

ROAD REPAIR AND ACCOUNTABILITY ACT OF 2017
PROJECT BASELINE AGREEMENT

Bradley CAPM (05-1K880)
Resolution **SHOPP-P-2627-01B**
(to be completed by CTC)

1. FUNDING PROGRAM

- ☐ Active Transportation Program
☐ Local Partnership Program (Competitive)
☐ Solutions for Congested Corridors Program
☒ State Highway Operation and Protection Program
☐ Trade Corridor Enhancement Program

2. PARTIES AND DATE

- 2.1 This Project Baseline Agreement (Agreement) effective on **August 20, 2026** (will be completed by CTC), is made by and between the California Transportation Commission (Commission), the California Department of Transportation (Caltrans), the Project Applicant, **Caltrans**, and the Implementing Agency, **Caltrans**, sometimes collectively referred to as the "Parties".

3. RECITAL

- 3.1 Whereas at its **3/20/2026** meeting the Commission approved the **State Highway Operation and Protection Program** and included in this program of projects the **Bradley CAPM (05-1K880)**, the parties are entering into this Project Baseline Agreement to document the project cost, schedule, scope and benefits, as detailed on the Project Programming Request Form attached hereto as **Exhibit A**, the Project Report attached hereto as **Exhibit B**, the Performance Metrics Form, if applicable, attached hereto as **Exhibit C**, as the baseline for project monitoring by the Commission.
- 3.2 The undersigned Project Applicant certifies that the funding sources cited are committed and expected to be available; the estimated costs represent full project funding; and the scope and description of benefits is the best estimate possible.

4. GENERAL PROVISIONS

The Project Applicant, Implementing Agency, and Caltrans agree to abide by the following provisions:

- 4.1 To meet the requirements of the Road Repair and Accountability Act of 2017 (Senate Bill [SB] 1, Chapter 5, Statutes of 2017) which provides the first significant, stable, and on-going increase in state transportation funding in more than two decades.
- 4.2 To adhere, as applicable, to the provisions of the Commission:
- ☐ Resolution **[REDACTED]**, "Adoption of Program of Projects for the Active Transportation Program", dated **[REDACTED]**
- ☐ Resolution **[REDACTED]**, "Adoption of Program of Projects for the Local Partnership Program", dated **[REDACTED]**
- ☐ Resolution **[REDACTED]**, "Adoption of Program of Projects for the Solutions for Congested Corridors Program", dated **[REDACTED]**
- ☒ Resolution **G-26-33**, "Adoption of Program of Projects for the State Highway Operation and Protection Program", dated **3/20/2026**
- ☐ Resolution **[REDACTED]**, "Adoption of Program of Projects for the Trade Corridor Enhancement Program", dated **[REDACTED]**

- 4.3 All signatories agree to adhere to the Commission's Guidelines. Any conflict between the programs will be resolved at the discretion of the Commission.
- 4.4 All signatories agree to adhere to the Commission's SB 1 Accountability and Transparency Guidelines and policies, and program and project amendment processes.
- 4.5 Caltrans agrees to secure funds for any additional costs of the project.
- 4.6 Caltrans agrees to report to Caltrans on a quarterly basis; on the progress made toward the implementation of the project, including scope, cost, schedule, and anticipated benefits/performance metric outcomes.
- 4.7 Caltrans agrees to prepare program progress reports on a on a semi-annual basis and include information appropriate to assess the current state of the overall program and the current status of each project identified in the program report.
- 4.8 Caltrans agrees to submit a timely Completion Report and Final Delivery Report as specified in the Commission's SB 1 Accountability and Transparency Guidelines.
- 4.9 Caltrans agrees to submit a timely Project Performance Analysis as specified in the Commission's SB 1 Accountability and Transparency Guidelines.
- 4.10 All signatories agree to maintain and make available to the Commission and/or its designated representative, all work related documents, including without limitation engineering, financial and other data, and methodologies and assumptions used in the determination of project benefits and performance metric outcomes during the course of the project, and retain those records for six years from the date of the final closeout of the project. Financial records will be maintained in accordance with Generally Accepted Accounting Principles.
- 4.11 The Inspector General of the Independent Office of Audits and Investigations has the right to audit the project records, including technical and financial data, of the Department of Transportation, the Project Applicant, the Implementing Agency, and any consultant or sub-consultants at any time during the course of the project and for six years from the date of the final closeout of the project, therefore all project records shall be maintained and made available at the time of request. Audits will be conducted in accordance with Generally Accepted Government Auditing Standards.

5. SPECIFIC PROVISIONS AND CONDITIONS

- 5.1 Project Schedule and Cost
See Project Programming Request Form, attached as Exhibit A.
- 5.2 Project Scope
See Project Report or equivalent, attached as Exhibit B. At a minimum, the attachment shall include the cover page, evidence of approval, executive summary, and a link to or electronic copy of the full document.
- 5.3 Performance Metrics
See Performance Metrics Form, if applicable, attached as Exhibit C.
- 5.4 Additional Provisions and Conditions *(Please attach an additional page if additional space is needed.)*

Attachments:

- Exhibit A: Project Programming Request Form
Exhibit B: Project Report
Exhibit C: Performance Metrics Form *(if applicable)*

SIGNATURE PAGE
TO
PROJECT BASELINE AGREEMENT

Project Name **Bradley CAPM (05-1K880)**
Resolution **SHOPP-P-2627-01B**

(to be completed by CTC)



06/11/2026

Scott Eades

Date

District Director

Project Applicant



06/11/2026

Scott Eades

Date

District Director

Implementing Agency



06/11/2026

Scott Eades

Date

District Director

California Department of Transportation



Dina El-Tawansy

Date

FOR

Director

California Department of Transportation



08/24/2026

Tanisha Taylor

Date

Executive Director

California Transportation Commission

Baseline agreement information was extracted from Caltrans' project data systems. Project description, funding and performance measures are from CTIPS. Project delivery milestones are from PRSM. All information is current and accurate.

STATE OF CALIFORNIA • DEPARTMENT OF TRANSPORTATION

BASELINE AGREEMENT

Date:	06/30/26 01:17:02 PM
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District	EA	Project ID		PPNO	Project Manager
05	1K880	0519000035		2904	LEICHTFUSS, MARK S
County	Route	Begin Postmile	End Postmile	Implementing Agency	
MON	101	R 1.9	R 9.7	PA&ED	Caltrans
				PS&E	Caltrans
				Right of Way	Caltrans
				Construction	Caltrans

Project Nickname

Bradley CAPM

Location/Description

Near Bradley, Nacimiento and San Miguel, from south of East Garrison Overcrossing to Jolon Road. Replace San Antonio River Bridge No. 44-0141R and North Bradley Undercrossing No. 44-0142L, rehabilitate pavement, reconstruct guardrail and drainage systems, and replace Transportation Management System (TMS) elements and signs.

Legislative Districts

Assembly:	30	Senate:	17	Congressional:	20
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PERFORMANCE MEASURES

	Primary Asset	Good	Fair	Poor	New	Total	Units
Existing Condition	Bridge Health			20010		20010	Square feet of bridge deck
Programmed Condition	Bridge Health	20010				20010	Square feet of bridge deck

Project Milestone	Actual	Planned
Project Approval and Environmental Document Milestone	09/25/25	
Right of Way Certification Milestone		07/01/30
Ready to List for Advertisement Milestone		07/10/30
Begin Construction Milestone (Approve Contract)		04/01/31

FUNDING (Allocated amounts are shaded)

Component	Fiscal Year	SHOPP					Total
PA&ED	22/23	3,359					3,359
PS&E	25/26	6,163					6,163
RW Support	25/26	690					690
Const Support	30/31	9,993					9,993
RW Capital	30/31	380					380
Const Capital	30/31	75,246					75,246
Total		95,831					95,831

Memorandum

To: RICH STONE
SHOPP
HQ Financial Programming

Date: July 7, 2026

File: 05-1K880-0519000035-2904
05-MON-101 R1.9/R9.7

From: Mark Leichtfuss
Project Manager
District 5

Subject: PROJECT STATUS UPDATE

This memorandum is written to accompany the Baseline Agreement for the referenced project.

The project is currently programmed in the 2026 SHOPP for RTL delivery and CON allocation in FY 30/31. The Project Report was approved on September 25, 2025. A SHOPP COS Allocation for PS&E of \$6,163,000 and R/W Support of \$690,000 was approved at the December 2025 CTC meeting.

The scope of the project as outlined in the approved Project Report does not match CTIPS. CTIPS project performance states replacement of 2 Bridges, No. 44-0141R (Northbound San Antonio River Bridge) & No. 44-0142L (left North Bradley Undercrossing) accounting for 20,010 SQFT (pre-fair/poor to post-good). In addition, Bridge No. 44-0141L (Southbound San Antonio River Bridge) is included in the project scope for environmental clearance and replacement. It is anticipated that this bridge will continue to deteriorate similarly to the Northbound Bridge because they were built at the same time, with the same materials and construction methods, and have experienced similar traffic patterns and volumes. Based on this consideration and existing ASR and soffit cracking documented in past bridge inspection reports, Bridge 44-0141L has also been scoped for replacement. If future bridge inspections recommend replacement, before 2028, a SHOPP Amendment will be requested to formally include the performance in the project.

Currently Proposed Major Milestones in PRSM:

Milestone	Current Schedule
R/W Cert M410	7/1/2030
RTL M460	7/10/2030
Approve Contract M500	4/1/2031

Funding:

Component	2026 SHOPP Programming	Allocated
PAED Support	\$3,359	\$3,359
PS&E Support	\$5,613	\$6,163
RW Support	\$690	\$690
Const. Support	\$9,993	
RW Capital	\$380	
Const. Capital	\$75,246	

cc: Darron Hill, Wes Thompson, Paul Valadao, Lindsay Leichtfuss, D5 Programming

“Provide a safe and reliable transportation network that serves all people and respects the environment.”

Project Report

For

Project Approval

On Route 101 in Monterey County

Between 0.3 Mile South of East Garrison Overcrossing

And Jolon Road Undercrossing

I have reviewed the right-of-way information contained in this report and the right-of-way data sheet attached hereto, and find the data to be complete, current and accurate:



PATRICK MASON, Acting Deputy District Director,
Right of Way

APPROVAL RECOMMENDED:



MARK LEICHTFUSS, Project Manager

PROJECT APPROVED:

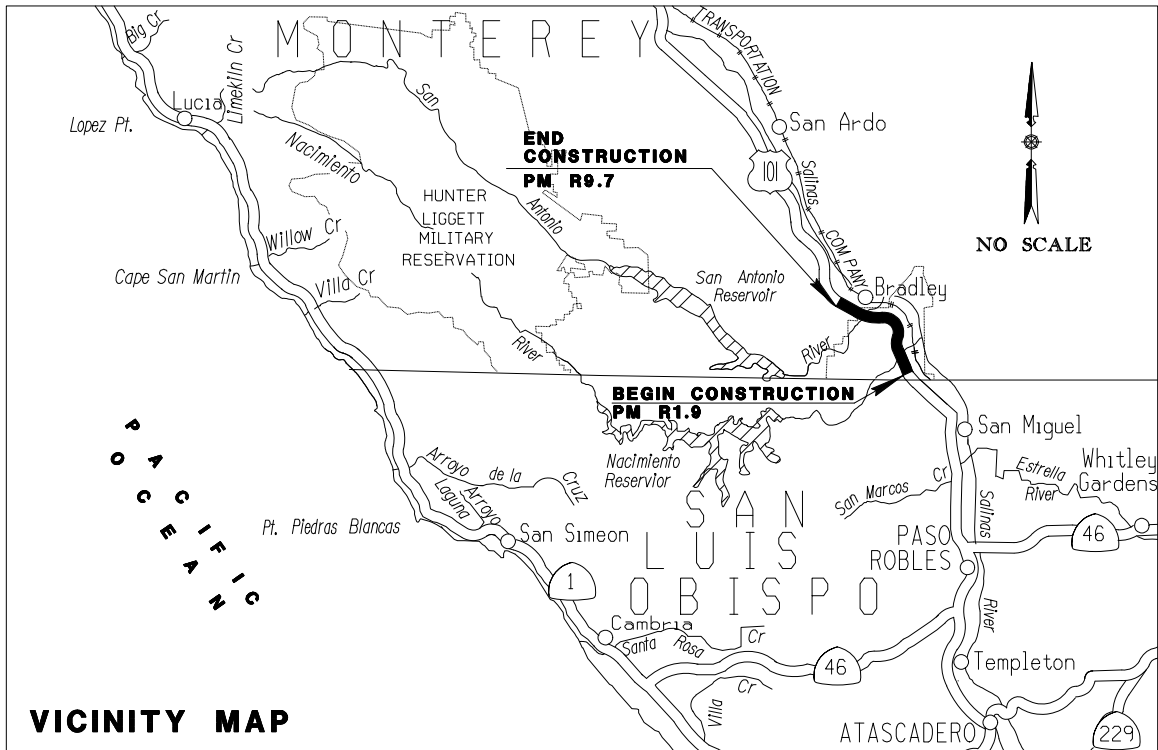


SCOTT EADES, District Director

09/25/2025

Date

Vicinity Map



This project report has been prepared under the direction of the following registered civil engineer. The registered civil engineer attests to the technical information contained herein and the engineering data upon which recommendations, conclusions, and decisions are based.

Jose Bautista
REGISTERED CIVIL ENGINEER

09/04/2025

DATE



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1. INTRODUCTION

Project Description:

This State Highway Operation and Protection Program (SHOPP) project is located on Route 101 in Monterey County near the community of Bradley. The project limits extend from 0.3 miles south of the East Garrison Overcrossing (PM R1.9) to the Jolon Road Undercrossing (PM R9.7). The anchor asset improvements include replacement of the left and right San Antonio River Bridge (44-0141L/R) at PM R6.66 and the left North Bradley Undercrossing (44-0142L) at PM R7.94. The scope of work also includes cold plane and 0.2' overlay of the lanes and shoulders within the project limits, reconstruct five drainage culverts, replace a census station, upgrade the guardrail and end treatments, replace dikes and install sign panels. Capital Preventive Maintenance (CAPM) strategies would be employed to extend the life of the existing flexible pavement.

The Project Report (PR) selected Alternative 1 as the preferred alternative. The proposed improvements would require temporary construction easements. A split-off mitigation planting project is included in the total construction cost estimate. The scope of the planting project is entirely within the limits of this project. A 3-year plant establishment period would be required.

The 2025 year construction cost estimate is \$81,889,000. The current Right of Way Capital cost estimate is \$327,771 and the escalated cost is \$379,435 which would be delivered in the fiscal year 2028/29. The Right of Way includes temporary construction easements and utility potholing. No permanent acquisition or utility relocation is proposed.

Project Limits	05 - Monterey – 101 - PM R1.9/R9.7	
	Current Cost Estimate:	Escalated Cost Estimate:
Capital Outlay Support	\$19,317,000	\$21,234,000
Capital Outlay Construction	\$81,889,000	\$97,888,000
Capital Outlay Right-of-Way	\$327,771	\$379,435
Funding Source	201.110 – Bridge Rehabilitation and Replacement	
Funding Year	FY 28/29	
Type of Facility	Bridge, 4-lane freeway	
Number of Structures	3 Bridges	
SHOPP Project Output	3 Bridges (Bridge Health 15,694 square feet Fair to Good, 4,136 square feet Poor to Good)	
Environmental Determination or Document	CEQA (California Environmental Policy Act) IS – Initial Study MND - Mitigated Negative Declaration NEPA (National Environmental Policy Act) CE - Categorical Exclusion	

Legal Description	In Monterey County near Bradley from 0.3 mile south of East Garrison Overcrossing to Jolon Road Undercrossing
Project Development Category	4B

Notes:

MON: Monterey

SHOPP: State Highway Operation and Protection Program

LM: Lane Miles

NEPA: National Environmental Policy Act

CEQA: California Environmental Quality Act

IS/MND: Initial Study / Mitigated Negative Declaration

2. RECOMMENDATION

It is recommended that this Project Report be approved using the preferred Build Alternative 1 and that the project proceed to the design phase.

3. BACKGROUND

District 5 initiated replacement of the San Antonio River Bridges (44-0141L/R) and the North Bradley UC (44-0142L) in a multi-objective Asset Management Long Lead Bridge Anchor project for the 2022 SHOPP cycle.

While the bridge is the anchor asset, the project includes satellite assets. Based on the information from the Pavement Condition Report (PaveM), the Project Initiation Document (PID) has identified rehabilitation of the pavement within the project limits as a satellite asset. The PID was approved in June 2020.

The existing alignment of Route 101 from the beginning of the project to the Bradley interchange was built in 1966 and the Bradley interchange to the Jolon Road interchange was built in 1964. Up to the Bradley interchange, the wear course of the travel lanes was built with 0.33' asphalt concrete, 0.67' Portland cement concrete, 0.33' of road mixed cement treated base, 0.17' aggregate base, 0.50' of aggregate subbase, and 0.50' of select material. The full limit of the project contains shoulders with asphalt concrete of varying thickness. In 1997, 0.2' of rubberized asphalt concrete was overlaid on the existing pavement. In 2003, the inside northbound and southbound shoulders were widened to 5' throughout the project limits. Based on District Document Retrieval System (DRS) records, the last maintenance improvement was performed in 2009, when the pavement was overlaid with 0.08' of rubberized hot mix asphalt – open graded. The recommended pavement preservation strategy considers Capital Preventive Maintenance (CAPM) guidance to improve the ride quality and extend the service life of the pavement. Other satellite assets identified in the PID for programming to meet the SHOPP performance goals include drainage system improvements, metal beam guardrail and Traffic Management System (TMS) features.

4. PURPOSE AND NEED

Purpose:

The purpose of this project is to comprehensively address the structural deficiencies, extend the service life of the roadway within the project limits, restore drainage systems, and replace a traffic census station. The proposed goals of the project are the following:

- Improve bridge health condition and/or mitigate for bridge scour.
- Improve the ride quality and extend the service life of the pavement by rehabilitating the worn out pavement.
- Restore failing culverts.
- Improve traffic census station data collection and maintain an efficient Intelligent Transportation System.
- Bring traffic safety devices up to current design standards.
- Replace sign panels to improve visibility and to meet current Federal Highway Administration Standards. Where sign panels are replaced, the sign posts will also need to be replaced.

Need:

This project is needed for the following reasons:

- The Bridge Strategy Meeting Fact Sheet and the Bridge Inspection Reports (Attachment L) states that delamination in the concrete bridge elements have occurred, which are being affected by alkali-silica reactivity (ASR) and chlorides.
- Based on the Pavement Condition Report, the pavement within the project limits is exhibiting distress and degraded ride quality. Minor rehabilitation of the pavement in the form of repair and overlay is needed because, if left uncorrected, the pavement will continue to deteriorate, leading to more costly reconstruction.
- Culvert inspections show that several culverts within the project limits are in fair and poor condition and need to be replaced or repaired. Not repairing this deficiency could lead to embankment or pavement failure.
- Traffic census station improvements are needed to collect reliable traffic volume data.

- Caltrans has adopted the new Manual for Assessing Safety Hardware (MASH) crash testing criteria as the new roadside safety hardware standard. Due to this change, the existing metal beam guardrail does not meet current standards.
- Many of the existing sign panels within the project limits do not meet the current Federal Highway Administration (FHWA) retro-reflectivity standards. Many of the sign posts are worn out and soon will reach the end of their service life.

A. Problem, Deficiencies, Justification

The San Antonio River Bridges (44-0141L/R) were built in 1965; they are 460-foot long continuous one hinge, 7 span Reinforced Concrete (RC) T-girder structures. In 2001 concrete core samples were taken from various locations in both structures, and analyzed for Alkali Silica Reactivity (ASR), specific gravity, modulus of elasticity compressive strength, and tensile strength. Both bridges had a polyester concrete overlay applied to the deck in 2021 which now obscures the previously reported delamination and cracks.

The right bridge (44-0141R) has a long history of observed alligator pattern cracking at Abutment 8. The alligator pattern cracking has been reported in biennial bridge inspection reports since 1984 and is indicative of ASR. ASR is a chemical reaction between alkalis in the cement and silica or silicates in the aggregate. The reaction produces an amorphous gel that swells in the presence of moisture with increasing internal tensional pressure. ASR leads to expansion and cracking of the concrete. Subsequent to a through deck hole that occurred on April 23, 2019 in the left wheel line of Lane 2 at Abutment 8, an in-depth investigation was conducted in May 2019. The investigation concluded the following:

- The hinge in Span 4 continues to degrade due to initial shortening of the structure. There are significant areas of delamination and shear flow cracks throughout the girders and diaphragms at the supporting side of the hinge adjacent to Pier 5. This condition is most severe at the exterior girders (Girders 1 and 5) and adjacent bays where there are significant shear flow cracks that extend from the girder to deck interface.
- There is significant deck delamination throughout the wheel lines of both travel lanes; a moderate number of deck spalls and failed patches, and moderate to severe map pattern cracking. Also, there is significant soffit and deck distress predominantly at Hinge 4 and adjacent to Abutment 8.
- Abutment 8 continues to degrade due to active ASR which has spread to the adjacent deck in Span 7.
- Bridge scour potential was assessed to have National Bridge Inventory (NBI) Item 113 rating of 3 (classified as scour critical).

The San Antonio River left Bridge (44-0141L) investigation concluded the following:

- The presence of ASR was confirmed when tested in 2001. As such, this structure is coded as “ASR-Confirmed.”

- There are hairline transverse and longitudinal soffit cracks spaced as close as 1 foot apart (with light efflorescence) in each bay of all spans. The cracks typically extend 2-4 feet in length. This condition is most densely concentrated near the piers and is most severe throughout Span 3. This condition has not significantly worsened when compared to the 10/13/2015 routine bridge inspection report. The most recent inspection in October 2023 determined that no actions or proposed work recommendations are considered at this time. It is anticipated the bridge will continue to deteriorate similarly to the Northbound bridge because they were built at the same time with the same construction method and have similar traffic patterns and volumes. With this in consideration along with the existing ASR and soffit cracking, both bridges have been scoped for replacement. Work request 10963, to revise the current Item 113 code, is in process. Scour mitigation work was completed in 2021 under project EA 05-1F820.

North Bradley Undercrossing Bridge (44-0142L) built in 1965, is a 109-foot long, 3 span RC T-girder structure with RC deck on RC column bents and RC open end diaphragm abutments with monolithic wingwalls. The abutments are founded on steel piles and the bents are founded on spread footings. This bridge has a long history of observed alligator pattern cracking at Abutments 1 and 4, indicative of ASR. Material Engineering and Testing of the bridge concrete cores from the face of each abutment has confirmed ASR. Test results have also revealed that chlorides have reached a maximum level which is indicative of corrosion being initiated up to depths of 2 inches.

Sporadic deck pattern cracking that are light to large in size, and severe in density have been observed throughout the deck since 2005. Spans 1 and 2 have several light to moderate transverse soffit cracks widely spread. Soffit cracks are visible with what appears to be rust staining. There are multiple unsound patched spalls up to two feet by two feet throughout the deck surface. The unsound patches are primarily located in the right wheel line of Lane 2 near the supports. Investigations have revealed that approximately 80% of the bridge length in both wheel lines has been delaminated. See Attachment M for Bridge Inspection Reports.

