommends the following appropriate avoidance, minimization, and mitigation measures are incorporated into the ND.

Compensatory Mitigation for Impacts to TRBL Foraging and Nesting Habitat: To mitigate Project impacts to a less than significant level, CDFW recommends the CEQA document: 1) quantify permanent direct, indirect, and cumulative impacts to

TRBL foraging and nesting habitat, and 2) include an enforceable mitigation measure requiring Caltrans to either purchase TRBL foraging and nesting habitat credits from a CDFW-approved conservation bank OR provide for both the permanent protection and management of Habitat Management (HM) lands including calculation and deposit of management funds as approved by CDFW. Prior to transfer of tricolored blackbird credits, Caltrans shall obtain CDFW approval to ensure the conservation bank is appropriate to compensate for the impacts of the Project. Caltrans shall submit to CDFW a copy of the executed Credit Transfer Agreement prior to initiating construction activities. The number of credits purchased shall be at a ratio appropriate to fully mitigate permanent habitat impacts.

Nesting Surveys. Prior to initiation of construction in all project work areas and within a ½ -mile of project work areas, the Designated Biologist(s) shall conduct protocol-level surveys to evaluate the presence of tricolored blackbird breeding colonies, suitable nesting and foraging habitats. Surveys shall be conducted during the nesting season (March 15 to July 31). If construction is initiated in the project work area during the nesting season, three (3) surveys shall be conducted within fifteen (15) days prior to the construction activity, with one of the surveys within three (3) days prior to the start of the construction. The surveys shall be based on survey methods identified in the Results of the 2017 Tricolored Blackbird Statewide Survey, Appendix 1 (Meese 2017). If breeding colonies are found, the foraging behavior of the colony shall also be documented. Many tricolored blackbird breeding colonies expand over time as additional birds are recruited at the edges of established colonies. For this reason, it is important to reassess the extent of a breeding colony before the start of construction activities. If a nesting colony or foraging habitat being used by a colony is present and established within 1/2 mile of the project site, construction shall be delayed until nesting is complete and the young have fledged as determined by the Designated Biologist. Work may not re-initiate until Caltrans has consulted with CDFW and can demonstrate compliance with CESA.
Foraging Surveys. During the nesting season, Designated Biologist(s) will conduct two (2) surveys within 1/2 mile of the project site to determine whether foraging habitat is being actively used by tricolored blackbird. The surveys will be conducted approximately one week apart, with the second survey occurring no more than two (2) calendar days prior to ground-disturbing activities. Two surveys are required because tricolored blackbirds may not visit a site during a single survey period, as they may be foraging elsewhere. The Designated Biologist(s) will conduct the foraging habitat survey by observing and listening from accessible vantage points that provide views of the entire survey area. Each survey shall last 4 hours and begin no later than 8:00 AM. If such vantage points are not available, the Designated Biologist(s) will survey from multiple vantage points to ensure that the entire survey area is covered. The Designated Biologist(s) will map the locations where tricolored blackbirds are observed, record an estimate of the numbers of tricolored blackbirds visiting the site (estimated by 10s, 100s, or 1000s), the frequency of visits (i.e., if individuals or a flock makes repeated foraging visits to the site during the survey period), whether tricolored blackbirds are leaving the site with food in their bills, and the direction they fly to/from. If tricolored blackbirds are found foraging in the survey area during the first survey, the site will be assumed to be actively used by foraging blackbirds and the second survey is not required. If tricolored blackbirds are found foraging within 1/2

mile of the project site at any point prior to or during construction, work shall be suspended, and CDFW notified. Work may not re-initiate until Caltrans has consulted with CDFW and can demonstrate compliance with CESA.

COMMENT 12: *Potential Significant Impacts to Swainson's Hawk* 12.

Issue: The ND does not include Project impact analysis or mention Swainson's hawk (*Buteo swainsoni*). Swainson's hawk is listed as a threatened species under CESA and has additional protection under the Migratory Bird Treaty Act and section 3503.5 of the Fish and Game Code; therefore, mitigation measures should be incorporated into the CEQA document to ensure take of the species does not occur.

There are known occurrences of nesting Swainson's hawk adjacent to the Project site and suitable foraging habitat within the Project site. The NES was not provided as an attachment to the ND and there are no acreages provided of habitat onsite. However, on page 46 of the ND, the affected environment is described as 27.81-acres in size and containing annual grassland, ruderal, agriculture, freshwater marsh, and ephemeral drainages present. Annual grassland, agricultural land including but not limited to low growing crops and fallow land, and dry wetland features are all considered Swainson's hawk foraging habitat. Although Swainson's hawk foraging habitat occurs within the Project site and will be impacted by construction activities, compensatory mitigation for impacts to foraging habitat is not included in the ND. The greatest threat to the Swainson's hawk population in California continues to be the loss of suitable foraging and nesting habitat in portions of the Swainson's hawks breeding range due to urban development and incompatible agriculture. This impact has greatly reduced their range and abundance in California in the last century (CDFW 2016, California Department of Conservation, 2011; Wilcove et al. 1986; Semlitsch and Bodie 1998).

As currently proposed, the Project will have a significant impact to Swainson's hawks unless enforceable mitigation measures are incorporated into the ND.

Recommendation: To reduce the Project's impact to Swainson's hawk to less than significant, CDFW recommends the following measures are incorporated into the ND:

Compensatory Mitigation for Permanent Impacts to SWHA Foraging Habitat: Caltrans shall quantify the total acreage of Project impacts to Swainson's hawk foraging habitat. Two seasons of temporary impacts to foraging habitat shall be considered and mitigated for as permanent impacts. To mitigate impacts to Swainson's hawk foraging habitat to a less than significant level, CDFW recommends Caltrans mitigate impacts at a 3:1 ratio by either purchasing SWHA foraging habitat credits from a CDFW-approved conservation bank OR providing for both the permanent protection and management of 30.0 acres of Habitat Management (HM) lands including calculation and deposit of management funds as approved by CDFW. Prior to transfer of SWHA foraging credits, Caltrans shall obtain CDFW approval to ensure the conservation bank is appropriate to compensate for the impacts of the Project. Caltrans shall submit to CDFW a copy of the executed Credit Transfer Agreement prior to initiating construction activities.

Swainsons' Hawk Protocol Level Surveys. Protocol-level surveys shall be conducted by a CDFW-approved Designated Biologist within a minimum 1/2-mile radius around the Project area in accordance with *Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley (Swainson's Hawk Technical Advisory Committee, 2000)* as follows:

- January to March 20- One (1) Survey, All Day
- March 20 to April 5- Three (3) Surveys, Sunrise to 1000 / 1600 to Sunset
- April 5 to April 20- Three (3) Surveys, Sunrise to 1200 / 1630 to Sunset
- April 21 to June 10- Monitoring
- June 10 to July 30- Three (3) Surveys, Sunrise to 1200 / 1600 to Sunset

Results of the protocol-level surveys should be submitted to CDFW a minimum of 10 days prior to the start of construction. Based on the survey results, additional mitigation measures may be required.

Survey methods should be closely followed by starting early in the nesting season to maximize the likelihood of detecting an active nest (nests, adults, and chicks are more difficult to detect later in the growing season because trees become less transparent as vegetation increases). Surveys should occur annually for the duration of the Project. The qualified biologist should have a minimum of two years of experience implementing the TAC survey methodology. If an active nest is identified, a 0.25-mile protective buffer should be maintained around the nest until the young fledge. The protective buffer should be clearly marked and be an area where no project-related activities or personnel are allowed while in place. If the 0.25-mile buffer must be reduced or take of Swainson's hawk cannot be avoided, the Project proponent should be required to obtain an Incidental Take Permit (ITP) as a condition of Project approval.

COMMENT 13: *Chapter 2, Cumulative Impacts,* page 5, 96 13.

Issue: The ND does not discuss the Project's incremental effects on biological resources or analyze whether those effects may be cumulatively significant. The ND introduces the proposed *State Route 99 Grade Project (EA 03-4J480)* as a profile improvement project overlapping the Willow Slough Bridge Replacement Project. Given the overlap of the EA 03-4J480 and proposed Project sites, the same wildlife corridors, aquatic habitats, special-status species, open space, and adjacent natural habitats will be impacted in the cumulative effects analysis. However, no analysis is given pertaining to the cumulative effects of both projects.