B. Regional and System Planning

United States Highway 101 (US 101) is a major north-south corridor running along the Pacific Coast of the United States. Within District 5, it is a major parallel freeway and expressway to Interstate 5 and the primary coastal route connecting centers of commerce, industry, agriculture, mineral wealth and recreation. It serves interregional traffic and commuters. It is an essential goods movement corridor, as well as a vacation corridor that supports tourism.

The federal functional classification of US 101 is Other Freeway or Expressway. This classification recognizes trip lengths and travel densities indicative of substantial statewide and interstate travel. US 101 is a Federal Aid Primary Route and part of the

Freeway and Expressway System; it is part of the National Highway System as a Strategic Highway Corridor Network (STRAHNET) route. STRAHNET is a network of linked highways deemed essential to national defense for the movement of troops and equipment to airports, ports, rail lines and military bases. It is also part of the State of California Interregional Road System (IRRS) and designated as a Strategic Interregional Corridor and Priority Interregional Highway in the Interregional Transportation Strategic Plan (ITSP).

Caltrans 2014 Transportation Concept Report identifies the project location to be part of Segment 7, which extends from the SR 46 East interchange in San Luis Obispo County and north to the Airport Boulevard interchange in Monterey County. Segment 7 is a 4-lane freeway from the San Luis Obispo County Line to King City. The project location is entirely located within Monterey County and is a 4-lane freeway.

Within the project limits, bicycle access is permitted along US 101. Caltrans supports local and regional agencies' initiatives to improve alternative bicycle routes to US 101 to enhance alternative modes of travel and to limit the exposure of cyclist to high speed traffic. Bicycles would utilize the outside shoulder. No new complete streets improvements were identified. The shoulders of high-speed roadways are not intended for pedestrian use.

The project is consistent with Caltrans Transportation Concept Report, which identifies future growth and development in Monterey County and interregional travel as the cause of operational impacts on US 101. As described in the 2045 Association of Monterey Bay Area Governments' (AMBAG) Metropolitan Transportation Plan (MTP) and the Sustainable Communities Strategy (SCS) that was adopted in 2022, in the area north in Salinas and north Monterey County. In and near the project limits, the 2035 congestion is expected to be low with the volume-to capacity ratio below 0.74.

The proposed improvements would maintain the existing pavement and improve the drainage systems. The improvements would not preclude any plans to improve nor hinder long-term operations of US 101. There are no alternative routes within the project vicinity. Future projects may include multimodal improvements as well as operational improvements. Included but not limited to bridge retrofits, new interchanges and additional capacity for the Bradley Rest stop and electric charging stations.

The following proposed projects are in Monterey County on US 101 near the project limits:

- EA 05-1K440, 2022 SHOPP, PM R41.9/49.8, Pavement rehabilitation using CAPM strategies, culverts, lighting and TMS elements. Construction is currently scheduled for February 2026.
- EA 05-1M350, 2024 SHOPP, PM R22/R28, Pavement rehabilitation using CAPM strategies. Construction is currently scheduled for December 2027.

- EA 05-1K490 2024 SHOPP, PM 9.2/22.0, Pavement rehabilitation using CAPM strategies, culverts, lighting and TMS elements. Construction is currently scheduled for December 2027.

The regional Transportation Planning Agency is the Transportation Agency for Monterey County (TAMC).

C. Traffic

Segment PM R1.9 to PM R9.7

Present Year AADT	22,050	10-Year AADT	33,559
Construction Year AADT	28,675	20-Year AADT	38,316
DHV=3,527		15% Trucks	
D= 58%			

Notes:

AADT: Annual Average Daily Traffic

DHV: Design Hourly Volume or Directional Flow Rate

D: Percent of Peak Hour Travel in the Peak Direction

The summary of the selective collision data from the Traffic Accident Surveillance and Analysis System (TASAS), Table B for the five-year period from April 18, 2018 to March 31, 2023 shown below in Table 8.1 indicates the Actual Fatal plus Injury and Total collision rate is below the Statewide Average for similar facilities for the northbound roadbed from PM R1.9 to PM R9.7, and below the Statewide Average for the southbound roadbed from PM R1.9 to PM R9.7.

Table 8.1: Traffic Collisions

County-Route (post mile range)	Number of Collisions			Actual Rate (Acc/Million Vehicle Miles)			Average Rate (Acc/Million Vehicle Miles)		
	F ¹	F+I ²	Total ³	F ¹	F+I ²	Total ³	F ¹	F+I ²	Total ³
05-Mon-101 R1.9 (Rt)/ R9.7 (Rt)	0	4	25	0.000	0.04	0.22	0.010	0.18	0.53
05-Mon-101 R1.9 (Lt)/ R9.7 (Lt)	1	8	48	0.009	0.07	0.43	0.010	0.18	0.53
05-Mon-101 R1.9 (Lt/Rt)/ R9.7 (Lt/Rt)	1	12	73	0.004	0.05	0.32	0.010	0.18	0.53

Notes:

1. Fatal collisions
2. Fatal collisions plus injury collisions
3. All reported collisions

Acc: Accidents

R: Realigned

Rt: Right

Lt: Left

There was 1 fatal and 12 fatal plus injury collisions with a total of 73 collisions. Three collisions occurred during wet conditions and 34 occurred when it was dark.

The data provided is protected by 23 U.S.C. § 407, and shall not be subject to discovery, nor admitted as evidence in any applicable legal proceeding against the State of California. By allowing the release of this information, the State of California, Department of Transportation does not waive any rights it has under 23 U.S.C. § 407.

5. ALTERNATIVES

5A. Viable Alternatives

The Draft Project Report discussed three alternatives for this project: two Build Alternatives and a No-Build Alternative. The only distinction between the two Build Alternatives is the type of bridge design for the San Antonio River Bridges which has significant differences to environmental impacts. Other than this difference, the two Build Alternatives are the same (i.e. pavement strategy, project elements, etc.).

Alternative 1 is recommended by the PDT as the preferred alternative based on engineering, environmental analysis and community/agency input. While both of the alternatives would have met the purpose and need of the project, Alternative 1 was selected as the preferred alternative based on reduced environmental issues and lessened traffic impacts to the traveling public.

The preferred Build Alternative proposes the following improvement strategies:

San Antonio River Bridges Strategy

Replace the right and left San Antonio River Bridges (44-0141L/R). The existing San Antonio River Bridges have a length of 460 feet, an overall width of 34' with a rail-

to-rail clear width of 28' and is on a super elevation of 6.0%. The existing bridge is a two-frame structure with 7 spans. The replacement structure will be 469.5 feet long, with a clear opening width of 39' on a super elevation of 6.0%. The new bridge will have two 12 feet lanes, 5 feet inside shoulder and 10 feet outside shoulder. Standard Type 86H bridge rails will be installed. This bridge will be built while the northbound traffic is diverted to the left San Antonio River Bridge through a median crossover.

Build Alternative 1 proposes to replace the structures with a precast prestressed wide flange girder structure. This alternative can maintain the existing minimum vertical clearance of 15'1" over San Antonio Drive and does not require falsework.

	ALTERNATIVE 1 COST
ROADWAY COST	\$ 44,750,000
STRUCTURE COST	\$ 53,138,000
RIGHT OF WAY COST	\$ 379,435
TOTAL	\$ 98,268,000

North Bradley Overcrossing Bridge Strategy

Replace the left North Bradley Undercrossing (44-0142L). The existing left North Bradley Overcrossing (44-0142L) has a length of 108.46 feet, an overall width of 39'8" with a rail-to-rail clear width of 37'8" and is on normal crown, i.e. 1.5% cross slope. The existing bridge is a 3-span structure. The replacement bridge will be single span, 100'0" in length, 42'-6" in width with a clear opening width of 39' and have a 1.5% or 2% cross slope. The new bridge will have two 12 feet lanes, 5 feet inside and 10 feet outside shoulders. Standard Type 842 bridge rails will be installed. A minimum vertical clearance of 16'6" will be maintained. This bridge will be built while the southbound traffic is diverted to the right North Bradley Undercrossing (44-0142R) through a median crossover. The proposed replacement structure uses the precast prestressed concrete box beam method which eliminates the need for falsework during construction. Permanent non-standard features are not proposed at this time.

Pavement Strategy

The travel lanes and the adjacent shoulders will be cold planed 0.15' and overlaid with 0.15' to 0.2' Rubberized Hot Mix Asphalt (RHMA) to rehabilitate and extend the service life of the pavement. At the interchanges, the overlay will be extended to the end of the ramps. Heavily distressed pavement will be repaired with dig outs.

The San Antonio River Bridge replacements will require reconstruction of the pavement for approximately 470' before and 490' after the bridge. The proposed structural section is 0.90' of continuously reinforced concrete pavement or jointed plain concrete pavement (JPCP) over 0.25' of hot mix asphalt (Type A).

The anticipated performance life of the pavement is approximately 5-10 years. A Life Cycle Cost Analysis (LCCA) is not required for this project. A programmable strategy has been developed to capture the different elements affected by the pavement improvements.

Project Elements:

1. Structures

- a. Replace the San Antonio River Bridges (44-0141R and 44-0141L) and the North Bradley Undercrossing Bridge (44-0142L).
- b. Install two retaining walls north of the bridge. Adjacent to the northbound lanes, the retaining wall will be approximately 450 feet and adjacent to the southbound lanes, approximately 520 feet.

2. Mainline

- a. For the full pavement width (including shoulders) cold plane the existing rubberized asphalt concrete surface 0.15', provide a SAMI, and place 0.15' to 0.20' RHMA overlay.
- b. Near the northbound San Antonio Bridge, the proposed reconstructed structural section is 0.90' of continuously reinforced concrete pavement (CRCP) or jointed plain concrete pavement (JPCP) over 0.25' of hot mix asphalt (Type A). The pavement will be reconstructed for approximately 470' before and 490' after the northbound bridge.
- c. Dig outs: Repair severely distressed or failing asphalt pavement with partial depth replacement.
- d. Construct tapered edge.
- e. At interchanges, the ramps will be cold planed overlayed with 0.2' RHMA. Additionally, at the Bradley Undercrossing interchange, Bradley Road which is perpendicular under Route 101 will be overlayed.
- f. At the northbound and southbound Camp Roberts rest areas the parking lot pavement will install a Type II slurry seal.

3. Striping

- a. Replace the existing traffic stripe and pavement marking to meet current standards.

4. Rumble Strips

- a. The existing rumble strips will be ground out as part of the cold plane operations and replaced.

5. Drainage Culverts and Appurtenances

- a. There are 5 drainage system improvements within the project limits.
- b. The culverts at PM 5.35 (44-101-41-00534, Nodes 2 to 1), PM 9.16 (44-101-41-00915, Nodes 2 to 1) and PM 9.66 (44-101-13-00970, Nodes 2 to 1) will require replacement of the 24" RCP and flared end sections with rock slope protection.
- c. The culvert at PM 7.92 (44-101-41-00793, Nodes 2) requires repair of the first joint from the drainage inlet by installing a new concrete collar.
- d. The drainage system at PM 7.78 (44-101-81-00779, Nodes 4 to 2, Nodes 3 to 2, and Nodes 2 to 1) consists of a 4'x4' concrete box culvert and 36" reinforced concrete pipe (RCP). This system will need to be abandoned

and replaced with a 48" RCP, headwall, and rock slope protection.

6. Guardrail

- a. Remove existing guardrail and install Midwest Guardrail System (MGS) features. Changing to MGS and terminal end features could require widening the embankment to the hinge point to 4-feet width in some locations. All proposed guardrails in this project would be constructed with steel posts and crushed shale for vegetation control, thus reducing the potential to be destroyed by a low intensity grass fire.

7. Dike

- a. All existing dike would be evaluated for hydraulic utility, traffic safety and for stormwater best management practice treatment benefits.

8. Shoulder Backing

- a. Place shoulder backing to account for erosion or weathering at the edge of pavement.

9. Traffic Management System - Census Stations

- a. One census station will be replaced (5506).

10. Signs

- a. Existing sign panels not using the Type XI backing material will be identified for replacement during the Plans, Specifications and Estimate (PS&E) stage. Along with the sign panels, replacement of the existing wood post would be evaluated during PS&E.

Utility Involvement

Utility verification has occurred, and the positive location mapping has been created, potholing is scheduled to occur in the PA&ED phase. Every reasonable effort will be made to avoid utility relocation as it could delay the needed improvements.

California Highway Patrol (CHP) Enforcement Activities

CHP enforcement would be used during construction.

Bicyclists Accommodation

Bicycles are allowed on this portion of US 101. Bicycles may need to be detoured to county roads when shoulder closures or uneven pavement make riding on US 101 unwelcome. Bradley Road provides off system connectivity between Nacimiento and Bradley. Bradley Road is a low volume 2-lane county road with no shoulders. Motorist information - bicycle detour plan(s) may be included in the construction contract.

Current Construction Capital and Right-of-Way Capital Cost Estimates

Current Construction Estimate:	\$81,889,000
Current Right of Way Cost Estimate:	\$327,771

Earth Retaining Systems

Earth retaining structures within the project limits include culvert headwalls of various sizes and a Type 5 retaining wall near San Antonio River Bridge. This retaining wall will be integrally colored and/or stained.

Erosion Control

Disturbed areas will be treated with permanent erosion control. Erosion control materials will be selected to best address the various conditions within the project site. Areas that are steep and exposed to concentrated flows will require aggressive erosion control techniques that may include bioengineering at creek banks, application of duff, netting, fiber rolls, compost berms and socks, and hydroseed to control erosion and establish vegetation for long term protection.

High-Occupancy Vehicle Lanes

Not Applicable.

Landscape-Existing Facility Condition

There are no existing irrigation facilities except at the SRRAs, where water is supplied by water wells.

Native vegetation including riparian forests, grasslands, and oak woodlands exist throughout the project corridor. The two Camp Roberts Safety Roadside Rest Areas (SRRAs) within the project limits, include ornamental planting maintained by Caltrans.

Highway Planting and Irrigation

Replacement planting will be required due to visual and biological impacts associated with the removal of native trees and vegetation impacted by construction.

Replacement planting may include wetland, riparian, and upland habitat.

Replacement planting associated with stabilizing drainages will be constructed as part of the roadway contract and may include bioengineering techniques such as willow cuttings, willow planting in rock slope protection, live siltation, and brush layering. Final scope and locations of work will be refined in coordination with the project biologist and visual specialist. Areas of temporary impacts to Waters of the US will be re-contoured to approximate pre-construction conditions.

Where additional replacement planting and restoration is required to meet permit conditions, a follow-up split-off restoration and mitigation planting project, including a three-year plant establishment period, will be implemented. Funding for the PS&E Support, Construction Support, and Construction Capital for the split-off mitigation planting project will be included as construction dollars in the parent project until a split off planting project is created.

Plants will be watered manually for three years during the plant establishment period using a temporary irrigation system supplied by a water tanker truck.

Aesthetic Treatments

Aesthetic treatment will be integrated into the design to be consistent with the visual impact analysis and recommendations, with specific types of aesthetic treatments being developed during the project design phase. The project must preserve as much vegetation as possible and all disturbed soil areas must be revegetated with native plant species. At this time, it is anticipated that roadside elements such as drainage headwall may need to be stained or darkened to blend in with the surroundings. The structural elements such as bridges and retaining walls will also include aesthetic treatment such a texture. New bridge rails will need to be analyzed with special consideration of existing railing type to remain at the San Antonio River Bridge. In order to match the existing rail style, a Type 85, 86H or similar bridge rail is being proposed.

GHG Emissions

A greenhouse gas (GHG) emissions analysis is included in the Environmental Document (ED). This project is not capacity increasing and as such would not increase GHG over the long term. Short term construction related emissions were estimated using the Caltrans Construction Emissions Tool (CAL-CET). The estimated average Carbon Dioxide Equivalent emission is 1,047 tons for Alternative 1 and 951 tons for Alternative 2.

Noise Barriers

Not Applicable.

Operational Improvement Features

No operational improvement features are proposed.

Ramp Metering

Not Applicable.

Roadside Design and Management

Reconstruction of culvert headwalls is included in the scope of work. This along with upgrading guardrail and end treatments constitutes the scope of roadside improvements. The table below shows the approximate location and lengths.

LOCATION	Layout Type	Midwest Guardrail System (LF)	End Treatment (AITS)	End Anchor Assembly (Type SFT)
Northbound Approach PM R2.1	12A	125	1	
Southbound Approach PM R2.1	12A	125	1	
Median PM R2.1	15A	212.5	1	
Northbound Approach PM R2.4	12A	212.5	1	
Northbound Approach PM R2.4	12E	193	1	
Southbound Departure PM R2.4	12AA	900		1
Northbound Departure PM R2.5	12AA	1425		1
Southbound Approach PM R2.5	12E	212.5	1	

Southbound Approach PM R2.5	12A	825	1	
Northbound Approach PM R2.8	11A	112.5	1	1
Southbound Approach PM R2.8	11A	104		1
Northbound Approach PM R3.8	11A	1800		1
Northbound Approach PM R4.3	12A	72.5	1	
Southbound Approach PM R4.3	12A	150	1	
Northbound Approach PM R6.6	12A	144	1	
Northbound Approach PM R6.6	12E	194	1	
Southbound Departure PM R6.6	12AA	160		1
Northbound Departure PM R6.7	12AA	4500		1
Northbound Departure PM R6.7	12AA	155		1
Southbound Approach PM R6.7	12E	180	1	
Southbound Approach PM R6.7	12A	1987.5	1	
Northbound Departure PM R7.9	12A	312.5	1	
Northbound Departure PM R7.9	12E	137.5	1	
Southbound Approach PM R8.0	12E	155	1	
Southbound Approach PM R8.0	12A	287.5	1	
Northbound Approach PM R9.0	11A	112.5		1
Southbound Approach PM R9.0	11A	200		1
Northbound Approach PM R9.7	12A	162	1	
Northbound Approach PM R9.7	12E	225	1	
Southbound Departure PM R9.7	12AA	146		1

Notes:

LF: Lineal Foot

AITs: Alternative In-line Treatment System

SFT: Steel Foundation Tube

Traffic Analysis

A traffic analysis is not required for the proposed project.

Design Standards and Deviations from Design Standards

Per DIB 81-03 "Minor Pavement Rehabilitation Capital Preventive Maintenance (CAPM) Guidelines", CAPM projects consistent with DIB 81-03 do not require a DSDD for existing non-standard features. Any future scope additions to the project that modify existing geometric features and create a non-standard feature will require a DSDD (Design Standard Decision Document). This project has documented nonstandard features associated with the non-CAPM proposed bridge replacement portion of the project.

Originally in the PIR, it was proposed to design the superelevation of the San Antonio River Bridge at the standard 9.4% (70 mph design speed at the 2,000' radius curve).

Past the bridge, the superelevation would transition back to the existing 6.0% superelevation through the remainder of the curve.

Upon further discussion and analysis, the team is in concurrence that, for several reasons, the superelevation at the San Antonio River Bridge should be designed at 6% to maintain the existing superelevation at the OH Structures and match the remainder of the curve.

This nonstandard feature is proposed for several reasons such as to provide alignment consistency, bicyclist comfort, address environmental preferences, structure maintenance recommendations and to avoid costs that are considered excessive.

A Design Standard Decision Document to maintain the existing 6.0% superelevation on the bridge was approved on February 3, 2025.

5B. Rejected Alternatives

Alternative 2 was rejected due to increased environmental issues and extended traffic impacts to the traveling public.

Build Alternative 2 entails replacement of the structures using the cast-in-place box girder method. This alternative will need falsework during construction and therefore a minimum vertical clearance of 18'10" over San Antonio Drive is required to satisfy minimum temporary (falsework) requirements.

The "no-build" alternative is also rejected. Without the needed improvements, water intrusion into the asphalt pavement will result in failure of the underlying base ultimately leading to costly pavement reconstruction. Corrosion along the flowline of one metal pipe culvert is eroding the highway embankment. Ultimately, the shoulder and then the lane will collapse. The "no build" alternative was rejected for not meeting the purpose and need. Not constructing this project will leave the deficiencies identified by headquarters which will lead to further deterioration and possible bridge failure.

6. CONSIDERATIONS REQUIRING DISCUSSION

6A. Hazardous Waste

Treated wood waste (TWW) will be encountered in the form of guardrail posts, blocking and sign posts. Treated wood waste must be managed in accordance with Standard Special Provisions (SSP) 14-11.14 for proper management of the TWW. Older hazardous yellow traffic stripe was removed under a different project in 2018. Stripe is going to be removed as part of the cold plane and must be managed in accordance to SSP 36-4. A project specific investigation for aerially deposited lead (ADL), lead based paint (LBP) and asbestos containing material (ACM) will be performed during the project design phase. The hazardous waste specialist will work with the project design team to determine the appropriate SSPs to include in the construction contract based on the results of the study.

6B. Value Analysis

A Value Analysis (VA) study is required by the federal government when the total cost is \$50 million and greater, as specified in Deputy Directive (DD) 92. A value analysis may be required by the State when the project cost is greater than \$25 million. The cost of this project is above the \$25 million-dollar threshold and would warrant a VA Study. A VA study is scheduled for early 2026.

6C. Resource Conservation

Where feasible salvaged material would be incorporated into the final design phase of the project. Reasonable measures would be taken to reduce wasteful, inefficient, and unnecessary consumption of energy and non-renewable resources during construction. Hot mix asphalt grindings may be used as shoulder backing.

6D. Right-of-Way Issues

There are existing utilities within the work area that will require Positive Location Determination which is scheduled to happen during the PA&ED stage. Work arounds and utility encroachment exceptions would be considered before relocation is proposed. The Right of Way Data Sheet dated 10/18/2024 assumes no utility conflicts or relocation. If a conflict is discovered during PA&ED, a new Data Sheet will be requested, and subsequent information will be updated.

Right of way impacts have been evaluated and a Right of Way Data Sheet is included in Attachment E. The project proposes temporary construction easements. The total current right of way cost for this project is estimated at \$327,771 and the escalated cost is \$379,435.

There is no railroad involvement on this project.

6E. Environmental Compliance

A Initial Study with a Mitigated Negative Declaration has been prepared for this project under the California Environmental Quality Act (CEQA) and a Categorical Exclusion will be prepared under the National Environmental Policy Act (NEPA). To view all mitigation measures, see pages iii and iv of the Final Environmental Document.

The project would have less than significant or no impact on aesthetics, agriculture and forest resources, cultural resources, air quality, energy, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, noise, population and housing, public services, recreation, transportation, tribal cultural resources, wildfire, or utilities and services systems. The project will have less than significant impact on biological and paleontological resources after mitigation is incorporated.

Preservation of existing vegetation to minimize the areas of disturbance will be implemented to the maximum extent feasible. Temporary impacts to jurisdictional

areas will be restored onsite at a 1-to-1 ratio. All trees removed within jurisdictional areas will be replaced at a 3-to-1 ratio for trees less than 12 inches in diameter at breast height and at a 10-to-1 ratio for trees equal to or greater than 12 inches diameter at breast height. Impacts to roosting bats will be compensated through the development and implementation of a Bat Protection and Mitigation Plan during the final project design phase.