Recommendation: The ND should include a cumulative impact analysis and prescribe scientifically supported appropriate and adequate avoidance, minimization, and/or mitigation measures for all direct, indirect, and cumulative impacts. The analysis should at a minimum include the cumulative effect of construction related noise, vibration, or lighting on biological resources including but not limited to special status species including TRBL, SWHA, GGS, and day roosting bats and swallows

inhabiting the Willow Slough bridge structures. Specifically, the cumulative effects of construction noise on bat and bird taxa, the frequency of noise generated and the hearing sensitivity of the bat and bird species at risk should be evaluated in the ND and mitigated to a less than significant level. Mitigation must be roughly proportional to the level of impacts, including cumulative impacts, in accordance with the provisions of CEQA (Guidelines § § 15126.4(a)(4)(B), 15064, 15065, and 16355).

COMMENT 14: *Potential Impacts to Burrowing Owls* 14.

Issue: The ND does not include Project impact analysis or mention burrowing owl (*Athene cunicularia*). Burrowing owl is listed as a bird species of special concern in California and is considered at risk throughout California; therefore, mitigation measures should be incorporated into the CEQA document to ensure that impacts for this species are reduced to less than significant.

There are known occurrences of burrowing owl adjacent to the Project site and suitable foraging habitat within the Project site. The NES was not provided as an attachment to the ND, and there are no acreages provided of habitat onsite. However, on page 46 of the ND, the affected environment is described as 27.81-acres in size and containing annual grassland, ruderal, agriculture, freshwater marsh, and ephemeral drainages present. Grassland and agricultural land including but not limited to low growing vegetation with sparse shrubs and some tall vegetation (Green and Anthony 1989, Haug et al 1993) are considered burrowing owl roosting and nesting habitat. Burrowing owls are also known to inhabit ditches, culverts, and roadsides that are surrounded by cropland. Because burrowing owls exhibit high fidelity to their nesting sites, their foraging habitat has significant overlap with their nesting habitat. Although burrowing owl nesting and foraging habitat occurs within and adjacent to the Project site and will be impacted by construction activities, mitigation measures to reduce impacts to burrowing owls are not included in the ND. The greatest threat to the burrowing owl populations in California continues to be loss of suitable foraging and nesting habitat in portions of their breeding range due to urban development, incompatible agriculture, and fallow land (Gervais et al 2008).

Recommendation: Project activities impacting burrowing owls and their habitat should mitigate all impacts to nesting, foraging, wintering, and dispersal habitat to a less than significant level. To reduce the Project's impact to burrowing owl to less than significant, CDFW recommends the following measures are incorporated into the ND:

Burrowing Owl Surveys. Project proponent shall conduct a burrowing owl pre-construction survey over all suitable habitat present within the BSA. Burrowing owl surveys shall be conducted by the Designated Biologist in accordance with the protocol described in the *Staff Report on Burrowing Owl Mitigation* (CDFW, March 7, 2012). If possible, surveys should be conducted during both the breeding (February 1 – August 31) and non-breeding seasons (September 1 – January 31) immediately preceding the planned start of construction activities to ascertain the seasonal residency status of any owls occupying the site. Initial pre-construction surveys shall be conducted no more than 30 days prior to ground-disturbing activities. The time

lapse between surveys and site disturbance shall not exceed seven days. Additional surveys are necessary when the initial disturbance is followed by periods of inactivity or the development is phased spatially and/or temporally over the project area.

The presence of burrowing owl or their sign anywhere on the Project site or within a 500-foot accessible radius around the project site shall be recorded and mapped. Surveys shall disclose all burrows and occurrence of sign of burrowing owl on the project site and within the 500-foot buffer. Results of the survey shall be submitted to CDFW.

-

EDITORIAL COMMENTS 15.

Issue: Throughout the ND, much of the language used to describe avoidance, minimization, and mitigation actions within the ND use the term "would".

Recommendation: To ensure mitigation measures are both quantifiable and enforceable, CDFW recommends replacing instances of "would" with "shall" within all avoidance, minimization, and mitigation measures.

ENVIRONMENTAL DATA

16.

CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database which may be used to make subsequent or supplemental environmental determinations (Pub. Resources Code, § 21003, subd. (e)). Accordingly, please report any special-status species and natural communities detected during Project surveys to the CNDDB. The CNNDB field survey form can be found at the following link: https://www.wildlife.ca.gov/Data/CNDDB/Submitting-Data. The completed form can be submitted online or mailed electronically to CNDDB at the following email address: CNDDB@wildlife.ca.gov.

FILING FEES 17.

The Project, as proposed, would have an impact on fish and/or wildlife, and assessment of filing fees is necessary. Fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by CDFW. Payment of the fee is required in order for the underlying project approval to be operative, vested, and final. (Cal. Code Regs, tit. 14, § 753.5; Fish & G. Code, § 711.4; Pub. Resources Code, § 21089.)

CONCLUSION

18.

Pursuant to Public Resources Code § 21092 and § 21092.2, CDFW requests written notification of proposed actions and pending decisions regarding the proposed project. Written notifications shall be directed to: California Department of Fish and Wildlife North Central Region, 1701 Nimbus Road, Rancho Cordova, CA 95670 or emailed to R2CEQA@wildlife.ca.gov.

CDFW appreciates the opportunity to comment on the ND for the Willow Slough Bridge Replacement Project to assist Caltrans in identifying and mitigating Project impacts on biological resources. Due to the issues presented in this letter, CDFW concludes that the ND does not adequately identify or mitigate the Project's significant, or potentially significant, impacts on biological resources. Deficiencies in the Caltrans CEQA document can affect later project approvals by CDFW in its role as a Responsible Agency. In addition, because of these issues, CDFW has concerns that Caltrans may not have the basis to approve the project or make "findings" as required by CEQA unless the environmental document is modified to eliminate and/or mitigate significant impacts, as reasonably feasible (CEQA Guidelines, §§ 15074, 15091 & 15092).

CDFW personnel are available for consultation regarding biological resources and strategies to minimize and/or mitigate impacts. If you have any questions regarding these comments, please contact me.

Thank you,

Melissa Stanfield
Senior Environmental Scientist (Supervisor)
North Central Region (Region 2)
Phone: 916-597-6417

CALIFORNIA DEPARTMENT OF FISH and WILDLIFE

Responses to CDFW (Comment Letter 2):

Response to Comment 1:

Standard Measures and Best Management Practices (BMPs) are project features used to avoid and minimize impacts that may occur. These measures are not used to mitigate impacts to change level of significance, therefore the ND is not a *mitigated* ND. The results of the biological studies did not find a significant impact.

Response to Comment 2:

Due to schedule constraints, protocol-level bat surveys were not conducted prior to the Draft IS/ND. Protocol-level surveys will be conducted in Spring 2024 and will utilize digital bat detection equipment. The information collected during these surveys will include particular bat species and type of roost (night roost or maternity roost).

If new information becomes available after adoption of this ND, Caltrans shall determine further documentation, consistent with Public Resources Code Section 15162.

Response to Comment 3:

Caltrans intends to utilize standard BMPs which will control invasives within the project area, as discussed in Section 1.6 Standard Measures and Best Management Practices, including the preparation of a Revegetation Plan (BR-4(A.)) to minimize invasive species. Additionally, Caltrans Standard Specification 14-6.05 addresses protocol for invasive species control.

Response to Comment 4:

Caltrans acknowledges CDFW's recommendation and will seek CDFW approval regarding contractor-supplied biologist monitors for appropriate state listed species and habitats.

Response to Comment 5:

Caltrans acknowledges CDFW's recommendation and will seek CDFW approval regarding contractor-supplied biologist monitors for appropriate state listed species and habitats.

Response to Comment 6:

Caltrans met with CDFW Environmental Scientist Mary Xiong in an online meeting (10/31/23) and in person in the field (6/9/23) to discuss the project scope, footprint, and any potential impacts. It was discussed at that time that due to the low quality of GGS aquatic or basking habitat present within the project ESL, the scope of work and minimal disturbance area, and the lack of water within the slough, that Caltrans will be seeking informal consultation (*Not Likely to Adversely Affect*) with USFWS for this dual listed species and will not seek "take" coverage with CDFW. Caltrans will implement all measures designed to protect the species resulting from this Section 7 Consultation into the project contract.

Response to Comment 7:

Protocol-level surveys for plants were conducted on 7/18/23 by Caltrans Environmental Scientists Andrew Marshall and Hannah Clark. No listed plants were identified within the project ESL. Additional surveys will be conducted during the upcoming wetland delineation in Spring 2024.

Response to Comment 8:

Caltrans will enact Standard Specification 14-6.03A for species protection, which will be modified to include nesting birds. Additionally, a non-standard special provision (NSSP 14-6.06) will be enacted for bird exclusion. Caltrans anticipates providing CDFW with this exclusion plan for approval.