Caltrans will retain a Principal Paleontologist that meets Caltrans qualifications to prepare or oversee preparation of a Paleontological Mitigation Plan.

6F. Air Quality Conformity

The project is in the North Central Coast Air Basin (NCCAB). This basin consists of Monterey, Santa Cruz, and San Benito Counties. The Monterey Bay Air Resources District (MBARD) regulates air quality in the NCCAB. The NCCAB is considered to be in attainment for all federal ambient air quality standards (AAQS) and non-attainment transitional for state AAQS for ozone and non-attainment for airborne particulate less than 10 microns in diameter.

6G. Title VI Considerations

The California Department of Transportation under Title VI of the Civil Rights Act of 1964 and related statutes ensures that no person in the State of California shall, on the grounds of race, color, national origin, sex, disability, and age, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program and activity it administers. This project will comply with Title VI statutes, wherever it is applicable.

6H. Noise Abatement Decision Report

This project will not increase traffic volumes and as such, noise levels from the facility would not change due to the improvements. According to the FHWA noise regulations, this is a Type III project and hence no further analysis would be required.

6I. Life-Cycle Cost Analysis

This project does not need a Life Cycle Cost Analysis.

6J. Reversible Lanes

This project does not qualify as a capacity increasing project nor a highway realignment project and as such reversible lanes is not a topic of consideration.

7. OTHER CONSIDERATIONS AS APPROPRIATE

Public Hearing Process

This project would not have a significant impact on environmental resources and does not propose a significant change in the right of way; it is as well deemed to be noncontroversial. A Notice of Availability and an opportunity for a virtual public hearing was posted in the newspaper, posted on the project web page and on

CEQANet. A meeting was not requested. The draft environmental document was circulated for 33 days of public review; one comment was received and responded to in the final environmental document.

Route Matters

There are no revisions required to highway route agreements within the project limits.

Permits

The following regulatory permits and/or approvals would be required prior to project construction:

Agency	Permit/Approval
California Department of Fish and Wildlife	Section 1602 Streambed Alteration Agreement
Central Coast Regional Water Quality Control Board	Section 401 Water Quality Certification
U.S. Army Corps of Engineers	Section 404 Nationwide Permit
National Marine Fisheries Service	Biological Opinion for South Central Coast Steelhead Trout
U.S. Fish and Wildlife Service	Biological Opinion for southwestern pond turtle and western spadefoot toad. Letter of Concurrence for least Bell's Vireo, southwestern willow flycatcher, and San Joaquin kit fox.
California Department of Fish and Wildlife	Section 4(f) <i>De Minimis</i> concurrence
California State Water Resources Control Board	Construction General Permit

Cooperative Agreements

There are no cooperative agreements with other agencies or parties for this project.

Report on Feasibility of Providing Access to Navigable Rivers

There are no navigable waters within the project limits as defined by the Army Corps of Engineers.

Public Boat Ramps

Not applicable for this project.

Transportation Management Plan

Preliminary traffic impacts and mitigation for this project have been outlined in the Transportation Management Plan Data Sheet (TMP Data Sheet) (Attachment H).

Costs associated with the traffic impact mitigation measures listed in the TMP Data Sheet have been included in the cost estimate.

Lane closure charts and an updated TMP would be prepared prior to finalizing the construction documents.

Stage Construction

The following proposed improvement would require long term closures and traffic handling plans:

Stage Construction for San Antonio River Bridge:

Construction of the San Antonio River Bridge will take place in four stages. To replace the bridge and allow traffic to operate, a temporary median crossover is proposed to detour traffic such that one bridge will be replaced while the other facilitates both the northbound and southbound traffic. The speed limit will be reduced throughout the project area. Currently, a temporary construction easement is proposed along San Antonio Drive to allow access to the bridge during construction. This roadway will be used to drive under the bridge and allow for parking of construction vehicles. To isolate the construction site from flowing water, a temporary clear-water stream diversion system would need to be installed to pass upstream flows around the active construction zone.

During the first stage of construction, temporary median crossovers will be constructed while both bridges stay fully operational.

Stage two of the construction has two phases. The first phase is where the crossover is open and in use. The temporary median crossovers will detour the northbound traffic to the southbound structure. The median crossovers taper from two to one lane so a single lane in each direction will be carried on the existing southbound structure. The second phase involves replacing the northbound San Antonio River Bridge while the traffic is detoured onto the southbound structure. During the second stage of construction, temporary median crossovers will also be constructed for the southbound traffic to use the northbound lanes.

Stage three of the construction also has two phases. The first phase is where the southbound crossover is open and in use. The temporary median crossovers will detour the southbound traffic to the northbound structure. The median crossovers taper from two to one lane so a single lane in each direction will be carried on the northbound structure. The second phase involves replacing the southbound San Antonio River Bridge.

Stage four is the final construction stage. At this stage both the northbound and southbound bridges have been constructed and will be opened while the temporary median crossover from stage three is removed.

The total working days for the construction of the San Antonio bridges will vary based on the build alternative but ranges between 686 to 940 working days.

The proposed construction of concrete barrier transitions at the bridges would require long term shoulder closures with placement of temporary barrier in the shoulder.

Stage Construction for Bradley Undercrossing:

Construction of the Southbound North Bradley Undercrossing (UC) Bridge will take place in three stages. To replace the bridge and allow traffic to operate, temporary median crossovers are proposed to detour traffic such that one bridge will be replaced while the other facilitates both the northbound and southbound traffic.

During the first stage of construction, temporary median crossovers will be constructed while both bridges stay fully operational.

Stage two of the construction has two phases. The first phase is where the crossover is open and in use. The temporary median crossovers will detour the southbound traffic to the northbound structure. The median crossovers taper from two to one lane so a single lane in each direction will be carried on the existing Northbound structure. The second phase involves replacing the southbound North Bradley UC while the traffic is detoured onto the northbound structure.

Stage three is the final construction stage. At this stage the southbound bridge has been constructed and will be opened while the temporary median crossover from stage three is removed.

The total working days for the construction of the North Bradley UC is approximately 134 working days.

The proposed construction of pipe culverts subject to open cut would require short term closures and to shift traffic through traffic handling plans. Other short-term closures would be defined in the lane closure charts. Work such as but not limited to cold plane, overlay, and striping would be shift work defined in the contract by the lane closure charts. Bicycles are allowed on this section of Route 101.

It is proposed to detour bicycle traffic to Bradley Road between the East Garrison interchange and the Bradley Road interchange. Between the Bradley Road interchange and the Jolon Road interchange, bicycles would be permitted to use the outside shoulders, including during the cold plane and overlay activities.

Accommodation of Oversize Loads

Oversize loads are permissible on this section of Route 101. The Encroachment Permit office would inform applicants of temporary vertical and horizontal restrictions when possible.

Graffiti Control

This project is not located in a graffiti prone area and does not propose improvements that would require graffiti control.

Asset Management

The anchor assets on this project are the bridge replacements. Satellite assets include drainage culverts, guardrail, and a census station. The left San Antonio River bridge is currently in fair health and a future bridge inspection finding will update the condition accordingly. Based on the inspection findings work recommendations will be confirmed or re-evaluated during the PS&E phase. For more information see Attachment J.

Complete Streets

The following conditions are representative of Route 101 through the project area only. Route 101 is classified as an Intercommunity Rural Connector per the Caltrans Active Transportation Plan. The adjacent land use is rural farmland. There are no sidewalks or curb ramps, and the paved shoulder is not intended for pedestrian use. Pedestrians would not be expected in the area due to high speeds on the freeway and the rural setting. There are no prohibitions for bicycles, therefore, active transportation will be considered as part of the project. The outside shoulders within the project limits are 8 feet except at the left and right Nacimiento River Bridges and the left and right San Antonio River Bridges. Currently, at these locations, the bicyclists share the road with the motorists. If or when the left and right San Antonio River Bridge will be replaced and widened, providing a 10-foot outside shoulder. The scope of the project does not include replacing or widening the left and right Nacimiento River Bridges. During construction, bicycles will be notified before entering the work area. Signage will be provided to alternative route(s), when possible. North of the Bradley Road interchange, bicycles would be permitted to use the outside shoulders, including during the cold plane and overlay activities. A Complete Streets Decision Document (CSDD) is included in Attachment K.

Broadband and Advance Technologies

Caltrans may provide partnering opportunities in planned transportation projects with Wired Broadband Stakeholders to incorporate wired broadband within the State highway right of way. Broadband stakeholders have not contacted Caltrans regarding installing conduits for wired broadband within the project limits.

Advanced technologies include fueling opportunities for zero-emission vehicles. No known advanced technologies are proposed at this time.

The Camp Roberts Safety Roadside Rest Areas have existing electric vehicle charging stations. This project does not propose the expansion or addition of new zero-emission vehicles charging stations.

8. FUNDING, PROGRAMMING AND ESTIMATE

Funding

It has been determined that this project is eligible for Federal-aid funding.

Programming

Fund Source	Fiscal Year Estimate							
20.XX.201.110	Prior	24/25	25/26	26/27	27/28	28/29	Future	Total
Component	In thousands of dollars (\$1,000)							
PA&ED Support	3,359							3,359
PS&E Support			5,613					5,613
Right-of-Way Support			690					690
Construction Support						9,655		9,655
Right-of-Way						380		380
Construction						72,842		72,842
Total	3,359		6,303			82,877		92,539

Estimate

The escalated construction capital cost at midpoint of construction is \$97,888,000. The escalated right of way cost is estimated at \$379,435. The scope may be reduced to stay within the programmed budget. As the design is refined during PS&E, a Project Change Request (PCR) may be processed to right size the project as needed. The Preliminary Project Cost Estimate is included as Attachment D.

The support to capital cost ratio is 26.4%. Support costs are escalated at 3.7% per year. Construction Capital Costs escalated at a rate of 4.89% (25/26) and 3.8% per year thereafter to the mid-point of the duration of each component. Right of way capital is escalated at 5% per year. The estimate for the escalated capital outlay support cost is \$21,234,000.

9. DELIVERY SCHEDULE

Project Milestones		Milestone Date (Month/Day/Year)	Milestone Designation (Target/Actual)
PROGRAM PROJECT	M015	03/16/2022	A
BEGIN ENVIRONMENTAL	M020	09/15/2022	A
CIRCULATE DPR & DED EXTERNALLY	M120	05/01/2025	A
PA & ED	M200	10/31/2025	T
BEGIN STRUCTURE	M215	3/10/2026	T
PS&E TO DOE	M377	04/10/2028	T

DRAFT STRUCTURES PS&E	M378	09/13/2027	T
RIGHT OF WAY CERTIFICATION	M410	03/02/2028	T
READY TO LIST	M460	01/26/2029	T
HEADQUARTERS ADVERTISE	M480	05/07/2029	T
AWARD	M495	07/18/2029	T
APPROVE CONTRACT	M500	08/10/2029	T
CONTRACT ACCEPTANCE	M600	12/14/2032	T
END PROJECT EXPENDITURES	M800	01/11/2034	T
FINAL PROJECT CLOSEOUT	M900	11/30/2034	T

10. RISKS

A Risk Assessment has been developed by the project development team. It is Attachment I. The primary risk to the project schedule comes from utility potholing. Utility potholing that identifies the need for utility relocation would introduce a new long lead critical path activity that could delay delivery.

11. EXTERNAL AGENCY COORDINATION

Federal Highway Administration (FHWA)

This project is considered an Assigned Project in accordance with the current FHWA and Department of Transportation (Caltrans) Joint Stewardship and Oversight Agreement.

The project requires the following coordination:

State Historic Preservation Officer, Office of Historic Preservation

Section 106 consultation during the evaluation of cultural resources and the Finding of Effect.

California Department of Fish and Wildlife

California Fish and Game Code Section 1602

Concurrence of Section 4(f) Evaluation

Regional Water Quality Control Board

Clean Water Act Section 401

Water Quality Certification

US Army Corps of Engineers

Department of the Army Permit for:

Clean Water Act Section 404

US Fish and Wildlife Service

Biological Opinion for southwestern pond turtle and spadefoot toad. Letter of Concurrence for least Bell's Vireo, southwestern willow flycatcher, and San Joaquin kit fox.

National Marine Fisheries Service

Biological Opinion and technical assistance for South Central Coast Steelhead Trout.

12. PROJECT REVIEWS

Scoping team field review	PDT	Date 09/19/2024
Scoping team field review attendance roster attached.		
District Program Advisor	Andrew Rose	Date 09/19/2024
Headquarters SHOPP Program Advisor	Rupinder Dosanjh	Date 09/19/2024
District Maintenance	Victor Devens	Date 09/19/2024
Headquarters Project Delivery Coordinator	Robert Effinger	Date 09/19/2024
Project Manager	Mark Leichtfuss	Date 09/19/2024
FHWA	Lanh Phan	Date 09/19/2024
District Safety Review	Michael Grolle	Date 09/19/2024
Constructability Review		Date 09/19/2024
Other		Date

13. PROJECT PERSONNEL

Name	Functional Unit	Phone #
Mark Leichtfuss	Project Manager	(805) 556-5295
Anonh Sengmany	Design Manager	(559) 974-3402
Jose Bautista	Project Engineer	(559) 840-7275
Alyssa Nishikawa	Design Engineer	(559) 383-5888
Scott Kirkish	Asset Management	(805) 441-3838
Dianna Beck	Senior Environmental Coordinator	(805) 459-9406
Claire Taggesell	Environmental Coordinator	(805) 459-9588
Audrey Weichert	Biologist	(805) 440-1115
Nina Tortosa	Aquatic Resource Biologist	(805) 305-3635
Kaya Wiggins	Archaeologist	(805) 503-5580
Sonia Miller	Architectural Historian	(805) 458-6618
Haley Aumiller	Air, Noise, & Water Specialist	(805) 305-9781
Pete Riegelhuth	Stormwater Specialist	(805) 459-9217
Adam Rianda	Construction Manager	(805) 471-2100
Laura Ivey	Visual Specialist	(805) 503-3506
Damaris Wyatt	Hazardous Waste & Paleontology	(805) 459-0207
Barrett Holland	Environmental Construction Liaison	(805) 748-5052
Justin Anderson	Geotechnical Supervisor	(510) 414-9122
Dhvani Desai	Structural Technical Liaison Engineer	(916) 227-5204

Carlos Blancas	Hydraulics Coordinator	(559) 383-5854
Phlora Barbash	Landscape Architect	(805) 779-0027
Bryan Sabagquit	Electrical Coordinator	(805) 542-4716
Stacey Meacham	Field Surveys Supervisor	(805) 440-0034
Marshall Garcia	R/W Manager	(805) 549-3471
Martin Miller	R/W Coordinator	(805) 549-3577
Robert Davis	R/W Utilities Supervisor	(805) 549-3002
Quay Chester	Traffic Design Supervisor	(805) 556-5740
Bing Yu	Traffic Ops Supervisor	(805) 903-3596
Michael Grolle	Traffic Safety Liaison	(805) 459-2969
Mannu Sehgal	Traffic Management Planner	(805) 748-3183
Andrew Rose	Project Sponsor	(805) 721-0082

14. ATTACHMENTS (270)

- A. Location map (1)
- B. Typical Cross Section (4)
- C. Project Plans (17)
- D. 11-Page Cost Estimate (10)
- E. Right of Way Data Sheet (4)
- F. Environmental Document (189)
- G. Storm Water Data Report (15)
- H. Transportation Management Plan (1)
- I. Risk Register (3)
- J. SHOPP Performance Measures Reports (1)
- K. Complete Street Decision Document (3)
- L. Bridge Inspection Reports (21)
- M. Final Distribution (1)

ATTACHMENT A

Location Map

ATTACHMENT B

Typical Cross Sections

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION		FUNCTIONAL SUPERVISOR	DESIGNED BY	REVISOR BY		
STEVEN McDONALD		CHECKED BY	DATE REVISED			

BORDER LAST REVISED 7/2/2010

PROJECT NUMBER & PHASE

0519000035

NOTES:

1. DIMENSIONS OF THE PAVEMENT STRUCTURES (STRUCTURAL SECTIONS) ARE SUBJECT TO TOLERANCES SPECIFIED IN THE STANDARD SPECIFICATIONS.
2. EXACT LOCATIONS AND TYPE OF HMA DIKE, MGS, VEGETATION CONTROL, SHOULDER BACKING AND RUMBLE STRIPS ARE SHOWN ON THE SUMMARY OF QUANTITIES SHEETS.

ABBREVIATIONS:

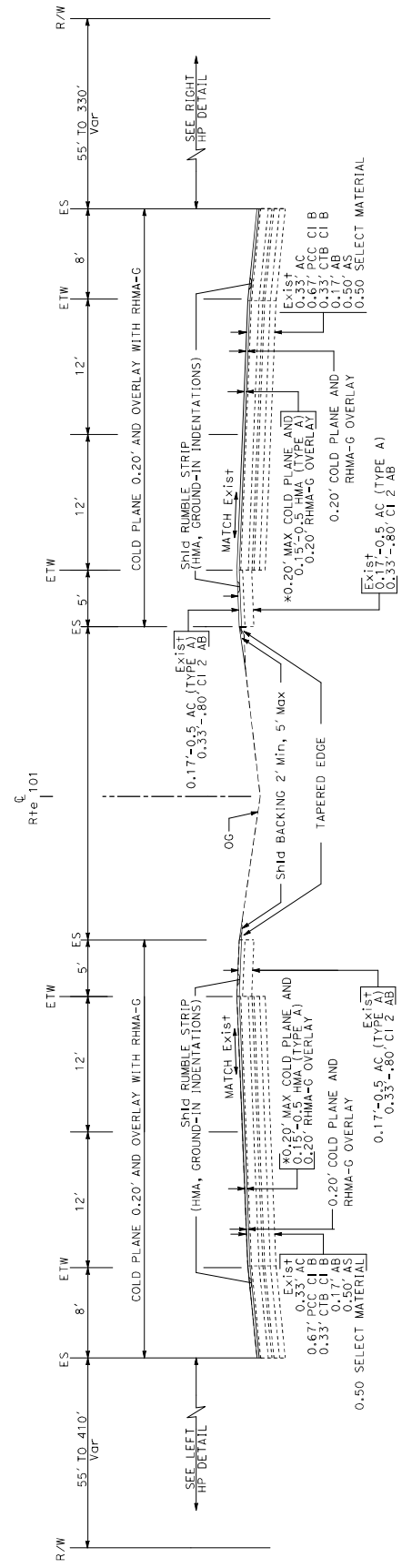
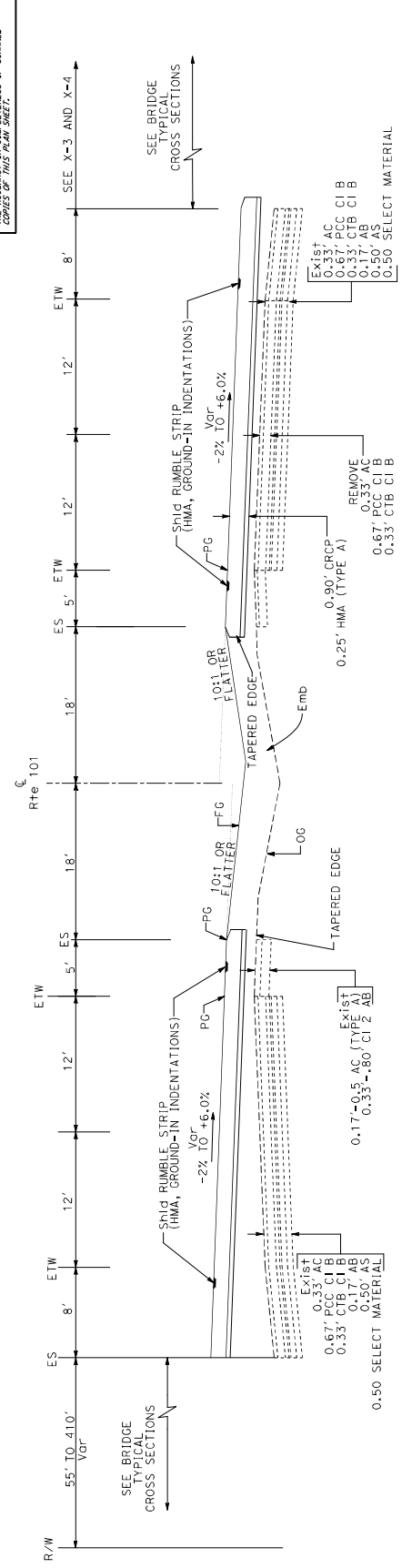
PAVEMENT CLIMATE REGION:
INLAND VALLEY

05	Mon	101	ROUTE	POST MILES TOTAL PROJECT	11.9/119.7	SHEET TOTAL NO. SHEETS
----	-----	-----	-------	-----------------------------	------------	---------------------------

REGISTERED CIVIL ENGINEER DATE

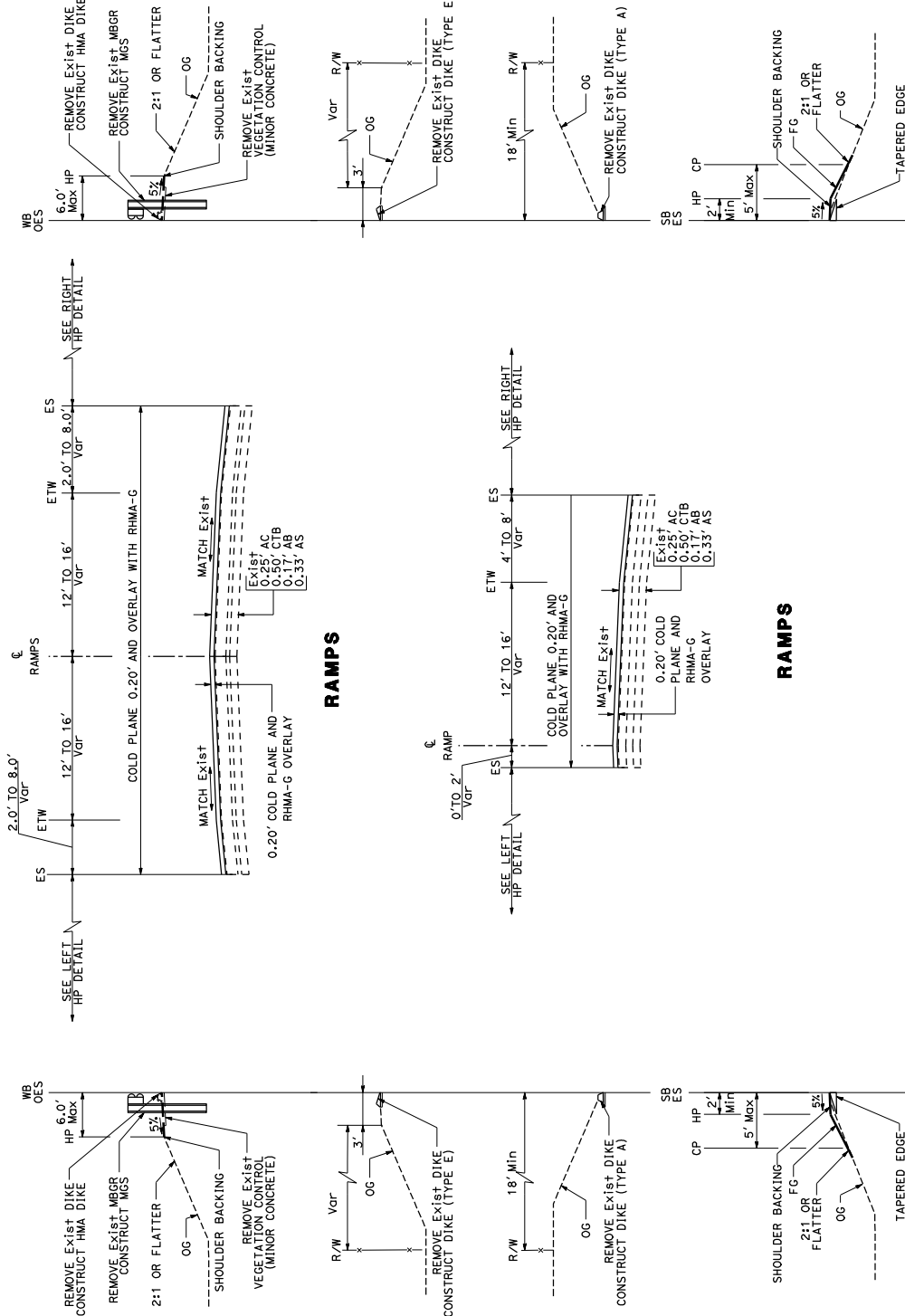
PLANS APPROVAL DATE

THE STATE OF CALIFORNIA AND ITS OFFICERS
THE RECORDING AND REPLYING DIVISION
DO NOT GUARANTEE THE ACCURACY OF THE REPRODUCED
COPIES OF THIS PLAN SHEET.