Response to Comment 9:

As discussed in Section 2.11, the proposed project would also not conflict with any existing land use plan, policy, or regulation, as the highway alignment remains within the transportation zone. The document has been amended to reflect consistency with the SSHCP. No impacts are anticipated to occur to the adjacent properties during construction.

Response to Comment 10:

The installation of new lighting is not included in the scope of work at this time.

Species of concern, including bats and birds, would not be present as exclusion devices would be in place. Due to exclusion devices preventing bat and bird presence on the bridge during construction, the possibility that this location is a night roost only, and as the slough does not provide anadromous fish habitat, no species are anticipated to be present or impacted by night lighting. Light shielding is not required for construction activities during nighttime. Please refer to Section 1.6 Standard Measures and Best Management Practices, Biological Resources measures (BR-2(B) and BR-2 (C)).

Response to Comment 11:

General migratory bird nesting surveys were conducted and no Tri-colored blackbirds (TRBL), nests or evidence of preferred habitat constituents were encountered. Additionally, no CNDDB occurrences of TRBL occur within three miles of the project area. No vegetation removal associated with potential habitat will occur as a result of this project. Caltrans will conduct preconstruction nesting bird surveys prior to construction. No take of TRBL is anticipated. Please refer to Section 1.6 Standard Measures and Best Management Practices, Biological Resources measures.

Response to Comment 12:

Although surveys were not conducted by standard SHTAC protocol, nesting surveys were done for Swainson's hawk and no nests were encountered. Additionally, though the nearest Swainson's occurrence is 1,200 ft away from the project location, surveys of the tree that will be removed were negative and therefore no direct habitat will be lost. Noise resulting from project activities will not exceed ambient noise levels that are regularly occurring on SR 99, and preconstruction surveys will be conducted prior to the commencement of construction activities to ensure no SWHA have moved within the project limits. Please refer to Section 1.6 Standard Measures and Best Management Practices, Biological Resources measures.

Response to Comment 13:

Cumulative impacts were analyzed in Section 2.22 of the Draft IS/ND. As stated in Section 2.22, "cumulative impacts can result from individually minor but collectively substantial impacts taking place over a period of time".

No impacts are anticipated for any listed species; therefore, no cumulative impacts are anticipated.

Response to Comment 14:

No known potential burrows for burrowing owls were found during general species habitat surveys. Additionally, there were no CNDDB occurrences nearby or within the project vicinity. There is constant heavy disturbance due to highway traffic, therefore the species was determined to be absent through surveys and no take of burrowing owl is anticipated to occur.

Response to Comment 15:

The term "would" is used as this is a *proposed* project. Once a project is approved, along with any permit requirements, the language will be updated to "will".

Response to Comment 16:

Any special status species and natural communities detected during project surveys will be reported to the CNDBB.

If new information becomes available after adoption of this ND, Caltrans will determine further documentation, consistent with Public Resources Code Section 15162.

Response to Comment 17:

Fees will be paid upon filing of the Notice of Determination to CDFW.

Response to Comment 18:

Thank you for your review of the Draft IS/ND for the Willow Slough Bridge Replacement Project.

COMMENT LETTER 3

Sacramento Municipal Utility District (SMUD)

Powering forward. Together.

SMUD

Sent Via E-Mail

February 8, 2024

California Department of Transportation
Environmental Branch, M5 Branch
Attn: Veronica Wilson
703 B Street
Marysville, CA 95901
Willow.Slough.ED@dot.ca.gov

Subject: **Willow Slough Bridge Replacement Project / 2024010128 / NEG**

To Whom It May Concern:

The Sacramento Municipal Utility District (SMUD) appreciates the opportunity to provide comments on the Negative Declaration (NEG) for the Willow Slough Bridge Replacement Project (Project, SCH 2024010128).

As a Responsible Agency, SMUD's review of projects include supporting the goals of our 2030 Zero Carbon Plan. This plan is a flexible road map to eliminate greenhouse gas emissions from our electricity production by 2030, which is the most ambitious goal of any large utility in the United States, while maintaining reliable and affordable service. This ambitious goal puts the Sacramento region on the map as an example to follow and a region where innovative, climate-friendly businesses want to be. As a community-owned, not-for-profit utility, our customers and community are at the heart of all we do. By pursuing zero carbon, we're helping create a cleaner and healthier region for all. 1.

It is our desire that the Project will acknowledge any impacts related to the following:

- Overhead and or underground transmission and distribution line easements. Please view the following links on smud.org for more information regarding transmission encroachment: 2.
  - https://www.smud.org/en/Business-Solutions-and-Rebates/Design-and-Construction-Services
  - https://www.smud.org/en/Corporate/Do-Business-with-SMUD/Land-Use/Transmission-Right-of-Way
- Utility line routing 3.
- Electrical load needs/requirements 4.
- Energy Efficiency 5.
- Climate Change 6.
- Cumulative impacts related to the need for increased electrical delivery 7.
- The potential need to relocate and or remove any SMUD infrastructure that may be affected in or around the project area 8.

More specifically, SMUD would like to have the following details related to the electrical infrastructure incorporated into the project description:

- SMUD has existing 69kV overhead facilities along the west side of Southbound St. Hwy 99.
- SMUD has existing 12kV overhead facilities along the west side of Southbound St. Hwy 99 with various crossings along the proposed project route.

9.

SMUD owns and operates four 230 kilo volt transmission lines that cross over the proposed project site. SMUD has 2 concerns that we would like to communicate to the project proposer as it relates to these transmission lines.

- **WARNING – SMUD 230KV OVERHEAD TRANSMISSION LINES ARE LIVE –** Electrocution Potential. Project owner or Contractor shall take all appropriate safety measures when working near or under lines, including placement of OSHA-required warning signage. On-site SMUD inspection required when working within 25 feet of SMUD facilities. Contractor shall contact SMUD Construction Management Services at (916) 732-4990 to schedule inspection. 72-hour advance notice is required.
- SMUD currently meets the CPUC's General Order 95 electrical clearance requirements for the 230 kilo-volts lines to the bridge deck for these transmission lines. A significant elevation increase with the new bridge design could cause SMUD to have a clearance violation. In that case SMUD would have to resolve the violation at significant expense. Please provide your bridge design plans to SMUD for review and comment by the Transmission Line Engineering department.

10.

In addition, SMUD owns and operates a 24" high pressure natural gas transmission line within the project area. See detail below for approximate pipeline location. While the pipeline is outside the boundaries of the work as it crosses Hwy 99, any construction activities over or near the pipeline, including any temporary access roads, will be subject to maximum loading requirements and access to the pipeline must be maintained throughout the duration of the project. Please provide plans, including any anticipated temporary roads and laydown areas to SMUD for review and comment by the Gas Pipeline Operations department.

11.

SMUD would like to be involved with discussing the above areas of interest as well as discussing any other potential issues. We aim to be partners in the efficient and sustainable delivery of the proposed Project. Please ensure that the information included in this response is conveyed to the Project planners and the appropriate Project proponents.

Environmental leadership is a core value of SMUD, and we look forward to collaborating with you on this Project. Again, we appreciate the opportunity to provide input on this Project. If you have any questions regarding this letter, please do not hesitate to contact me at 916.732.7406, or by email at jerry.park@smud.org.

Sincerely,

Jerry Park
Environmental Services Specialist
Sacramento Municipal Utility District
6201 S Street
Sacramento, CA 95817

cc: Entitlements

Figure 1 - Approximate location of Gas Pipeline

Responses to SMUD (Comment Letter 3):

Response to Comment 1:

Thank you for your comments on the Draft IS/ND for the Willow Slough Bridge Replacement Project.

Response to Comment 2:

Any conflicts with utilities, the need for new power hook-ups, or shut off power is identified by Caltrans during the design phase. Preliminary design does not anticipate conflict with utilities.

Response to Comment 3:

No impacts are expected to occur to utility line routing. Preliminary design does not anticipate conflict with utilities.

Response to Comment 4:

TMS elements in the project will use new electrical. The electrical load will be slightly modified. Wattage estimates are not available at this time; however, Caltrans does not anticipate SMUD infrastructure changes.

Response to Comment 5:

Caltrans uses energy efficient electrical components.

Response to Comment 6:

Section 2.8 of the Draft IS/ND discussed impacts related to Climate Change.

Response to Comment 7:

The electrical load will be slightly modified. Wattage estimates are not available at this time; however, Caltrans does not anticipate SMUD infrastructure changes.

Response to Comment 8:

No relocation or removal of SMUD infrastructure is expected at this time. Any public utility conflicts will be identified and used to complete conflict map documents. If relocation is needed, the discussion of relocation with the utility owner will occur after the conflict notice package is sent by Caltrans' Right of Way Utilities.