TYPICAL CROSS SECTIONS
NO SCALE
X-1

Dist#	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL
05	Mon	101	R1.9/R9.7	No. SHEETS
REGISTERED CIVIL ENGINEER		DATE	PLANS APPROVAL DATE	
PROFESSIONAL ENGINEER		No.	No.	
CIVIL		SITE & PLAN SHEET		
THE STATE OF CALIFORNIA OR ITS OFFICERS THESE PLANS HAVE BEEN REVIEWED AND THE ACCURACY OF THE INFORMATION AND THE COMPLETENESS OF THE SCANNED COPIES OF THIS PLAN SHEET.				



ATTACHMENT C

Plans

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	STEVEN McDONALD	CHECKED BY		DATE REVISD	
			DESIGNED BY		REVISD BY	

BORDER LAST REVISED 7/2/2010

USERNAME => J137023
DGN FILE => RFL1000

RELATIVE SCALE
1" = 100' FEET



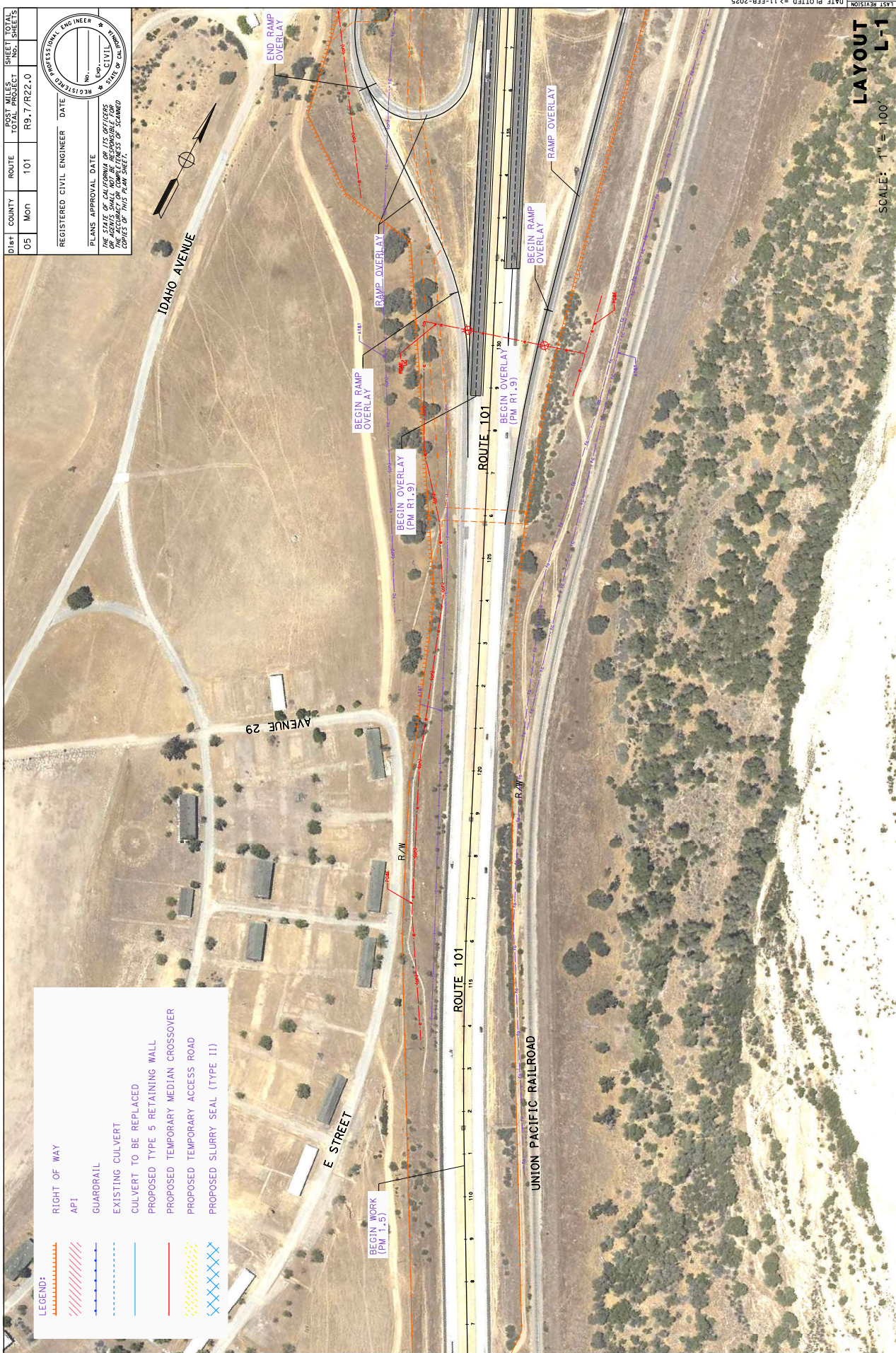
UNIT 1435

PROJECT NUMBER & PHASE

0518000213

LAYOUT L-1
SCALE: 1" = 100'

LAST REVISION
DATE PLOTTED => 11-FEB-2025
08-20-18
TIME PLOTTED => 10:02

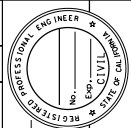


DIST	COUNTY	ROUTE	POST MILES	SHEET	TOTAL SHEETS
05	Mon	101	R9.7/R22.0		

REGISTERED CIVIL ENGINEER	DATE

PLANS APPROVAL	DATE

THE STATE OF CALIFORNIA OR ITS OFFICERS
DO NOT WARRANT, GUARANTEE, OR
ACCEPT ANY LIABILITY FOR THE
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COPIES OF THIS PLAN SHEET.



STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	STEVEN McDONALD	CHECKED BY		DATE REVISED	
			DESIGNED BY		REVISED BY	

BORDER LAST REVISED 7/2/2010

USERNAME => J121023
DGN FILE => APT3V.dgn

RELATIVE BORDER SCALE
1/8" = 100'

0 1 2 3

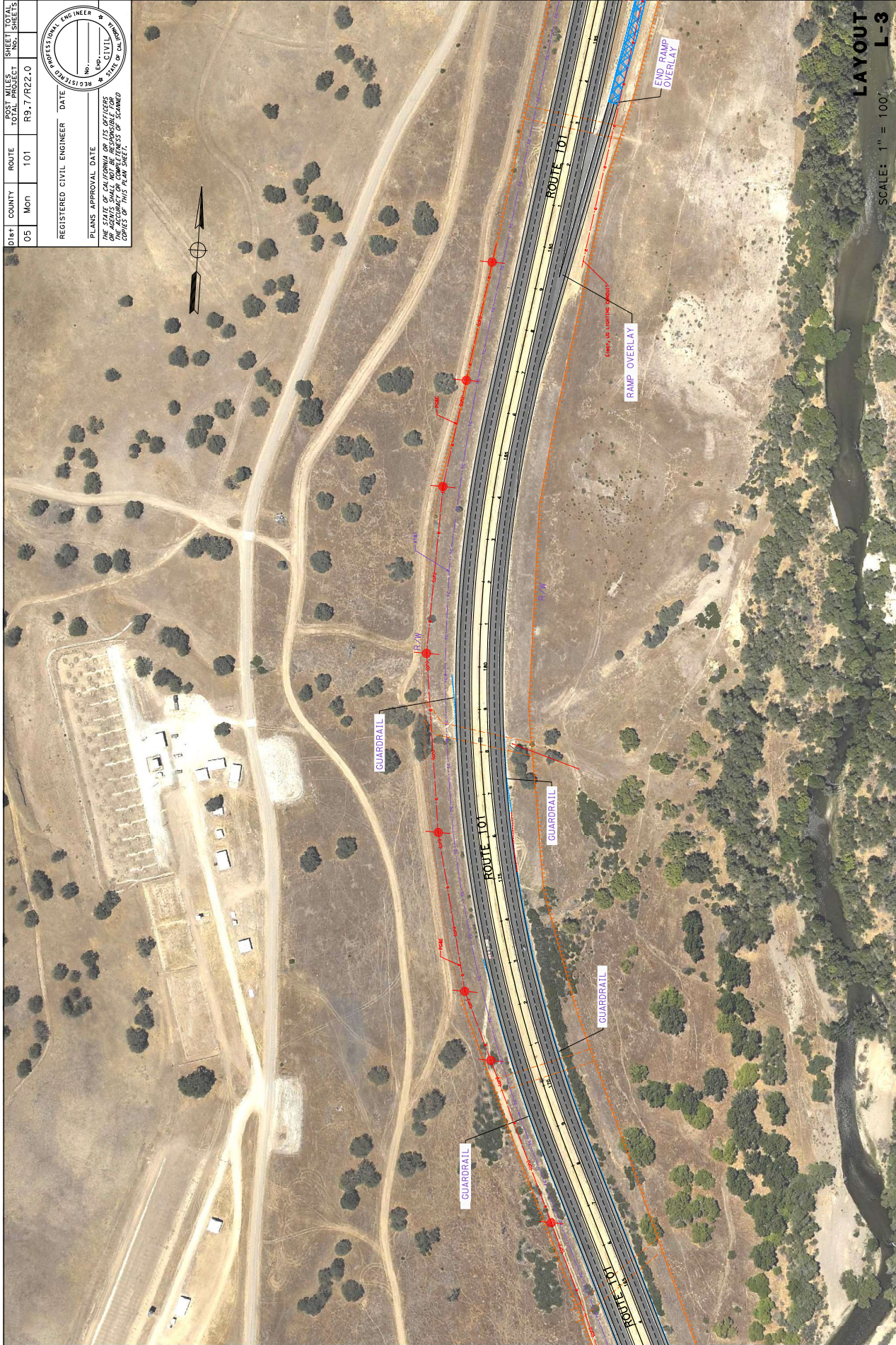
UNIT 1435

PROJECT NUMBER & PHASE

0518000213

LAYOUT
SCALE: 1" = 100'
L-3

LAST REVISION
DATE PLOTTED => 11-FEB-2025
TIME PLOTTED => 10:02



05	Mon	ROUTE 101	POST MILES TOTAL PROJECT	R9.7/R22-0	SHEET NO.	TOTAL SHEETS
REGISTERED CIVIL ENGINEER			DATE			
PLANS APPROVAL DATE			No.			
THE STATE OF CALIFORNIA ON ITS OFFICERS THE ACCURACY, OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.						

DIS#	COUNTY	ROUTE	POST MILES	SHEET TOTAL
05	Mon	101	R9.7/R22.0	NO. SHEETS

REGISTERED CIVIL ENGINEER	DATE
PLANS APPROVAL	DATE

THE STATE OF CALIFORNIA BY ITS OFFICERS THE AUTHORITY OF THE DEPARTMENT OF TRANSPORTATION CERTIFIES THAT THIS PLAN SHEET IS A TRUE AND CORRECT COPY OF THE ORIGINAL AS SUBMITTED TO THE DEPARTMENT OF TRANSPORTATION FOR REVIEW AND APPROVAL.	REGISTERED CIVIL ENGINEER No. _____ State of Cal. No. _____
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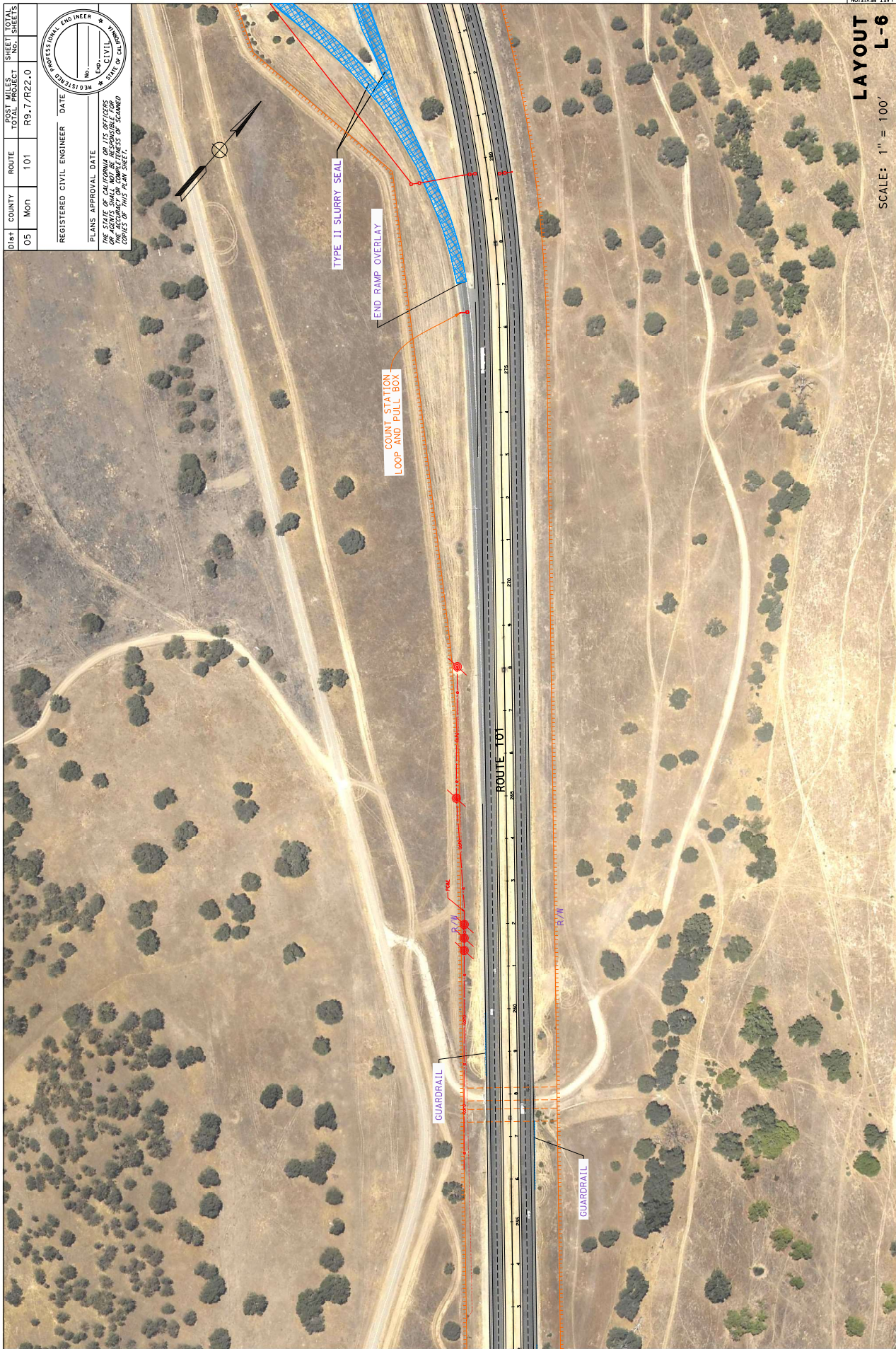


LAYOUT L-4
SCALE: 1" = 100'

DIS#	COUNTY	ROUTE	POST MILES	SHEET TOTAL
05	Mon	101	R9.7/R22.0	NO. SHEETS

REGISTERED CIVIL ENGINEER	DATE
PLANS APPROVAL	DATE

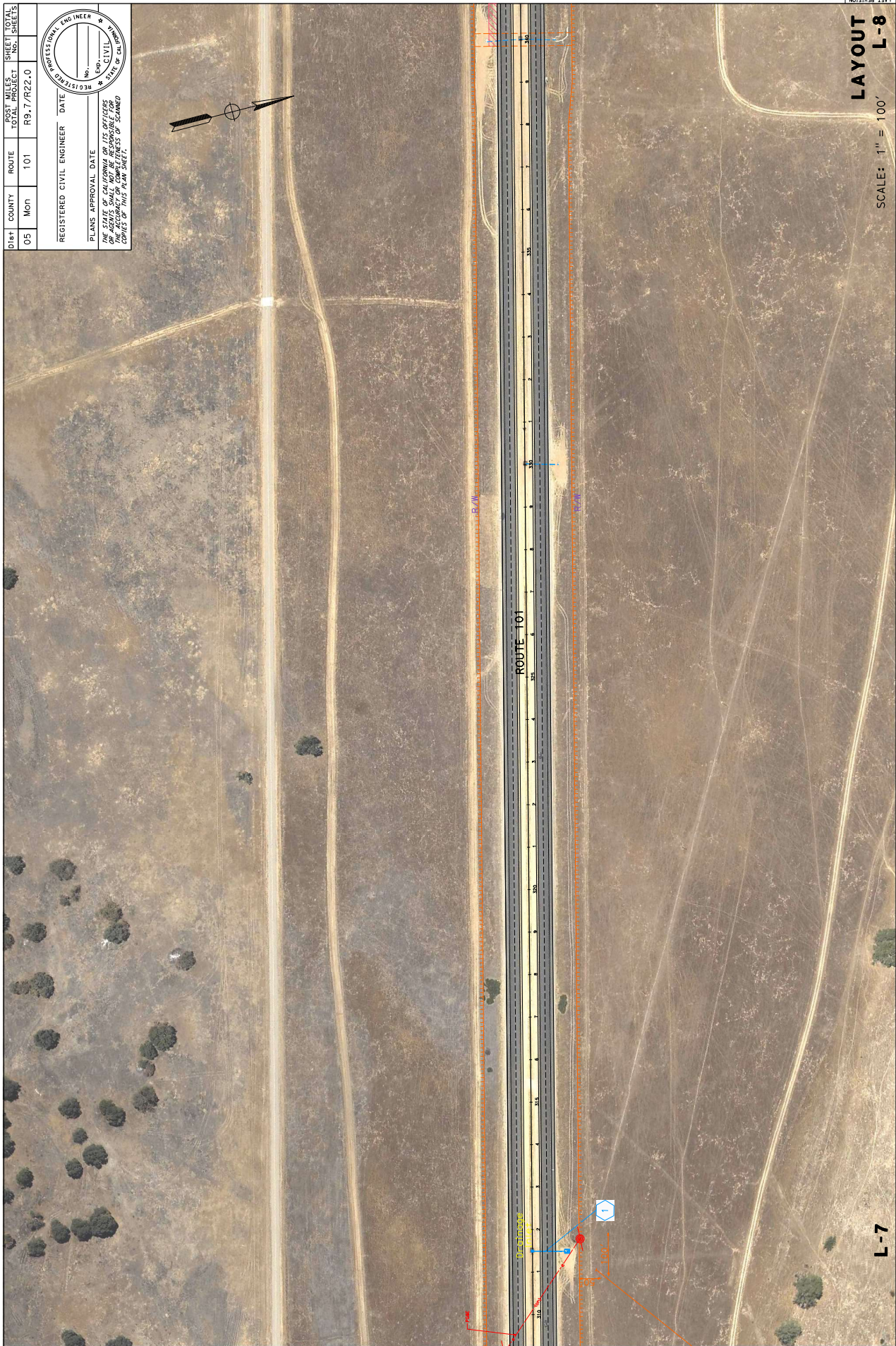
PROFESSIONAL ENGINEER & ARCHITECT	NO.	EXP.	SITE OF CALIFORNIA
PLANS APPROVAL ONE STATE OF CALIFORNIA OR ITS OFFICERS THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.			



LAYOUT L-6
SCALE: 1" = 100'

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	06-DESIGN	STEVEN McDONALD	CHECKED BY	DATE REVISD
FUNCTIONAL SUPERVISOR	DESIGNED BY		REVISD BY	

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	06-DESIGN	FUNCTIONAL SUPERVISOR	CHECKED BY	DATE REVISED	
ST. CATHARINE'S	06-DESIGN	STEVEN McDONALD	DESIGNED BY	REVISED BY	



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL SHEETS
05	Mon	101	R9.7/R22.0	

REGISTERED CIVIL ENGINEER	DATE

PLANS APPROVAL	DATE

ONE STATE OF CALIFORNIA OR ITS OFFICERS THESE PLANS HAVE BEEN REVIEWED FOR THE ACCURACY OF THE INFORMATION CONTAINED HEREIN AND THE COMPLETION OF THE WORKS OF THIS PLAN SHEET.

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	STEVEN McDONALD	CHECKED BY	DATE REVISED	
06-DESIGN	DESIGNED BY				
06-DESIGN	CALCULATED BY				
06-DESIGN	REVISOR				

BORDER LAST REVISED 7/2/2010

USERNAME => J171023
DGN FILE => MFE9.dgn



DIS#	COUNTY	ROUTE	POST MILES	SHEET TOTAL
05	Mon	101	R9.7/R22.0	NO. SHEETS

REGISTERED CIVIL ENGINEER	DATE
PLANS APPROVAL	DATE

NO.	EXP.
SITE OF CALIFORNIA	

ONE STATE OF CALIFORNIA OR ITS OFFICERS
THE ACCURACY OR COMPLETENESS OF SCANNED
COPIES OF THIS PLAN SHEET.

LAYOUT
L-9
SCALE: 1" = 100'

PROJECT NUMBER & PHASE

UNIT 1435

RELATIVE CROSSER SCALE
1" = 10' IN INCHES

0518000213

08-20-18
DATE PLOTTED => 11-FEB-2025
LAST REVISION

DIS#	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
05	Mon	101	R9.7/R22.0		

REGISTERED CIVIL ENGINEER	DATE
PLANS APPROVAL DATE	
THE STATE OF CALIFORNIA ON ITS OFFICERS THE ACCURACY OF THE INFORMATION CONTAINED HEREIN IS THE RESPONSIBILITY OF THE ENGINEER AND NOT THE STATE OF CALIFORNIA.	





STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	CHECKED BY	DATE REVIS
06-DESIGN	STEVEN McDONALD	DESIGNED BY	REVIS

05	Mon	101	R9.7/R22.0	SHEET TOTAL PROJECT NO. 101
REGISTERED CIVIL ENGINEER				DATE
PLANS APPROVAL DATE				DATE
ONE STATE OF CALIFORNIA OR ITS OFFICERS THE STATE OF CALIFORNIA OR ITS OFFICERS THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.				DATE
PROFESSIONAL ENGINEER & ARCHITECT No. 101				DATE



LAYOUT
SCALE: 1" = 100'

08-20-18	DATE PLOTTED => 11-FEB-2025	LAST REVISION	
0518000213	PROJECT NUMBER & PHASE	UNIT 1435	
0	1	2	3
RELATIVE BORDER SCALE 1/8" = 1' IN INCHES			
BORDER LAST REVISED 7/2/2010			
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION			
06-DESIGN			
STEVEN McDONALD			
FUNCTIONAL SUPERVISOR			
CHECKED BY			
DESIGNED BY			
CALCULATED BY			
DATE REVISED			
REVISED BY			

L-13

USERNAME => J12023
DGN FILE => BFE14.dgn

ATTACHMENT D

11 Page Cost Estimate

PROJECT COST ESTIMATE
PLANNING COST ESTIMATE

EA: 05-1K880

EA: 05-1K880 PAED: 519000035

PAED: 519000035

District-County-Route: 05-Mon-101

PM: R1.9 - R9.7

Type of Estimate : Project Report

Program Code : 201.110

Project Limits : From 0.3 miles south of East Garrison Overcrossing to Jolon Road Undercrossing

Project Description: Bradley CAPM

Scope : Replace San Antonio River Bridge (44-0141L/R), North Bradley Undercrossing (44-0142L), and rehabilitate pavement

Alternative : Build Alternative 1

SUMMARY OF PROJECT COST ESTIMATE

	Current Year Cost	Escalated Cost
TOTAL ROADWAY COST	\$ 37,436,000	\$ 44,750,000
TOTAL STRUCTURES COST	\$ 44,453,000	\$ 53,138,000
SUBTOTAL CONSTRUCTION COST	\$ 81,889,000	\$ 97,888,000
TOTAL RIGHT OF WAY COST	\$ 327,771	\$ 379,435
TOTAL CAPITAL OUTLAY COSTS	\$ 82,217,000	\$ 98,268,000
PA&ED SUPPORT	\$ 3,359,000.00	\$ 3,359,000.00
PS&E SUPPORT	\$ 5,613,000.00	\$ 6,054,000.00
RIGHT OF WAY SUPPORT	\$ 690,000.00	\$ 776,000.00
CONSTRUCTION SUPPORT	\$ 9,655,000.00	\$ 11,045,000.00
TOTAL SUPPORT COST	\$ 19,317,000.00	\$ 21,234,000.00

If Project has been programmed enter Programmed Amount

Month / Year
Date of Estimate (Month/Year) 8 / 2025
Estimated Construction Start (Month/Year) 8 / 2029
Number of Working Days = 686
Estimated Mid-Point of Construction (Month/Year) 2 / 2031
Estimated Construction End (Month/Year) 8 / 2032
Number of Plant Establishment Days 750

Estimated Project Schedule

PID Approval 6/29/2020
PA/ED Approval 10/31/2025
PS&E 4/10/2028
RTL 1/26/2029
Begin Construction 8/10/2029

Reviewed by District O.E. or
Cost Estimate Certifier

(xxx) xxx-xxxx

Office Engineer / Cost Estimate Certifier

Date

Phone

Approved by Project Manager

Mark Leichfuss

(805) 441-0125

Project Manager

Date

Phone

I. ROADWAY ITEMS SUMMARY

	Section	Cost
1	Earthwork	\$ 1,161,000
2	Pavement Structural Section	\$ 13,822,500
3	Drainage	\$ 1,006,700
4	Specialty Items	\$ 3,213,600
5	Environmental	\$ 2,982,500
6	Traffic Items	\$ 2,330,400
7	Detours	\$ 1,038,000
8	Minor Items	\$ 255,600
9	Roadway Mobilization	\$ 2,581,100
10	Supplemental Work	\$ 736,400
11	State Furnished	\$ 1,638,200.00
12	Time-Related Overhead	\$ 700,000.00
13	Roadway Contingency	\$ 4,719,900.00
14	Split-Off Mitigation Planting Project	\$ 1,250,000
TOTAL ROADWAY ITEMS		\$ 37,436,000

Estimate Prepared By :

Jose Bautista
Jose Bautista, Project Engineer

9/24/2025

Date Phone

Estimate Reviewed By :

Anonh Sengmany, Design Manager

Date Phone

By signing this estimate you are attesting that you have discussed your project with all functional units and have incorporated all their comments or have discussed with them why they will not be incorporated.

PROJECT COST ESTIMATE

EA: 05-1K880 PAED: 519000035

SECTION 1: EARTHWORK

Item code		Unit	Quantity		Unit Price (\$)		Cost
190101	Roadway Excavation	CY	5,100	x	110.00	= \$	561,000
19010X	Roadway Excavation (Type X) ADL	CY		x		= \$	-
194001	Ditch Excavation	CY		x		= \$	-
19801X	Imported Borrow	CY/TON		x		= \$	-
192037	Structure Excavation (Retaining Wall)	CY	1,000	x	200.00	= \$	200,000
193013	Structure Backfill (Retaining Wall)	CY	1,000	x	250.00	= \$	250,000
193031	Pervious Backfill Material (Retaining Wall)	CY		x		= \$	-
16010X	Clearing & Grubbing	LS/ACRE	1	x	150,000.00	= \$	150,000
170101	Develop Water Supply	LS		x		= \$	-
19801X	Imported Borrow	CY/TON		x		= \$	-
210130	Duff	ACRE		x		= \$	-
XXXXXX	Some Item	Unit					

TOTAL EARTHWORK SECTION ITEMS	\$ 1,161,000
--------------------------------------	---------------------

SECTION 2: PAVEMENT STRUCTURAL SECTION

Item code		Unit	Quantity		Unit Price (\$)		Cost
40105X	Jointed Plain Concrete Pavement	CY		x		= \$	-
400050	CONTINUOUSLY REINFORCED CONC PVMT	CY	900	x	1,000.00	= \$	900,000
404092	Seal Pavement Joint	LF		x		= \$	-
404093	Seal Isolation Joint	LF		x		= \$	-
413117	Seal Concrete Pavement Joint (Silicone)	LF		x		= \$	-
413118	Seal Pavement Joint (Asphalt Rubber)	LF		x		= \$	-
280010	Rapid Strength Concrete Base	CY		x		= \$	-
410095	Dowel Bar (Drill and Bond)	EA		x		= \$	-
390132	Hot Mix Asphalt (Type A)	TON	10,800	x	190.00	= \$	2,052,000
390137	Rubberized Hot Mix Asphalt (Gap Graded)	TON	49,000	x	180.00	= \$	8,820,000
39300X	Geosynthetic Pavement Interlayer (Type X)	SQYD					
26020X	Class 2 Aggregate Base	CY/TON					
290201	Asphalt Treated Permeable Base	CY					
250401	Class 4 Aggregate Subbase	CY	900	x	75.00	= \$	67,500
374002	Asphaltic Emulsion (Fog Seal Coat)	TON					
397005	Tack Coat	TON	155	x	1,000.00	= \$	155,000
377501	Slurry Seal	TON	300	x	300.00	= \$	90,000
3750XX	Screenings (Type XX)	TON					
374492	Asphaltic Emulsion (Polymer Modified)	TON					
370001	Sand Cover (Seal)	TON					
731530	Minor Concrete (Textured Paving)	CY					
731502	Minor Concrete (Miscellaneous Construction)	CY					
394076	Place Hot Mix Asphalt Dike (TYPE E)	LF	44,000	x	2.00	= \$	88,000
398100	Remove Asphalt Concrete Dike	LF	44,000	x	2.00	= \$	88,000
398200	Cold Plane Asphalt Concrete Pavement	SQYD	335,400	x	3.00	= \$	1,006,200
150860	Remove Base and Surfacing	CY					
390095	Replace Asphalt Concrete Surfacing	CY					
15312X	Remove Concrete	LF/CY/LS					
394090	Place Hot Mix Asphalt (Miscellaneous Area)	SQYD					
153103	Cold Plane Asphalt Concrete Pavement	SQYD					
846051	12" Rumble Strip (Asphalt Concrete Pavement)	STA	1,555	x	60.00	= \$	93,300
846047	6" RUMBLE STRIP (ASPHALT CONCRETE PAVEMENT-SINUSOIDAL)	SQYD					
420102	Groove Existing Concrete Pavement	SQYD					
390136	Minor Hot Mix Asphalt	TON					
394095	Roadside Paving (Miscellaneous Areas)	SQYD					
190185	Shoulder Backing	TON	7,708	x	60.00	= \$	462,480

TOTAL PAVEMENT STRUCTURAL SECTION ITEMS	\$ 13,822,500
--	----------------------

PROJECT COST ESTIMATE

EA: 05-1K880 PAED: 519000035

SECTION 3: DRAINAGE

Item code	Unit	Quantity	Unit Price (\$)	Cost
150816 Remove Reinforced Box Culvert	EA	1	x 50,000.00	= \$ 50,000
710132 Remove Culvert	LF	537	x 100.00	= \$ 53,700
155232 Sand Backfill	CY		x	= \$ -
15020X Abandon Culvert	EA/LF		x	= \$ -
152430 Adjust Inlet	LF		x	= \$ -
155003 Cap Inlet	EA		x	= \$ -
510501 Minor Concrete	CY		x	= \$ -
510502 Minor Concrete (Minor Structure)	CY		x	= \$ -
610406 36" Temporary Culvert	LF	800	x 300.00	= \$ 240,000
6411XX Temporary Channel Dewatering	LS	1	x 100,000.00	= \$ 100,000
650018 24" Reinforced Concrete Pipe (X)	LF	546	x 500.00	= \$ 273,000
650026 48" Reinforced Concrete Pipe (X)	LF	360	x 800.00	= \$ 288,000
665017 18" Corrugated Steel Pipe (0.XXX" Thick)	LF		x	= \$ -
68XXXX XX" Plastic Pipe (Edge Drain)	LF		x	= \$ -
69011X XX" Corrugated Steel Pipe Downdrain (0.XXX" Thick)	LF		x	= \$ -
70321X XX" Corrugated Steel Pipe Inlet (0.XXX" Thick)	LF		x	= \$ -
70XXXX XX" Corrugated Steel Pipe Riser (0.XXX" Thick)	LF		x	= \$ -
7050XX XX" Steel Flared End Section	EA		x	= \$ -
703233 Grated Line Drain	LF		x	= \$ -
72XXXX Rock Slope Protection (Type and Method)	CY/TON		x	= \$ -
72901X Rock Slope Protection Fabric (Class X)	SQYD		x	= \$ -
721420 Concrete (Ditch Lining)	CY		x	= \$ -
721430 Concrete (Channel Lining)	CY		x	= \$ -
Headwall Staining	LS	1	x 2,000.00	= \$ 2,000
XXXXXX Additional Drainage	LS		x	= \$ -

TOTAL DRAINAGE ITEMS	\$ 1,006,700
-----------------------------	---------------------

SECTION 4: SPECIALTY ITEMS

Item code	Unit	Quantity	Unit Price (\$)	Cost
080060 Level 2 Critical Path Method Schedule	LS	1	x 5,000.00	= \$ 5,000
582001 Sound Wall (Masonry Block)	SQFT			= \$ -
510530 Minor Concrete (Wall)	CY			= \$ -
15325X Remove Sound Wall	LF/LS			= \$ -
070030 Lead Compliance Plan	LS	1	x 2,000.00	= \$ 2,000
141120 Treated Wood Waste	LB	321,000	x 0.50	= \$ 160,500
153221 Remove Concrete Barrier	LF			= \$ -
839752 Remove Metal Beam Guard Railing	LF	15,600	x 8.00	= \$ 124,800
150668 Remove Flared End Section	EA	3	x 600.00	= \$ 1,800
8000XX Chain Link Fence (Type XX)	LF			= \$ -
80XXXX XX" Chain Link Gate (Type CL-6)	EA			= \$ -
832006 Midwest Guardrail System (Steel Post)	LF	15,600	x 40.00	= \$ 624,000
839301 Single Thrie Beam Barrier	LF			= \$ -
839310 Double Thrie Beam Barrier	LF			= \$ -
839521 Cable Railing	LF			= \$ -
8395XX Terminal System (Type CAT)	EA			= \$ -
839585 Alternative Flared Terminal System	EA			= \$ -
839584 Alternative In-line Terminal System	EA	20	x 3,600.00	= \$ 72,000
4906XX CIDH Concrete Piling (Insert Diameter)	LF			= \$ -
839601 Crash Cushion (CAT)	EA	8	x 6,000.00	= \$ 48,000
839745 Concrete Barrier Transition	LF	470	x 800.00	= \$ 376,000
839651 Concrete Barrier (Type 60SD)	LF	160	x 1,000.00	= \$ 160,000
510060 Structural Concrete, Retaining Wall	CY	700	x 1,200.00	= \$ 840,000
513553 Retaining Wall (Masonry Wall)	SQFT			= \$ -
511035 Architectural Treatment	SQFT			= \$ -
598001 Anti-Graffiti Coating	SQFT			= \$ -
203070 Rock Stain	SQFT			= \$ -
014278 Vegetation Control (Crushed Shale)	SQYD	6,456	65.00	= \$ 419,640
839543 Transition Railing (Type WB-31)	EA	21	x 6,000.00	= \$ 126,000
780440 Prepare and Stain Concrete	LS	1	10,000.00	= \$ 10,000
8396XX Bridge Rail Aesthetics	LS	1	x 93,780.00	= \$ 93,780
Bridge Rail Aesthetics	LS	1	x 150,000.00	= \$ 150,000
xxxxxx Asbestos/Lead Study	LS		x	= \$ -

TOTAL SPECIALTY ITEMS	\$ 3,213,600
------------------------------	---------------------

PROJECT COST ESTIMATE

EA: 05-1K880 PAED: 519000035

SECTION 5: ENVIRONMENTAL

5A - ENVIRONMENTAL MITIGATION

Item code	Unit	Quantity	Unit Price (\$)	Cost
Split-Off Planting Mitigation & Restoration (Capita	LS	1	x 1,250,000.00 = \$	1,250,000
160110 Temporary High Visibility Fence	LS	1	x 25,000.00 = \$	25,000
141000 Temporary Fence (Type ESA)	LF	1	x 25,000.00 = \$	25,000
Subtotal Environmental Mitigation				\$ 1,300,000

5B - LANDSCAPE AND IRRIGATION

Item code	Unit	Quantity	Unit Price (\$)	Cost
			x = \$	-
			x = \$	-
20XXXX Highway Planting	LS	1	x 100,000.00 = \$	100,000
20XXXX Temporary Irrigation System	LS	1	x 35,000.00 = \$	35,000
20XXXX Plant Establishment (3 year/750 WD)	LS	1	x 200,000.00 = \$	200,000
150685 Remove Irrigation Facility	LS		x = \$	-
20XXXX Maintain Existing (Irrigation or Planted Areas)	EA		x = \$	-
206400 Check and Test Existing Irrigation Facilities	LS		x = \$	-
21011X Imported Topsoil (X)	CY/TON		x = \$	-
20XXXX Rock Blanket, Rock Mulch, DG, Gravel Mulch	SQFT/SQYD		x = \$	-
200122 Weed Germination	SQYD		x = \$	-
208304 Gore Paving	EA		x = \$	-
200002 Roadside Clearing	LS	1	x 25,000.00 = \$	25,000
20890X Erosion Control	Acre	17	x 20,000.00 = \$	340,000
Subtotal Landscape and Irrigation				\$ 700,000

5C - EROSION CONTROL

Item code	Unit	Quantity	Unit Price (\$)	Cost
211111 Erosion Control	LS		x =	-
210350 Fiber Rolls	LF		x = \$	-
210360 Compost Sock	LF		x = \$	-
2102XX Rolled Erosion Control Product (X)	SQFT		x = \$	-
21025X Bonded Fiber Matrix	SQFT/ACRE		x = \$	-
210300 Hydromulch	SQFT		x = \$	-
210420 Straw	SQFT		x = \$	-
210430 Hydroseed	LS		x = \$	-
210600 Compost	SQFT		x = \$	-
210630 Incorporate Materials	SQFT		x = \$	-
Subtotal Erosion Control				\$ -

5D - NPDES

Item code	Unit	Quantity	Unit Price (\$)	Cost
130300 Prepare SWPPP	LS	1	x 5,000.00 = \$	5,000
130100 Job Site Management	LS	1	x 80,000.00 = \$	80,000
130330 Storm Water Annual Report	EA	1	x 2,000.00 = \$	2,000
130310 Rain Event Action Plan (REAP)	EA		x = \$	-
130320 Storm Water Sampling and Analysis Day	EA	3	x 600.00 = \$	1,800
130520 Temporary Hydraulic Mulch	SQYD	170,000	x 1.00 = \$	170,000
130610 Temporary Check Dam	LF	200	x 13.00 = \$	2,600
130505 Move-In/Move-Out (Temporary Erosion Control)	EA	2	x 800.00 = \$	1,600
130640 Temporary Fiber Roll	LF	75,200	x 5.00 = \$	376,000
130900 Temporary Concrete Washout	LS	1	x 10,000.00 = \$	10,000
130710 Temporary Construction Entrance	EA	4	x 2,000.00 = \$	8,000
130660 Temporary Large Sediment Barrier	LF	600	x 15.00 = \$	9,000
130620 Temporary Drainage Inlet Protection	EA	5	x 300.00 = \$	1,500
130730 Street Sweeping	LS	1	x 15,000.00 = \$	15,000
131201 Temp Creek Diversion Systems	LS	1	x 300,000.00 = \$	300,000
Subtotal NPDES				\$ 982,500

Supplemental Work for NPDES

066595 Water Pollution Control Maintenance Sharing*	LS	1	x 10,000.00 = \$	10,000
066596 Additional Water Pollution Control**	LS	1	x 5,000.00 = \$	5,000
066597 Storm Water Sampling and Analysis***	LS		x = \$	-
XXXXXX Some Item	LS		x = \$	-
Subtotal Supplemental Work for NDPS				\$ 15,000

*Applies to all SWPPPs and those WPCPs with sediment control or soil stabilization BMPs.

**Applies to both SWPPPs and WPCP projects.

*** Applies only to project with SWPPPs.

TOTAL ENVIRONMENTAL	\$ 2,982,500
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PROJECT COST ESTIMATE

EA: 05-1K880 PAED: 519000035

SECTION 6: TRAFFIC ITEMS

6A - Traffic Electrical

Item code	Unit	Quantity	Unit Price (\$)	Cost
870600 Traffic Monitoring Station System	LS	1	x 65,400.00 = \$	65,400
860201 Signal and Lighting	LS	x	= \$	-
860990 Closed Circuit Television System	LS	x	= \$	-
86110X Ramp Metering System (Location X)	LS	x	= \$	-
86070X Interconnection Conduit and Cable	LF/LS	x	= \$	-
5602XX Furnish Sign Structure (Type X)	LB	x	= \$	-
5602XX Install Sign Structure (Type X)	LB	x	= \$	-
498040 XX" CIDHC Pile (Sign Foundation)	LF	x	= \$	-
86080X Inductive Loop Detectors	EA/LS	x	= \$	-
8609XX Traffic Monitoring Station (Type X)	LS	x	= \$	-
15075X Remove Sign Structure	EA/LS	x	= \$	-
151581 Reconstruct Sign Structure	EA	x	= \$	-
152641 Modify Sign Structure	EA	x	= \$	-
860090 Maintain Existing Traffic Management System Elements During Construction	LS	x	= \$	-
86XXXX Fiber Optic Conduit System	LS	x	= \$	-
872135 7-MVDS	LS	x	= \$	-
Subtotal Traffic Electrical				\$ 65,400

6B - Traffic Signing and Striping

Item code	Unit	Quantity	Unit Price (\$)	Cost
566011 Roadside Sign - One Post	EA	x	= \$	-
566012 Roadside Sign - Two Post	EA	x	= \$	-
5602XX Furnish Sign	SQFT	x	= \$	-
568016 Install Sign Panel on Existing Frame	SQFT	x	= \$	-
150711 Remove Painted Traffic Stripe	LF	x	= \$	-
141101 Remove Yellow Painted Traffic Stripe (Hazardous Waste)	LF	x	= \$	-
150712 Remove Painted Pavement Marking	SQFT	x	= \$	-
150742 Remove Roadside Sign	EA	x	= \$	-
152320 Reset Roadside Sign	EA	x	= \$	-
152390 Relocate Roadside Sign	EA	x	= \$	-
82010X Delineator (Class X)	EA	x	= \$	-
840502 Thermoplastic Traffic Stripe (Enhanced Wet Night Visibility)	LF	270,000	x 0.50 = \$	135,000
846012 Thermoplastic Crosswalk and Pavement Marking (Enhanced Wet Night Visibility)	SQFT	x	= \$	-
120090 Construction Area Signs	LS	1	x 50,000.00 = \$	50,000
84XXXX Permanent Pavement Delineation	LS	x	= \$	-
Pavement Delineation Items	LS	x	= \$	-
Subtotal Traffic Signing and Striping				\$ 185,000

6C - Traffic Management Plan

Item code	Unit	Quantity	Unit Price (\$)	Cost
12865X Portable Changeable Message Signs	EA/LS	1	x \$ 300,000 = \$	300,000
Subtotal Traffic Management Plan				\$ 300,000

6C - Stage Construction and Traffic Handling

Item code	Unit	Quantity	Unit Price (\$)	Cost
120199 Traffic Plastic Drum	EA	x	= \$	-
12016X Channelizer (Type X)	EA	x	= \$	-
120120 Type III Barricade	EA	x	= \$	-
129100 Temporary Crash Cushion Module	EA	x	= \$	-
120100 Traffic Control System	LS	1	x 1,200,000.00 = \$	1,200,000
129110 Temporary Crash Cushion	EA	15	x 4,000.00 = \$	60,000
129000 Temporary Railing	LF	10,000	x 40.00 = \$	400,000
120149 Temporary Pavement Marking (Paint)	SQFT	x	= \$	-
90205 Dispute Resolution Board	EA	12	x 6,000.00 = \$	72,000
90210 Dispute Resolution Advisor	HR	240	x 200.00 = \$	48,000
Subtotal Stage Construction and Traffic Handling				\$ 1,780,000

TOTAL TRAFFIC ITEMS	\$ 2,330,400
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PROJECT COST ESTIMATE

EA: 05-1K880 PAED: 519000035

SECTION 7: DETOURS

Includes constructing, maintaining, and removal

Item code		Unit	Quantity		Unit Price (\$)		Cost
190101	Roadway Excavation	CY		x		= \$	-
19801X	Imported Borrow	CY/TON		x		= \$	-
390132	Hot Mix Asphalt (Type A)	TON	2,600	x	180.00	= \$	468,000
26020X	Class 2 Aggregate Base	CY/TON	3,800	x	150.00	= \$	570,000
250401	Class 4 Aggregate Subbase	CY		x		= \$	-
130620	Temporary Drainage Inlet Protection	EA		x		= \$	-
129000	Temporary Railing (Type K)	LF		x		= \$	-
128601	Temporary Signal System	LS		x		= \$	-
120149	Temporary Pavement Marking (Paint)	SQFT		x		= \$	-
80010X	Temporary Fence (Type X)	LF		x		= \$	-
XXXXXX	Some Item	Unit		x		= \$	-