Response to Comment 9:

Typically, utilities are incorporated in the plan sets during the design phase. Preliminary design does not anticipate conflict with utilities.

Response to Comment 10:

Notification to SMUD is required under Electrical Safety Order ESO-2948 and will be included in the project contract's "Information Handout." This is a contract document per Caltrans Standard Specifications. Caltrans Standard Special Provision (SSP 10-1.03) will also be included and will be amended to include "Do not work within 25-feet of the following locations until SMUD has been notified at least 72 hours prior to construction in the area and has performed an on-site inspection."

Lines and the voltage of the lines is typically shown on plans so that the contractor knows how far to stay away from the lines based on safety standards. Electrical Safety Orders, which are from Title 8, Article 37. Provisions for Preventing Accidents Due to Proximity to Overhead Lines. Warning signs are covered under Construction Safety Order CSO 1612.1 and Electrical Safety Order ESO-2947.

Caltrans Standard Specification (Standard Spec 7-1.02K(6)(a), Occupational Safety and Health Standards) will also be included in the project contract. This specification states, "Project owner or Contractor shall take all appropriate safety measures when working near or under lines, including placement of OSHA-required warning signage."

During the design phase, discussion with SMUD about the vertical elevation of existing and proposed bridge clearance, based on survey data, will be undertaken. Preliminary design has not identified a utility conflict.

Response to Comment 11:

The gas line will not be impacted by the proposed project. Caltrans will coordinate with SMUD regarding any utility conflicts during the design phase and before construction.

COMMENT LETTER 4

California Geologic Survey

From: Zachariasen, Judith@DOC
To: Willow Slough ED@DOT
Cc: OLRA@DOC; OPR State Clearinghouse
Subject: Willow Slough Bridge Replacement Project - SCH No. 2024010128
Date: Thursday, February 1, 2024 6:11:17 PM
Attachments: image001.png

EXTERNAL EMAIL. Links/attachments may not be safe.

Dear Veronica Wilson,

The California Geological Survey (CGS) has received the Initial Study with Proposed Negative Declaration (IS/ND) for the Willow Slough Bridge Replacement Project. This email conveys the following recommendations from CGS concerning geologic issues related to the project area:

1. Liquefaction Hazards

In the Geology and Soils Section 2.7, the IS/ND states that there is no impact related to liquefaction or unstable soil and that the project location is not located in a liquefaction hazard zone. I am writing to clarify that CGS has not yet evaluated the area in and around the project location for liquefaction or earthquake-induced landslide hazard zoning, so the lack of a hazard zone does not indicate a determination that there is no liquefaction hazard. CGS suggests that the project documents should clarify that the project area has not been evaluated by CGS for liquefaction hazard. Further, given the geologic setting, which appears to include Holocene alluvial deposits and potentially shallow groundwater, conditions that can give rise to liquefaction hazard, the project should independently address this hazard as it relates to the design of the proposed structures.

1.

If you have any additional comments or questions, please feel free to call or email.

Thank you,
Judy Zachariasen

Judith Zachariasen, PhD, PG, CEG
Senior Engineering Geologist
Fault Zoning Unit Supervisor
Seismic Hazards Program
California Geological Survey

California Department of Conservation
715 P Street, MS 1900, Sacramento, CA 95814
T: (916) 879-2844
E: judith.zachariasen@conservation.ca.gov

Responses to California Geological Survey (Comment Letter 4):

Response to Comment:

Thank you for your comments on the Draft IS/ND for the Willow Slough Bridge Replacement Project.

A site-specific geotechnical field investigation and liquefaction analysis has been completed for the subject bridge site (Caltrans 2024). According to the results, liquefaction is not a concern at this site.

No revisions to the Draft IS/ND are necessary.

Appendix E. Mitigation and Monitoring Reporting Program

This project does not require mitigation per CEQA, therefore a Mitigation and Monitoring Plan (MMP) is not required. The project is not expected to have significant impacts that would require mitigation to reduce impacts. During project design, Caltrans Standard Measures and Best Management Practices will be incorporated into the project's final plans, specifications, and cost estimates, as appropriate. All permits will be obtained prior to implementation of the project. During construction, environmental and construction/engineering staff will ensure the commitments are fulfilled.