TOTAL DETOURS	\$ 1,038,000
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SUBTOTAL SECTIONS 1 through 7	\$ 25,554,700
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SECTION 8: MINOR ITEMS

8A - Americans with Disabilities Act Items

ADA Items 0.0%

8B - Bike Path Items

Bike Path Items 0.0% \$ -

8C - Other Minor Items

Other Minor Items 1.0% \$ 255,547

Total of Section 1-7 \$ 25,554,700 x 1.0% = \$ 255,547

TOTAL MINOR ITEMS	\$ 255,600
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SECTIONS 9: MOBILIZATION

Item code						
999990	Total Section 1-8	\$ 25,810,300	x	10%	= \$	2,581,030

TOTAL MOBILIZATION	\$ 2,581,100
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SECTION 10: SUPPLEMENTAL WORK

Item code		Unit	Quantity		Unit Price (\$)		Cost
066670	Payment Adjustments For Price Index Fluctuations	LS	1	x	363,285.00	= \$	363,285
066094	Value Analysis	LS		x		= \$	-
066070	Maintain Traffic	LS	1	x	10,000.00	= \$	10,000
066919		LS		x		= \$	-
066921		LS		x		= \$	-
066015	Federal Trainee Program	LS		x		= \$	-
066610	Partnering	LS	1	x	90,000.00	= \$	90,000
066204	Remove Rock and Debris	LS		x		= \$	-
066222	Locate Existing Crossover	LS		x		= \$	-
XXXXXX	Some Item	Unit		x		= \$	-

Cost of NPDES Supplemental Work specified in Section 5D = \$ 15,000

Total Section 1-8 \$ 25,810,300 1% = \$ 258,103

TOTAL SUPPLEMENTAL WORK	\$ 736,400
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PROJECT COST ESTIMATE

EA: 05-1K880 PAED: 519000035

SECTION 11: STATE FURNISHED MATERIALS AND EXPENSES

Item code		Unit	Quantity		Unit Price (\$)		Cost
066105	Resident Engineers Office	LS	1	x	675,000.00	=	\$675,000
066063	Traffic Management Plan - Public Information	LS	1	x	45,000.00	=	\$45,000
066901	Water Expenses	LS		x		=	\$0
8609XX	Traffic Monitoring Station (X)	LS		x		=	\$0
066841	Traffic Controller Assembly	LS		x		=	\$0
066840	Traffic Signal Controller Assembly	LS		x		=	\$0
066062	COZEEP Contract	LS	1	x	660,000.00	=	\$660,000
066838	Reflective Numbers and Edge Sealer	LS		x		=	\$0
066065	Tow Truck Service Patrol	LS		x		=	\$0
066916	Annual Construction General Permit Fee	LS		x	5,700.00	=	\$0
XXXXXX	Some Item	Unit		x		=	\$0
Total Section 1-8		\$	25,810,300		1%	=	\$ 258,103

TOTAL STATE FURNISHED	\$1,638,200
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SECTION 12: TIME-RELATED OVERHEAD

Total of Roadway and Structures Contract Items excluding Mobilization \$67,353,693 (used to calculate TRO)
Total Construction Cost (excluding TRO and Contingency) \$75,219,000 (used to check if project is greater than \$5 million excluding contingency)

Estiamted Time-Releated Overhead (TRO) Percentage (0% to 10%) = 3%

Item code		Unit	Quantity		Unit Price (\$)		Cost
070018	Time-Related Overhead	WD	280	X	\$2,500	=	\$700,000

TOTAL TIME-RELATED OVERHEAD	\$700,000
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Note: If the building portion of the project is greater than 50% of the total project cost, then TRO is not included.

SECTION 13: ROADWAY CONTINGENCY

Recommended Contingency: (Pre-PSR 30%-50%, PSR 25%, Draft PR 20%, PR 15%, after PR approval 10%, Final PS&E 5%)

Total Section 1-12 \$ 31,466,000 x 15% = \$4,719,900

TOTAL CONTINGENCY	\$4,719,900
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SECTION 14: Split-Off Mitigation Planting (Support)

Split-Off Mitigation Planting (Support) \$ 1 LS 1250000 = \$1,250,000

TOTAL	\$1,250,000
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PROJECT COST ESTIMATE

EA: 05-1K880 PAED: 519000035

II. STRUCTURE ITEMS

DATE OF ESTIMATE	00/00/00		00/00/00		00/00/00
Name	XXXXXXXXXXXXXXXXXXXX		XXXXXXXXXXXXXXXXXXXX		XXXXXXXXXXXXXXXXXXXX
Bridge Number	44-0141L/R		44-0142L		57-XXX
Structure Type	XXXXXXXXXXXXXXXXXXXX		XXXXXXXXXXXXXXXXXXXX		XXXXXXXXXXXXXXXXXXXX
Width (Feet) [out to out]	86 LF		43 LF		0 LF
Total Length (Feet)	470 LF		100 LF		0 LF
Total Area (Square Feet)	40377 SQFT		4250 SQFT		0 SQFT
Structure Depth (Feet)	6.17 LF		6.00 LF		0 LF
Footing Type (pile or spread)	XXXXXXXXXXXXXXXXXXXX		XXXXXXXXXXXXXXXXXXXX		XXXXXXXXXXXXXXXXXXXX
Cost Per Square Foot	\$620		\$535		\$0
Bridge Removal	\$1,564,000		\$224,730		
COST OF EACH	\$26,595,721		\$2,500,350		\$0

DATE OF ESTIMATE	00/00/00		00/00/00		00/00/00
Name	XXXXXXXXXXXXXXXXXXXX		XXXXXXXXXXXXXXXXXXXX		XXXXXXXXXXXXXXXXXXXX
Bridge Number	57-XXX		57-XXX		57-XXX
Structure Type	XXXXXXXXXXXXXXXXXXXX		XXXXXXXXXXXXXXXXXXXX		XXXXXXXXXXXXXXXXXXXX
Width (Feet) [out to out]	0 LF		0 LF		0 LF
Total Length (Feet)	0 LF		0 LF		0 LF
Total Area (Square Feet)	0 SQFT		0 SQFT		0 SQFT
Structure Depth (Feet)	0 LF		0 LF		0 LF
Footing Type (pile or spread)	XXXXXXXXXXXXXXXXXXXX		XXXXXXXXXXXXXXXXXXXX		XXXXXXXXXXXXXXXXXXXX
Cost Per Square Foot	\$100		\$0		\$0
COST OF EACH	\$0		\$0		\$0

TOTAL COST OF BRIDGES	\$29,096,071
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TOTAL COST OF BUILDINGS	\$0
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TRO	10%	\$2,909,607
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Structures Mobilization Percentage	10%	\$3,556,186
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Structures Contingency Percentage	25%	\$8,890,466
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Recommended Contingency: (Pre-PSR 30%-50%, PSR 25%, Draft PR 20%, PR 15%, after PR approval 10%, Final PS&E 5%)

TOTAL COST OF STRUCTURES	\$44,453,000
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Estimate Prepared By: _____
XXXXXXXXXXXXXXXXXXXX ----- Division of Structures

Date

PROJECT COST ESTIMATE

EA: 05-1K880 PAED: 519000035

III. RIGHT OF WAY

Fill in all of the available information from the Right of Way data sheet.

A)	A1)	Acquisition, including Excess Land Purchases, Damages & Goodwill, Fees	\$	45,625
	A2)	SB-1210	\$	0
B)		Acquisition of Offsite Mitigation	\$	217,158
C)	C1)	Utility Relocation (State Share)	\$	56,250
	C2)	Potholing (Design Phase)	\$	
D)		Railroad Acquisition	\$	0
E)		Clearance / Demolition	\$	0
F)		Relocation Assistance (RAP and/or Last Resort Housing Costs)	\$	0
G)		Title and Escrow	\$	8,738
H)		Environmental Review	\$	0
I)		Condemnation Settlements <u>0%</u>	\$	0
J)		Design Appreciation Factor <u>0%</u>	\$	0
K)		Utility Relocation (Construction Cost)	\$	0

L) **TOTAL RIGHT OF WAY ESTIMATE** **\$327,771**

M) **TOTAL R/W ESTIMATE: Escalated** **\$379,435**

N) **RIGHT OF WAY SUPPORT** **\$0**

Support Cost Estimate
Prepared By _____ Project Coordinator¹ _____ Phone _____

Utility Estimate Prepared
By _____ Utility Coordinator² _____ Phone _____

R/W Acquisition Estimate
Prepared By _____ Right of Way Estimator³ _____ Phone _____

Note: Items G & H applied to items A + B

¹ When estimate has Support Costs only

² When estimate has Utility Relocation

³ When R/W Acquisition is required

ATTACHMENT E

Right of Way Data Sheet

Memorandum**To:** Mark Leichtfuss**Date:** October 18, 2024**File:** CD 05 **EA** 1K880 **Alt** 1REV1-Revised-2**Attn:** Anonh Sengmany
Jose Bautista**Co** MON **RTE** 101 **PM** 1.9/9.7**From:** Department of Transportation
Division of Right of Way**Subject:** RIGHT OF WAY DATASHEET**DESCRIPTION:**

This project proposes to replace bridges, rehabilitate pavement, reconstruct guardrails and drainage systems, and replace Transportation Management System (TMS) elements and signs on Route 101 in Monterey County near the community of Bradley.

We have completed an estimate of the right of way costs for the above-referenced project based on the Right of Way Datasheet Request Form dated August 30, 2023.

The following assumptions and limiting conditions were identified:**Parcels**

Temporary Construction Easements are based on M410 of 8/11/27 and M600 of 4/2/31 totaling 3.64 years (say 44 months). TCEs are valued at 10% of the fee over the duration. No significant improvements appear to be affected. 7 TCEs on four larger parcels. Two acquisitions would fall below Nominal amount, Nominal amount (\$2,500) utilized for estimate purposes. Easement Costs include \$5,400 for Incentive Program. Two TCEs located on a Federal military installation appear to be in compliance with RWM Section 7.13.70.00, which may allow for no compensation. Two other TCEs are on County of Monterey lands and may be eligible for Permits from the County. These two elements could present a sizable savings to the Right of Way costs.

Utility

The Project Engineer states on the Right of Way Data Sheet Request Form that a Utility permit search has been completed. Utility involvement and/or relocation is not required, potholing is required with an estimated number of 3 holes, and verifications are necessary. Once Pos-Loc has been completed, it will be possible to determine the full extent of any utility involvement in this project. Avoid and protect in place all existing, unaffected, buried, and aerial utility facilities in the project area. Comply with USA alert requirements, including at construction sign locations.

Right of Way Lead Time will require a minimum of eighteen (18) months after we receive Certified Appraisal Maps and/or **final** Utility Conflict Plans, obtained necessary environmental clearance, and applicable freeway agreements have been approved.

Martin Miller

Recommended for approval by:

MARTIN MILLER
Senior Right of Way Agent
(805) 779-0804

General Description of R/W and Excess Lands Required (zoning, use, major improvements, critical or sensitive parcels, etc.):

Proposed project runs from south of Garrison Road to Jolon Road. The purpose of the project is to replace various bridges, pavement preservation, reconstruct drainage culverts, upgrade guardrail, install TMS and sign panels. There are seven acquisitions across four larger parcels. One larger parcel US Army, one the State of California, and another County of Monterey. All Temporary Construction Easements (TCEs). The properties are principally unimproved.

General Description of Utility Involvement:

Route 101 is a Divided Freeway throughout the project limits in Monterey County near the community of Bradley from 0.3 miles south of the East Garrison Overcrossing (PMR1.9) to the Jolon Road Undercrossing (PM R9.7). The project proposes to replace the right San Antonio Creek Bridge (Br. No. 44-0141R/L) at PM R6.66 and the left North Bradley Undercrossing (Br. No. 44-0142L) at PM R7.94. The scope of work also includes cold plane and 0.2' overlay of the lanes and shoulders within the project limits, reconstruction of five drainage culverts, construction of census stations, upgrading the guardrail and end treatments, replacing dikes, and installing sign panels.

General Description of Railroad Involvement:

No railroad facilities or rights of way will be affected. However, the title sheet does show Union Pacific tracks on the east side of SR 101. The project will not impact them. Clauses required.

Right Of Way Cost Estimate	Current Year 2023	Contingency Rate 25%	Escalation Rate 5%	Escalated Year 2027
Acquisition:	\$45,625	25%	5%	\$52,817
Mitigation:	\$ 217,158	25%	5%	\$251,387
State Share of Utilities:	\$56,250	25%	5%	\$65,116
Expert Witness:	\$0	25%	5%	\$0
Relocation Assistance:	\$0	25%	5%	\$0
Demolition and Clearance:	\$0	25%	5%	\$0
Title and Escrow:	\$8,738	25%	5%	\$10,115
Ad Signs:	\$	25%	5%	\$0
Total Current Value:	\$327,771			\$379,435

If RW Cost Est fields are blank, Costs = \$0

NOTE: above estimate includes railroad engineering in the amount of: \$0.00

Estimated Construction Contract Work (CCW): 0 R/W LEAD TIME/Mo. 18

Estimated Pothole Date: 7/23/2025

Cost Break Down		Parcel Data		
Pot Hole	45,0000	# of Parcel Type X:	0	
# Pot Holes	30	# of Parcel Type A: less than \$10,000 non-complex	7	
Mitigation		# of Parcel Type B: more than \$10,000 non-complex	0	
Land	0	# of Parcel Type C: complex, special valuation	0	
Bank	0	# of Parcel Type D: most complex/time-consuming	0	# of Duals Needed: 0
Permit fees	173,726	Totals:	7	Totals: 0
Parcel Area		# of Excess Parcels:	0	
Total R/W Required:	163908			
Total Excess Area:	0			

Misc. R/W Work

# of RAP Displacements:	0
# of Clearance/Demos:	0
# of Const Permits:	0
# of Condemnations:	0

Utilities

2 Companies to be potholed
8 Companies for Verification
 Companies for Utility Relocations
 JUA/CCUAs are not needed

RR Involvement

Railroad Facilities or Right of Way Affected?	No
Const/Maint Agreement:	No
Service Contract Count:	0
Right of Entry:	No
Clauses:	Yes
Estimated Lead-time:	3 mos.

Is there a significant effect on assessed valuation:

No

Were any previously unidentified sites with hazardous waste or material found:

No

Are RAP displacements required: No

of single family: 0 # of multi-family: 0 # of business/nonprofit: 0 # of farms: 0

Sufficient replacement housing will be available without last-resort housing:

NA

Are material borrow or disposal sites required:

No

Are there potential relinquishments or abandonments:

No

Are there any existing or potential airspace sites:

No

Are environmental mitigation parcels required:

No

Data for evaluation provided by:

Estimator:	Martin Miller	10/18/2024
Railroad Liaison Agent:	Patrick Mason	8/9/2024
Utility Relocation Coordinator:	Samantha Senet	8/30/2024

I have personally reviewed this Right of Way Sheet and all supporting information. I find this Data Sheet complete and current, subject to the limiting conditions set forth.



Date: October 18, 2024
 ENTERED PMCS August 30, 2023
 BY: Ginger Allison

Martin Miller for Marshall Garcia
 Deputy District Director
 Right of Way

ATTACHMENT F

Environmental Document

Bradley Capital Preventative Maintenance Project

On U.S. 101 in Monterey County, near Bradley, from the
East Garrison Off-ramp to the Jolon Road Undercrossing

05-MON-101 Post Mile R1.9/R9.7

Project ID Number 0519000035

State Clearinghouse Number 2025050140

Initial Study with Mitigated Negative Declaration



Volume 1 of 2

Prepared by the
State of California Department of Transportation

September 2025



General Information About This Document

Document prepared by: Claire Taggesell, Associate Environmental Planner

The Initial Study circulated to the public for thirty-three days between May 1, 2025 and June 2, 2025. Comments received during this period are included in Appendix D. Elsewhere, language has been added throughout the document to indicate where a change has been made since the circulation of the draft environmental document. Minor editorial changes and clarifications have not been so indicated.

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For individuals with sensory disabilities, this document can be made available in Braille, in large print, on audiocassette, or on computer disk. To obtain a copy in one of these alternate formats, please write to or call Caltrans, Attention: Dianna Beck, District 5 Environmental Division, 50 Higuera Street, San Luis Obispo, CA 93401; phone number 805-459-9406 (Voice), or use the California Relay Service 1-800-735-2929 (Teletype to Voice), 1-800-735-2922 (Voice to Teletype), 1-800-855-3000 (Spanish Teletype to Voice and Voice to Teletype), 1-800-854-7784 (Spanish and English Speech-to-Speech), or 711.

Perform Capital Preventative Maintenance and San Antonio River Bridge
Rehabilitation on U.S. 101 from post miles R1.9 to R9.7 in Monterey County

**INITIAL STUDY
with Mitigated Negative Declaration**

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

THE STATE OF CALIFORNIA
Department of Transportation
and

Cooperating Agencies: U.S. Fish and Wildlife Service, U.S. Army Corps
of Engineers, National Marine Fisheries Service, California Department
of Fish and Wildlife, Regional Water Quality Control Board
Responsible Agency: California Transportation Commission

Scott Smith

Digitally signed by Scott Smith
Date: 2025.09.09 13:52:48
+07'00'

Scott Smith
D5 Office Chief, Environmental Analysis
California Department of Transportation
CEQA Lead Agency

9/9/2025

Date

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

Dianna Beck, District 5 Environmental Division, 50 Higuera Street, San Luis Obispo, CA
93401, phone 805-459-9406, email Dianna.Beck@dot.ca.gov.



Mitigated Negative Declaration

Pursuant to: Division 13, Public Resources Code

State Clearinghouse Number: 2025050140

District-County-Route-Post Mile: 05-MON-101 post mile R1.9/R9.7

EA/Project Number: 05-1K880/0519000035

Project Description

The California Department of Transportation (Caltrans) proposes to perform preventative maintenance (roadway repaving) and bridge replacements on U.S. 101 from post miles R1.9 to R9.7 in Monterey County. The primary scope of the project is to rehabilitate and extend the service life of the pavement on the roadway and shoulders within the project limits, replace the San Antonio River Bridges (44-0141L/R) at post mile R6.6, and replace the southbound North Bradley Undercrossing Bridge (44-0142L) at post mile R7.9.

Determination

An Initial Study has been prepared by Caltrans District 5. On the basis of this study, it is determined that the proposed action with the incorporation of the identified mitigation measures will not have a significant effect on the environment for the following reasons:

The project will have no effect on agriculture and forest resources, energy, land use and planning, mineral resources, population and housing, public services, recreation, and wildfire.

The project will have less than significant effects to aesthetics, air quality, cultural resources, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, noise, transportation, tribal cultural resources, and utilities and service systems.

With the following mitigation measures incorporated, the project will have a less than significant effect to biological and paleontological resources:

- Due to the reduced number of support structures for the proposed new San Antonio River Bridges, the project will result in a net reduction of structures within the streambed and riparian/streambank corridor. However, the project will have temporary impacts spanning three to four seasons at San Antonio River. Temporary impacts to jurisdictional areas will be restored at a 1-to-1 ratio. All trees removed within jurisdictional areas will be replaced at a 3-to-1

ratio for trees less than 12 inches in diameter at breast height and at a 10-to-1 ratio for trees equal to or greater than 12 inches diameter at breast height. Replacement plantings will include appropriate native tree and understory species. To ensure success, monitoring and an appropriate plant establishment period will be required, which will include regular inspections, weeding, and replacement. [The following sentence has been added since the draft environmental document was circulated.] Replacement plantings will be detailed in Caltrans' Landscape Architecture Landscape Planting Plan and the final Mitigation Monitoring Plan.

- Impacts to roosting bats will be compensated through the development and implementation of a Bat Protection and Mitigation Plan during the final project design phase. Roosting habitat will be created on the new structures. The plan will include post-construction monitoring of roosts for five years.
- Caltrans will retain a Principal Paleontologist that meets Caltrans qualifications to prepare or oversee preparation of a Paleontological Mitigation Plan. If deemed necessary, Paleontological Monitoring during construction may be required as a component of the Paleontological Mitigation Plan.

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California Department of Transportation

9/9/2025

Date

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Chapter 1 **Proposed Project**

1.1 Introduction

The California Department of Transportation (Caltrans) is the lead agency under the California Environmental Quality Act (CEQA). Caltrans as assigned by the Federal Highway Administration, is the lead agency under the National Environmental Policy Act (NEPA). As CEQA lead, Caltrans has prepared this Initial Study with proposed Mitigated Negative Declaration for the project.

The project is programmed in the adopted 2024 State Highway Operation and Protection Program and is funded in the Bridge Rehabilitation and Replacement Program for delivery in Fiscal Year 2028-2029. The current total non-escalated cost of the project is [this cost has been corrected since the draft environmental document was circulated.] \$81,327,000, which includes \$80,999,000 for construction. Additional funds will be programmed for the project. [The following sentence has been added since the draft environmental document was circulated.] The current total escalated cost of the project is \$97,204,435 which includes \$96,825,000 for construction. Construction is expected to start in the spring of 2029 and will span three to four years.

Caltrans proposes to rehabilitate and extend the service life of the pavement on the roadway and shoulders within the project limits. The project also proposes to replace the San Antonio River Bridges at post mile R6.6 and the southbound North Bradley Undercrossing Bridge at post mile R7.9. The scope of the project also includes improvement and repair of assets, as described in more detail in the project description.

1.2 Purpose and Need

1.2.1 Purpose

[The following sentence has been revised since the draft environmental document was circulated to reflect that the project scope no longer includes installing five new traffic census stations.] The purpose of the project is to comprehensively address the bridges' structural deficiencies, extend the service life of the roadway within the project limits, restore drainage systems, and replace a traffic census (count) station. The proposed goals of the project are the following:

- Improve bridge health condition and/or mitigate for bridge scour.

- Improve the ride quality and extend the service life of the pavement by rehabilitating the worn-out pavement.
- Restore failing culverts.
- Improve traffic census station data collection and maintain an efficient Intelligent Transportation System.
- Bring traffic safety devices (guardrail, guardrail end treatments, and guardrail connections to bridges) up to current design standards.
- Replace the sign panels to improve visibility and to meet current Federal Highway Administration standards. Replace signposts where sign panels are replaced.

1.2.2 Need

This project is needed for the following reasons:

- The Bridge Strategy Meeting Fact Sheet and the Bridge Inspection Reports state that delamination (where material fractures or separates into layers) has occurred in the concrete bridge elements, affected by alkali-silica reactivity and chlorides. Also, the August 15, 2024 Structure Maintenance and Investigation Hydraulics Inspection Report states that the San Antonio River Bridges are scour critical.
- Based on the Pavement Condition Report, the pavement within the project limits is exhibiting distress and degraded ride quality. Minor rehabilitation of the pavement in the form of repair and overlay is needed because, if left uncorrected, the pavement will continue to deteriorate, leading to more costly reconstruction.
- Culvert inspections show that several culverts within the project limits are in fair and poor condition and need to be replaced or repaired. Not repairing this deficiency could lead to embankment or pavement failure.
- Traffic census station improvements are needed to collect reliable traffic volume data.
- Caltrans has adopted the new Manual for Assessing Safety Hardware crash testing criteria as the new roadside safety hardware standard. Due to this change, the existing metal beam guardrail does not meet current standards.
- Many of the existing sign panels within the project limits do not meet the current Federal Highway Administration retro-reflectivity standards. Where sign panels are replaced, the signposts will also need to be replaced.

1.3 Project Description

The proposed project is located along U.S. 101 in Monterey County, near Bradley, from the East Garrison off-ramp at post mile R1.9 to the Jolon Road Undercrossing at post mile R9.7. The primary scope of the project is to rehabilitate and extend the service life of the pavement on the roadway and shoulders within the project limits, replace the southbound and northbound San Antonio River Bridges (44-0141L/R) at post mile R6.6, and replace the southbound North Bradley Undercrossing Bridge (44-0142L) at post mile R7.9. The scope of the project also includes improvement or repair of related assets, as outlined below.

1.3.1 Project Elements

The project includes the following design elements:

Structures

The project will make the following changes to structures:

- The project will replace the southbound and northbound San Antonio River Bridges (44-0141L/R) at post mile R6.6. There are two build alternatives under consideration for the bridge replacement method. See Section 1.4.1 Build Alternatives for information about the two build alternatives.
- The project will replace the southbound North Bradley Undercrossing Bridge (44-0142L) at post mile R7.9. The southbound (left) North Bradley Undercrossing Bridge will be replaced with 3-foot-6-inch-deep precast/prestressed concrete box beam-type superstructure. The proposed bridge will be an approximately 100-foot-long and 42-foot-6-inch-wide single-span structure. The structure will be cast at the manufacturer's location, transported to the project site, and placed on top of supports. A concrete deck will then be poured on top. Slope paving will be necessary in front of both abutments.

This design will maintain the minimum vertical clearance of 16-foot-6-inches over North Bradley Road. This will allow trucks to pass under the bridge. The bridge will take approximately 134 working days to construct.

- The San Antonio River Bridge replacements will require two retaining walls north of the bridges. Adjacent to the northbound lanes, the retaining wall will be approximately 450 feet long. Adjacent to the southbound lanes, the wall will be approximately 520 feet long.

Roadway Rehabilitation

The project will rehabilitate the roadway as follows:

- [The following sentence has been modified since the draft environmental document was circulated.] The project will perform preventative maintenance by cold planing 0.15 feet, and overlaying the lanes and inside and outside shoulders with 0.15 to 0.20-foot rubberized asphalt concrete. This will occur on U.S. 101 through the entire project limits, aside from at the two bridge replacement locations. Severely distressed or failing asphalt pavement will be replaced with dig outs (repair of more distressed areas of pavement through partial depth replacement). The replacement of the San Antonio River Bridges will require reconstruction of the pavement for approximately 470 feet before and 490 feet after the bridges. [The following sentence has been modified since the draft environmental document was circulated.] The proposed structural section is 0.90 foot of continuously reinforced concrete pavement or jointed plain concrete pavement over 0.25 feet of hot mix asphalt (type A).
- The project will replace shoulder rumble strips, traffic striping, and pavement markings.
- The project will widen the northbound and southbound outside shoulders from 8 feet to 10 feet for a short distance before and after the San Antonio River Bridges.
- The project will place shoulder backing to account for erosion or weathering at the edge of pavement.
- The project will also install a Type II slurry seal at the parking lots of both the northbound and southbound Camp Roberts Safety Roadside Rest Areas.

Guardrails and Barriers

The project will replace and upgrade guardrails and barriers:

- The project will remove existing guardrails and install Midwest Guardrail System features. Changing to Midwest Guardrail System and terminal end features could require widening the embankment to the hinge point to 4 feet wide in some locations. All proposed guardrails in the project will be constructed with steel posts and crushed shale for vegetation control. The project will upgrade all guardrails to current standards, including upgrading connections to bridges, upgrading terminal end treatments, and extending the guardrails, where needed. The guardrails at the Garrison Avenue Overcrossing (post mile R2.15) abutments will be replaced with concrete barriers to meet current safety standards.

Transportation Management System and Signs

[The following sentence and the first bullet point have been modified since the draft environmental document was circulated.] The project will replace one Transportation Management System and replace signs:

- The project will replace one existing census station at post mile R4.85.
- The project will replace and upgrade all sign panels that are not currently Type XI backing material within the project limits. This includes replacing associated signposts. Twenty-five one-post signs and 15 two-post signs are planned for replacement.

Drainage Improvements

The project will improve drainage in the project area:

- The project will remove and replace existing dikes where appropriate.
- The project will replace four culverts and repair one culvert. The replacement method is anticipated to be open cut for three of the culvert replacements. Jack and bore will be needed for the culvert at post mile R7.78. The planned replacement and repairs are as follows:
 - Replace existing 24-inch reinforced concrete pipe with 24-inch reinforced concrete pipe and with a flared end section with rock slope protection at post mile R5.35.
 - Abandon the existing 4-foot by 4-foot reinforced concrete box and 36-inch reinforced concrete pipe and construct a new 48-inch reinforced concrete pipe at post mile R7.78. The new pipe will be installed by trenchless methods (jack and bore) to the east of the existing drainage system. Headwalls will be placed at each end. The existing median and gore drainage inlets are to be removed and replaced with a new drainage system. The median drainage inlet will be placed at the same station as the gore drainage inlet and connected with a 24-inch reinforced concrete pipe. North of the gore inlet, another 24-inch pipe will lead to a drainage inlet north of Bradley Road connected to a 24-inch reinforced concrete pipe draining north, adjoining to the 48-inch pipe headwall and outlet. Rock slope protection will be placed at the outlet.
 - Use a concrete collar to repair the first joint from the drainage inlet at post mile R7.92.
 - Replace 24-inch reinforced concrete pipe with 24-inch reinforced concrete pipe and a flared end section with rock slope protection at the outlet at post mile R9.16. Possible extension of this culvert is currently being evaluated because the outlet is within the clear recovery zone.
 - Replace 24-inch reinforced concrete pipe with new 24-inch reinforced concrete pipe and a flared end section with rock slope protection at the outlet at post mile R9.66, on the Jolon Road off-ramp.

See Figure 1-1 Vicinity Map and Figure 1-2 Project Location Map for project location information. See Figure 1-3 Work Location Detail map for a depiction of the proposed work locations.

Figure 1-1 Project Vicinity Map

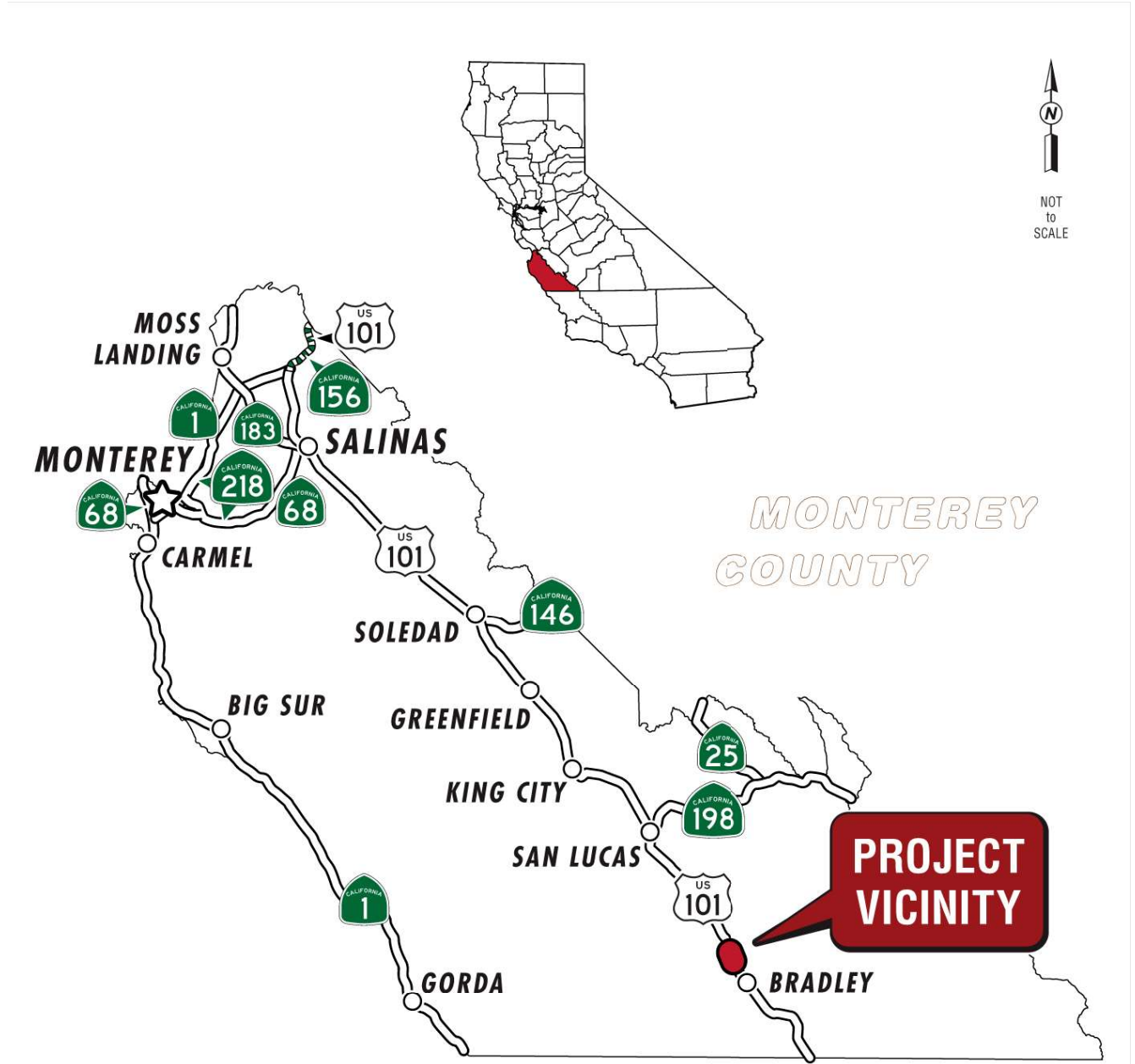


Figure 1-2 Project Location Map

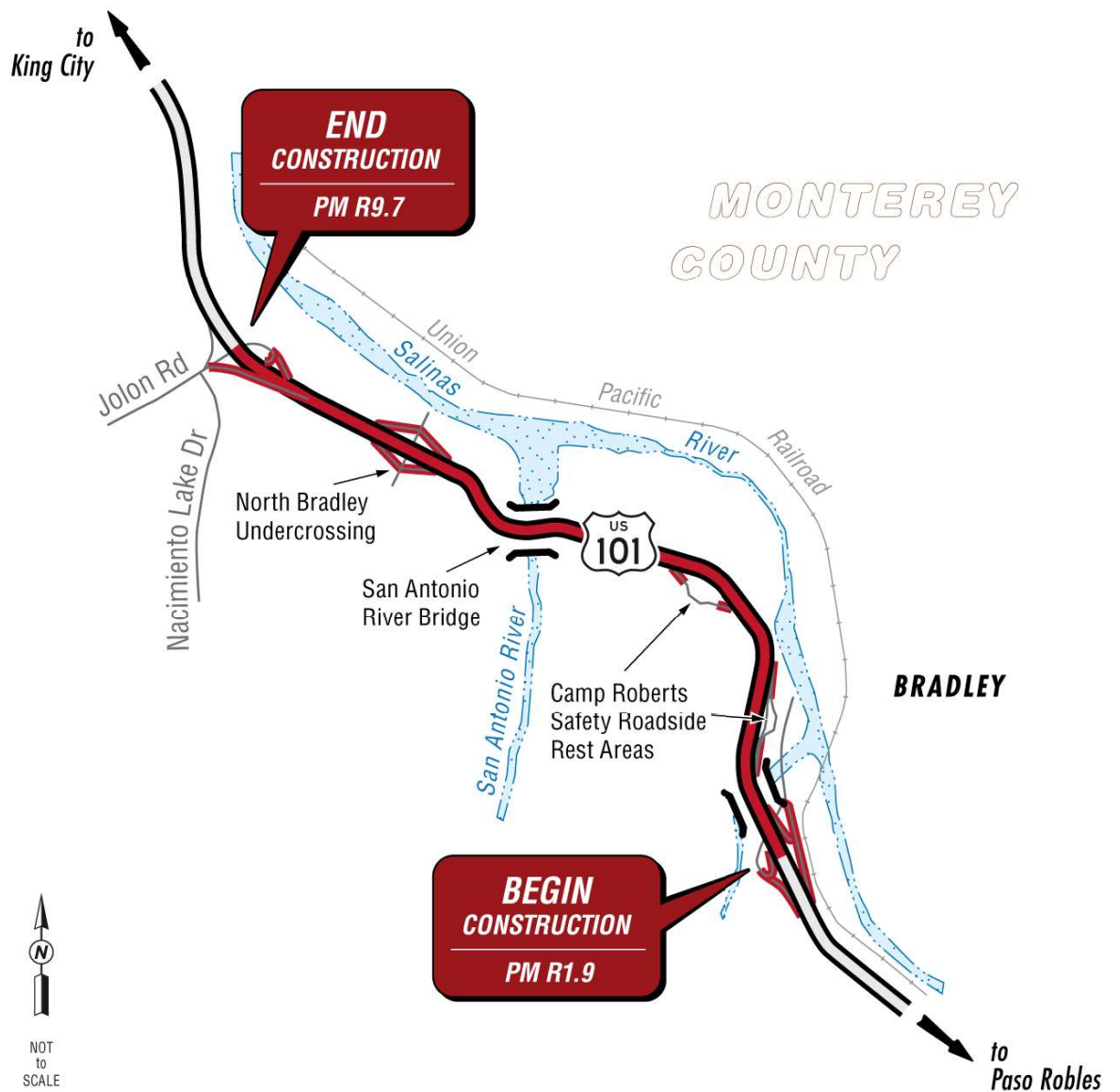
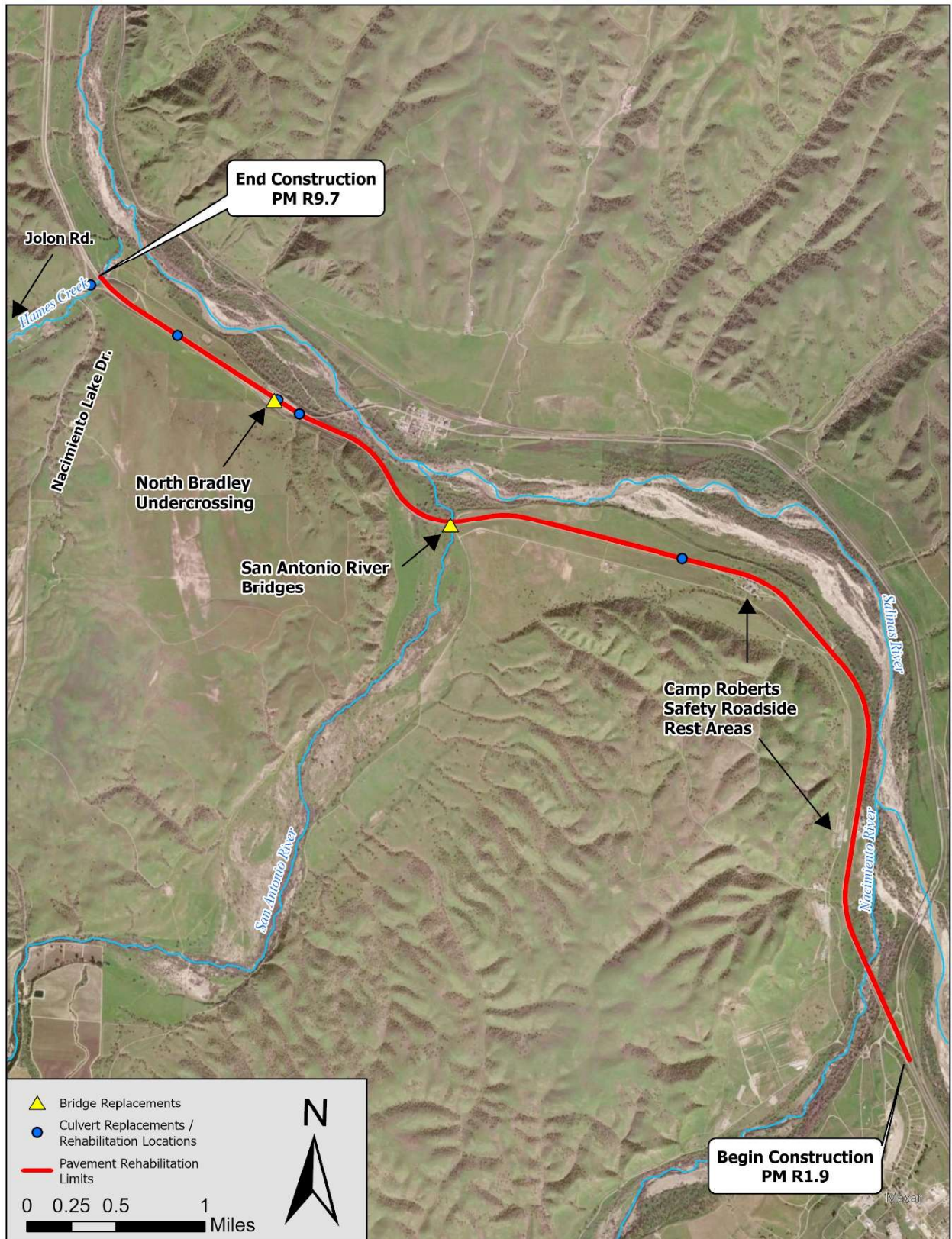


Figure 1-3 Work Location Detail Map



1.4 Project Alternatives

Two build alternatives and a No-Build Alternative are under consideration for the project.

The two build alternatives offer different designs for the replacement of the San Antonio River Bridges. The rest of the project scope is the same between the two build alternatives, including pavement rehabilitation, culvert replacements and rehabilitation, and replacement of the North Bradley Undercrossing. The common design features of the build alternatives are explained more fully in Section 1.4.1 below.

The two build alternatives—Alternative 1 and Alternative 2—are described below. The build alternatives will result in temporary impacts to environmental resources. All potentially significant impacts will be mitigated to a less than significant level. No net permanent impacts will result, as the new San Antonio River Bridges will have a reduced number of support structures from what is currently existing. The build alternatives will address the purpose and need of the project by replacing the San Antonio River Bridges, replacing the southbound North Bradley Undercrossing Bridge, rehabilitating the roadway, restoring culverts, improving traffic data collection, upgrading signs, and upgrading guardrails.

This project contains a number of standardized project measures that are used on most, if not all, Caltrans projects and were not developed in response to any specific environmental impact resulting from the proposed project. These measures are listed later in this chapter under “Standard Measures and Best Management Practices Included in All Build Alternatives.”

1.4.1 Build Alternatives

The build alternatives under consideration were developed by Caltrans Structures Design and evaluated by an interdisciplinary team. Several criteria were taken into consideration when evaluating the various alternatives for the project, including the project’s purpose and need, cost, design, schedule, construction strategies, and environmental impacts.

Alternative 1 and Alternative 2 present two different bridge designs for the replacement of the San Antonio River Bridges.

Alternative 1

Alternative 1 will replace the bridges with precast structures. This alternative will use 6-foot-2-inch-deep precast (prestressed) wide flange girder-type superstructures to replace the existing structures. The precast wide flange girders will be cast at the manufacturer factory location, transported to the project site and placed on top of supports; then a concrete deck will be poured on top. The use of precast wide flange girders will facilitate faster

construction since the girder will be cast in advance of being transported to the project site, in the manufacturing unit. This alternative will also eliminate the need for falsework during construction. With this alternative, the existing minimum vertical clearance of approximately 15-feet-1-inch over San Antonio Drive will be maintained.

Alternative 1 (precast structure) will require an estimated 686 working days for construction, over the course of three seasons.

Alternative 2

Alternative 2 would replace the bridge structures using the cast-in-place method. This alternative will use 5-foot-2-inch-deep cast-in-place prestressed concrete box girder-type superstructures, which would be cast at the project site, on the top of supports (abutments and piers). During casting, ducts are placed in girders through which the prestressing strands pass. Then, once the superstructures harden (achieve required strength), the girders are post-tensioned (strands are pulled and anchored). The use of cast-in-place prestressed concrete box girder-type superstructures would need falsework during construction. With this alternative, a minimum vertical clearance of approximately 18-feet-10-inches would be required over San Antonio Drive to satisfy minimum temporary (falsework) vertical clearance requirements.

Alternative 2 (cast-in-place) would require an estimated 940 working days for construction, over the course of four seasons.

Common Design Features of the Build Alternatives

Structures

Northbound and Southbound San Antonio River Bridges

Under both build alternatives, the project would replace the northbound and southbound San Antonio River Bridges. The bridges will be replaced to prevent further deterioration due to the effects of alkali-silica reactivity and chlorides. Without replacement, the bridge would eventually fail.

Both build alternatives require the same number, placement, and diameter of bridge piles. Twelve cast-in-drilled-hole-type bridge piles will be constructed. Each pile will be 96 inches in diameter. Both build alternatives would require construction in the San Antonio River floodplain. In addition, both alternatives are eligible for construction with the same type of bridge rail and will have a very similar appearance from the view of the traveling public.

Both alternatives would eliminate bat day and maternity roosting habitat, requiring mitigation for these roosting types. Both alternatives would have many other similar biological effects. See Section 2.1.4 Biological Resources for more information.

Southbound North Bradley Undercrossing Bridge

Under both build alternatives, the project will replace the Southbound North Bradley Undercrossing Bridge using a precast/prestressed concrete box beam-type superstructure. As with the other bridges, this bridge will be replaced to prevent further deterioration due to the effects of alkali-silica reactivity and chlorides. Without replacement, the bridge would eventually fail.

Roadway Rehabilitation

Under both build alternatives, the project will rehabilitate the road surface of the lanes and shoulders, as well as in the parking lots of both northbound and southbound Camp Roberts Safety Roadside Rest Areas and widen the shoulder on either end of the San Antonio River Bridges, as deemed necessary. This will ensure an acceptable roadway condition and the continued operation of the roadway and rest areas for the traveling public.

Guardrail and Barriers

Under both build alternatives, the project will upgrade and extend the guardrails as needed to meet current Manual for Assessing Safety Hardware standards and meet the needs of the project design.

Transportation Management System and Signs

Under both build alternatives, the project will improve the traffic management system and signs as needed within the project limits. [This sentence has been updated since the draft environmental document was circulated.] More specifically, the project will replace one existing census station. In addition, all sign panels that are not currently Type XI backing material within the project limits will be replaced and upgraded. Worn out signposts will be replaced.

Drainage Improvements

Both build alternatives include replacement of four culverts (three reinforced concrete pipe culverts and one box culvert) that are at risk of failure. One of these culverts will be upsized to improve wildlife crossing opportunities for larger animals, including deer. Culvert replacement will be completed via open cut at three locations and via jack and bore at one location. One culvert will be repaired. No new culverts will be installed at new locations.

Construction Activities

[This section has been updated since the draft environmental document was circulated.] During the final project design phase, prior to the official start of the construction phase, geotechnical boring investigations will be completed to gather data necessary for project design decisions. An estimated three borings are anticipated to be necessary within the San Antonio River floodplain prior to construction. Test cores will be collected from varying depths to determine the geologic structure. The three borings to be completed for the northbound bridge will be drilled through the bridge deck. Any additional borings required for the southbound bridge likely would require the

drill rig to be driven down the embankment to access the boring locations under the San Antonio River Bridges. Separate biology permits will be obtained prior to the geotechnical drilling operation. Specified biology avoidance and minimization measures (listed in Section 2.1.4 Biological Resources) will be implemented for the geotechnical drilling operation.

The bulk of the on-the-ground work will occur during the construction phase. At the beginning of bridge construction, pile load testing will be performed on the bridge piles. This test will be minimally invasive and will perform stress testing on a pile that will be used for the bridge. Use of a separate test pile is not anticipated.

Temporary construction activities will include pavement rehabilitation, culvert replacement, bridge replacement, traffic controls (including a bicycle detour), equipment access, vegetation clearing, staging, and stock piling. Utility relocations are not currently anticipated. During replacement of the San Antonio River Bridges, temporary median crossovers will be used to divert the northbound and southbound traffic onto the opposite structure of the one being actively replaced. Temporary dewatering and diversion will be required in the San Antonio River to allow for bridge replacement work to be completed.

Unique Features of the Build Alternatives

The two build alternatives for the San Antonio River Bridges differ in several ways. These distinctions are described below. Differences in biological impacts are explained further in Section 2.1.4 Biological Resources.

Alternative 1

Alternative 1 (precast structures) will require an estimated 686 working days (three seasons) for construction. This alternative will facilitate faster construction because the girder would be cast in advance of being transported to the project site, in the manufacturing unit. This alternative will also eliminate the need for falsework during construction. The existing minimum vertical clearance of approximately 15-feet-1-inch over San Antonio Drive will be maintained.

This design is similar to what currently exists, with open soffits under the bridge, so mitigation for night-roosting bats would not be necessary. See Section 2.1.4 Biological Resources for more information on this and other differences in biological effects.

The estimated escalated cost for this alternative is currently \$97,205,000.

Alternative 2

Alternative 2 (cast-in-place) would require an estimated 940 working days (four seasons) for construction, meaning construction activities in the San Antonio River floodplain would occur for a longer duration. This alternative

would require the bridge superstructure to be cast at the project site. This alternative would require falsework during construction. With this alternative, a minimum vertical clearance of approximately 18-feet-10-inches over San Antonio Drive would be needed to satisfy minimum temporary (falsework) vertical clearance requirements.

The box girder that is part of the cast-in-place design would eliminate bat night-roosting habitat and would require night-roosting habitat mitigation. See Section 2.1.4 Biological Resources for more information on this and other differences in biological effects.

The estimated escalated cost for this alternative is currently \$94,331,000. The cost of the bat roosting mitigation has not yet been determined and therefore is not included in this estimated cost.

1.4.2 No-Build (No-Action) Alternative

Under the No-Build Alternative, no work would occur on the project. This alternative would not address the purpose and need of the project. With the No-Build Alternative, the condition of the bridges, culverts, and roadway would continue to worsen, and no new traffic information would be provided to the traveling public. Traffic monitoring would also not be improved. Outside of this project, routine maintenance activities by the Caltrans maintenance crew would continue. Common maintenance activities include cleaning out culverts and repairing potholes and cracks in the pavement.

Construction Activities

No construction activities would occur under the No-Build Alternative.

Structures

Under the No-Build Alternative, the project would not replace the San Antonio River Bridges or the southbound North Bradley Undercrossing Bridge. The bridges would continue to deteriorate due to the effects of alkali-silica reactivity and chlorides, and would eventually be at risk of failure.

Roadway Rehabilitation

Under the No-Build Alternative, the project would not rehabilitate the lanes and shoulder, or place accompanying shoulder backing. In addition, slurry seal would not be placed at the northbound and southbound Camp Roberts Safety Roadside Rest Areas to extend the pavement life. The pavement would continue to deteriorate at these locations and would soon reach the end of its service life.

Guardrail and Barriers

Under the No-Build Alternative, the project would not upgrade and extend guardrails, or replace guardrails with median barriers where it is needed. The

current Manual for Assessing Safety Hardware standards for guardrails and median barrier would not be met.

Transportation Management System and Signs

[This sentence has been updated since the draft environmental document was circulated.] Under the No-Build Alternative, the project would not replace a traffic census station or replace sign panels to meet current reflectivity standards. This alternative would not contribute to the improvement of traffic monitoring or provide additional traffic information to the traveling public.

Drainage Improvements

Under the No-Build Alternative, the project would not replace or repair deteriorating culverts. This alternative would not address the potential risk for roadway and/or embankment failures on U.S. 101 as a result of culvert damage and/or culvert deterioration. Wildlife crossing at post mile R7.78 would not be improved to accommodate larger animals (namely deer).

[The following section has been added since the draft environmental document was circulated.]

1.5 Identification of a Preferred Alternative

Both Alternative 1 and Alternative 2 meet the purpose and need of project and are feasible options. Alternative 1, replacement of the San Antonio River Bridges with precast structures, has been chosen as the preferred alternative. This alternative was chosen due to the reduced construction duration and reduced impacts to roosting bats as compared to Alternative 2. This alternative would not eliminate nighttime bat roosting, and therefore would not require mitigation for this type of roosting.

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

This project will include a list of Caltrans standard measures that are typically used on all Caltrans projects. Caltrans standard measures are considered features of the project and are evaluated as part of the project. Caltrans standard measures are not implemented to address any specific effects, impacts or circumstances associated with the project, but are instead implemented as part of the project's design to address common issues encountered on projects. The measures listed below are those related to environmental resources and are applicable to the project. These measures can be found in Caltrans 2024 Standard Specifications document.

- 7-1 Legal Relations and Responsibility to the Public
- 10-4 Water Usage

- 10-5 Dust Control
- 10-6 Watering
- 12-1 Temporary Traffic Control
- 12-3 Temporary Traffic Control Devices
- 12-4 Maintaining Traffic
- 13-1 Water Pollution Control
- 13-3 Stormwater Pollution Prevention Program
- 13-4 Job Site Management
- 13-6 Temporary Sediment Control
- 13-7 Temporary Tracking Control
- 13-10 Temporary Linear Sediment Barriers
- 14-1 General (Environmental Stewardship)
- 14-2 Cultural Resources
- 14-6 Biological Resources
- 14-8 Noise and Vibration
- 14-9 Air Quality
- 14-10 Solid Waste Disposal and Recycling
- 14-11 Hazardous Waste and Contamination
- 14-12 Other Agency Regulatory Requirements
- 17-2 Clearing and Grubbing
- 18-1 Dust Palliatives
- 20-1 Landscape
- 20-3 Planting
- 20-4 Plant Establishment Work
- 21-2 Erosion Control Work

Additional standard measures would be added to the project as necessary or appropriate.

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, has been prepared in accordance with the National

Environmental Policy Act. When needed for clarity, or as required by CEQA, this document may contain references to federal laws and/or regulations (CEQA, for example, requires consideration of adverse effects on species identified as a candidate, sensitive, or special-status species by the U.S. National Marine Fisheries Service and the U.S. Fish and Wildlife Service—that is, species protected by the Federal Endangered Species Act).

1.8 Permits and Approvals Needed

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

Agency	Permit/Approval	Status
California Department of Fish and Wildlife	Section 1602 Streambed Alteration Agreement	To be obtained before construction.
Central Coast Regional Water Quality Control Board	Section 401 Water Quality Certification	To be obtained before construction.
U.S. Army Corps of Engineers	Section 404 Nationwide Permit	To be obtained before construction.
National Marine Fisheries Service	Technical assistance for the South Central Coast steelhead trout	Complete
U.S. Fish and Wildlife Service	Technical assistance for the southwestern pond turtle, western spadefoot toad, least Bell's vireo, southwestern willow flycatcher, and San Joaquin kit fox	Complete
National Marine Fisheries Service	Biological Opinion for the South Central Coast steelhead trout	To be obtained prior to construction.
U.S. Fish and Wildlife Service	Biological Opinion for the southwestern pond turtle, western spadefoot toad, least Bell's vireo, southwestern willow flycatcher, and San Joaquin kit fox.	To be obtained prior to construction.
California Department of Fish and Wildlife	Section 4(f) De Minimis concurrence	Complete. See Appendix A for a description of the determination.
California State Water Resources Control Board	Construction General Permit	To be obtained prior to construction.

Chapter 2 CEQA Evaluation

2.1 CEQA Environmental Checklist

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

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

“No Impact” determinations in each section are based on the scope, description, and location of the proposed project as well as the appropriate technical report (bound separately in Volume 2), and no further discussion is included in this document.

2.1.1 Aesthetics

Considering the information in the Visual Impact Assessment dated February 5, 2025, the following significance determinations have been made:

Except as provided in Public Resources Code Section 21099:

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

Question—Would the project:	CEQA Significance Determinations for Aesthetics
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	Less Than Significant Impact
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	No Impact

Affected Environment

Existing Facility

Within the project limits, U.S. 101 is a four-lane divided highway with two lanes of travel in either direction. The highway is the main north-south transportation corridor serving Central Coast communities. The project limits run from 0.3 mile south of the East Garrison Overcrossing (post mile R1.9) to the Jolon Road Undercrossing near the community of Bradley (post mile R9.7). The route follows the historic El Camino Real, and several replica mission bells are located within the project limits marking the historic route.

Existing Visual Environment

Southern Monterey County and the Salinas Valley area are defined by the broad valley floor, with the Coastal Range mountains to the west and the Gabilan Mountains to the east. Land use is mostly agricultural, and cattle are readily seen grazing in grasslands. The Salinas River runs parallel to the highway on the east side, with dense riparian vegetation, and conjoins with the Nacimiento River and San Antonio River as they cross under U.S. 101. Throughout the area, low rolling hills are covered with scattered oaks.

While Bradley is not visible from the highway due to intervening vegetation, the existing Caltrans safety roadside rest area facilities are noticeable and contribute to the visual experience along U.S. 101 in both the northbound and southbound directions. As seen from the highway, the rest stops are mostly known by the on- and off-ramps associated with them, the low-rise structures, parking areas, electric vehicle charging stations, and landscaping.

Some residential areas can also be seen along the highway, along with some scattered military structures and an expansive railroad bridge over the Salinas River.

Viewer Sensitivity

Viewers traveling along U.S. 101 in this area represent a wide range of users and associated viewing expectations. No local or state designated scenic roadways are identified within the project, but the hills west of the Salinas Valley area are considered a sensitive visual resource as defined by Monterey County planning policy. The moderate to moderately high viewer sensitivity is due in part to the combination of the low-density rural setting allowing for expansive valley views of agriculture backdropped by scenic hillsides in the Salinas Valley.

Guiding Goals and Policies

The project area lies in rural Monterey County. The 2010 Monterey County General Plan provides guidelines for development in the area. The following goal and policy from the Conservation and Open Space Element, Scenic Resources Section apply to the project:

- GOAL OS-1: Retain the character and natural beauty of Monterey County by preserving, conserving, and maintaining unique physical features, natural resources, and agricultural operations.
 - Policy OS-1.9 [in relevant part]: Development that protects and enhances the County's scenic qualities shall be encouraged.

Environmental Consequences

Scenic Vistas

Scenic vistas in the vicinity of U.S. 101 include views of the hills to the west, agricultural and open space, and gentle topography with natural vegetation patterns. Proposed improvements, such as guardrails and bridge rails that are in compliance with the latest safety standards, may be slightly taller than what is existing. Drivers may also observe taller rails on the adjacent bridge. Together, these elements create a more urbanizing effect and slightly degrade experiencing these vistas at spot locations. However, the distant hills and fields will remain visible though the project limits and will continue to contribute to the scenic vista.

Visual Character

The existing visual character of the project area is based primarily on its generally well-vegetated roadsides, rural farming character, and rolling topography.

Proposed project elements such as three upgraded bridges with bridge rails, upgraded guardrails, and additional paving will be readily visible from the roadway. Drainage inlets, culvert headwalls, rock slope protection, and flared end sections of new and repaired culverts may be noticed by the traveling public. These may be seen from county roads near highway on- and off-ramps, and in the median area between the northbound and southbound

lanes. These elements will be partly obscured by vegetation for a portion of the year. Proposed elements may be slightly taller or bulkier. By themselves, these types of elements are not uncommon and will not be seen as unexpected visual elements in a highway setting. The addition of all these elements together will create a more utilitarian appearance and will add a minor degree of urbanization to the setting.

Much of the area in the vicinity of the bridges and culverts is vegetated, either with native shrubs and/or trees. The construction of bridges and drainage improvements, including access roads will cause the removal of vegetation in the immediate area. As a result, these visual changes will cause a minor reduction of rural character and visual quality to the immediate project area until revegetation efforts reach maturity. The proposed retaining walls will not be seen readily from the main alignment due to their location below the roadway and the roadway curvature at this location. However, the northbound wall may be seen briefly due to roadway curvature near the San Antonio River. Also, the Bradley Undercrossing Bridge may be seen from local roadways, such as Bradley Road and Stonesifer Road. The sides of the San Antonio River bridge structures will also be noticeable by drivers from the adjacent structure, but are in areas with limited public access. Treatment, such as texture, on bridges and walls can form shadows to soften urbanizing character and minimize the likelihood of graffiti. Revegetation efforts can also reduce the urbanizing elements.

Measures specifically addressing these visual effects, however, will minimize noticeability of the individual project elements and will reduce the potential effect on the existing visual character.

Light, Glare, and Daytime or Nighttime Views

No new sources of light are proposed as part of the project. Nighttime views will not be affected.

Summary of Visual Effects

Implementation of the project will result in visual changes as seen from public viewpoints such as U.S. 101 and some local streets, such as Bradley Road. An increased visual scale of the highway facility will primarily be the result of the paved elements associated with the new structures, including new retaining walls along with slightly taller guardrails and bridge rails. Additional elements like drainage headwalls also contribute to change in rural character. While the new and replaced infrastructures would not be unexpected in the roadway environment, the increased size and contrasting appearance will make these otherwise visually neutral features potentially more noticeable and will contribute somewhat to the increased visual scale of the highway facility. The reduction in roadside vegetation will also result in a somewhat more engineered appearance of the highway facility.

Though potential visual changes would occur, the same type of elements proposed with this project are seen elsewhere along the highway and are not

by themselves inconsistent with the rural roadway character of the region or throughout the state. The noticeability of the visibly new bridges, railing and guardrail is not unexpected in a roadway environment. Noticeability of concrete drainage elements will be reduced with coloring or staining. As a result, the proposed drainage structures will be subordinate to the overall experience of traveling along the highway. New paving at gores will also be aesthetically treated. Impacted shrubs, trees and riparian habitat will be revegetated.

It is expected that following project construction and revegetation, the project will be generally unnoticed by the casual observer on U.S. 101 and other public roads in the area. If noticed, the project with proposed minimization measures will not appear out of place within the setting. Impacts to visual resources will be less than significant.

Avoidance and Minimization Measures

With implementation of the following avoidance and minimization measures, the project will be consistent with the goals and policies of the Monterey County General Plan, Conservation and Open Space Element, Scenic Resources Section, and potential visual effects will be reduced:

- VIS-1. Preserve as much existing vegetation as possible. Prescriptive clearing and grubbing and grading techniques which save the most existing vegetation possible should be employed.
- VIS-2. Revegetate all disturbed soil areas with native plant species and other erosion control treatments appropriate to each specific work location as directed by Caltrans District 5 Landscape Architecture.
- VIS-3. Replacement planting shall include aesthetic considerations as well as the inherent biological goals. Revegetation shall include native trees and plants as determined by the Caltrans Biologist and Caltrans District 5 Landscape Architecture and shall be maintained through plant establishment.
- VIS-4. All visible concrete drainage elements (including but not limited to headwalls, drain inlet aprons, etc.) should be colored to blend with the surroundings and reduce reflectivity. The specific colors of these concrete elements shall be determined by Caltrans District 5 Landscape Architecture.
- VIS-5. If vegetation control under guardrails is required, shale or colored concrete will be selected to blend in with the natural surrounding and reduce reflectivity. The selection of the vegetation control material and/or color shall be determined and approved by District 5 Landscape Architecture in coordination with District 5 field maintenance.
- VIS-6. Structural elements such as bridges and the retaining walls will include aesthetic treatment, such as texture, to reduce glare and graffiti.

Aesthetic treatments are to be determined by District 5 Landscape Architecture.

- VIS-7. Bridge railing selection shall be in “open-style” type 85, 86H or similar. Bridge railing and bridge aesthetics will be developed as a collaboration between Caltrans District 5 Landscape Architecture and Structures Design.
- VIS-8. Following construction, re-grade and re-contour all new construction staging areas and other temporary uses as necessary to match the surrounding pre-project topography.

2.1.2 Agriculture and Forest Resources

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

The project will not require permanent acquisition of farmland and is not located in or near forest resources. Temporary construction easements and existing Caltrans construction easements are not within land designated for agricultural use; therefore, the following significance determinations have been made:

Question—Would the project:	CEQA Significance Determinations for Agriculture and Forest Resources
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	No Impact
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	No Impact

Question—Would the project:	CEQA Significance Determinations for Agriculture and Forest Resources
c) Conflict with existing zoning, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	No Impact
d) Result in the loss of forest land or conversion of forest land to non-forest use?	No Impact
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of farmland to non-agricultural use or conversion of forest land to non-forest use?	No Impact

2.1.3 Air Quality

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

Considering the information in the Air Technical Memo dated July 3, 2024, the following significance determinations have been made for air quality:

Question—Would the project:	CEQA Significance Determinations for Air Quality
a) Conflict with or obstruct implementation of the applicable air quality plan?	Less Than Significant Impact
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	Less Than Significant Impact
c) Expose sensitive receptors to substantial pollutant concentrations?	Less Than Significant Impact
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	Less Than Significant Impact

Affected Environment

The project lies in the North Central Coast Air Basin. The Monterey Bay Air Resources District regulates air quality in the North Central Coast Air Basin. The North Central Coast Air Basin is considered in attainment for all federal ambient air quality standards, non-attainment transitional for state ambient air quality standards for ozone, and non-attainment for airborne particulate less than 10 microns in diameter (PM₁₀).

Because the project area is in attainment for all federal ambient air quality standards, conformity requirements do not apply to this project. Projects that do not further degrade air quality in the basin are consistent with the Monterey Bay Air Resources District's state air quality attainment goals as stated in its State Implementation Plan (the 2012- 2015 Air Quality Management Plan).

Environmental Consequences

Permanent (Long-term) Impacts

Because no additional lanes or capacity is being added to the highway, there will be no difference in long-term air emissions with or without the proposed project. No impact will occur.

Temporary (Construction) Impacts

With almost every construction project, there will be a short-term temporary increase in air emissions and fugitive dust during the construction period. Use of equipment during project construction can generate fugitive dust that may have substantial temporary impacts on local air quality if large amounts of excavation, soil transport, and subsequent fill operations are necessary. It is anticipated that there will be earthwork associated with bridge reconstruction, drainage improvements, and cold planing, so temporary dust generation is expected.

While the Monterey Bay Air Resources District does have established daily construction emission thresholds for many types of projects, small highway projects like this one do not fit into the district's typical jurisdiction, which typically includes residential, commercial, and industrial projects. However, since the state does not have established air pollution thresholds, the Monterey Bay Air Resources District thresholds are used for comparison purposes in this section. Due to use of standard construction dust and emission minimization practices and procedures, it is anticipated that project emissions of particulate matter (dust) and equipment emissions will be well within the Monterey Bay Air Resources District daily thresholds. Under CEQA, the Monterey Bay Air Resources District has established the threshold of significance for inhalable particulates (PM₁₀) for non-highway projects as 82 pounds per day for construction.

Results of construction emissions quantified using the CAL-CET modeling tool are shown in Table 2.1 and Table 2.2. Emissions were estimated for the

following pollutants: total organic gases (TOG), reactive organic gases (ROG), carbon monoxide (CO), nitrogen oxides (NOx), particulate matter (PM10 and PM2.5), and black carbon (BC). From these tables, it can be determined that approximate daily average PM10 emissions are quantified around 9.7 and 6.9 pounds per day, depending on the alternative selected for bridge construction; these are levels well below the Monterey Bay Air Resources District threshold of 82 pounds per day.

Table 2.1. Project-Related Pollutant Emission Estimates (Alternative 1)

Averages	Total Organic Gases	Reactive Organic Gases	Carbon Monoxide	Nitrogen Oxides	PM10	PM2.5	Black Carbon
Daily Average (pounds per day)	3.858	3.647	15.536	20.987	9.713	2.222	0.177
Max Daily Average (pounds per day)	7.155	6.728	49.429	46.062	135.960	14.600	0.285
Annual Average (tons per year)	0.439	0.415	1.767	2.387	1.105	0.253	0.020

Source: Estimated using Caltrans Construction Emissions Tool, 2021

Table 2.2. Project-Related Pollutant Emission Estimates (Alternative 2)

Averages	Total Organic Gases	Reactive Organic Gases	Carbon Monoxide	Nitrogen Oxides	PM10	PM2.5	Black Carbon
Daily Average (pounds per day)	2.701	2.554	10.858	14.680	6.929	1.570	0.124
Max Daily Average (pounds per day)	5.019	4.719	34.672	32.326	95.173	10.222	0.200
Annual Average (tons per year)	0.286	0.271	1.151	1.556	0.734	0.166	0.013

Source: Estimated using Caltrans Construction Emissions Tool, 2021

To minimize dust emissions from the project, Standard Specifications Section 14-9.02, Air Pollution Control, will be implemented. Section 14-9.02 states that the contractor is responsible for complying with all local air pollution control rules, regulations, ordinances, and statutes that apply to work performed under

the contract. Also, the project-level Stormwater Pollution Prevention Plan will include water pollution control measures that also serve as standard dust emission minimization measures (such as covering soil stockpiles, watering haul roads, watering excavation and grading areas, and so on). By incorporating appropriate engineering design and storm water Best Management Practices during construction, minimal short-term air quality impacts are expected. Impacts to air quality will be less than significant.

2.1.4 Biological Resources

Considering the information in the Natural Environment Study dated February 6, 2025, the following significance determinations have been made:

Question—Would the project:	CEQA Significance Determinations for Biological Resources
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife, U.S. Fish and Wildlife Service, or National Oceanic and Atmospheric Administration Fisheries?	Less Than Significant Impact With Mitigation Incorporated
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	Less Than Significant Impact With Mitigation Incorporated
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	Less Than Significant Impact With Mitigation Incorporated
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	Less Than Significant Impact With Mitigation Incorporated
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	No Impact

Question—Would the project:	CEQA Significance Determinations for Biological Resources
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	No Impact

Affected Environment

Biological Study Area

The Biological Study Area is the area encompassing the project limits that was studied for biological resources and includes the area that may be directly, indirectly, temporarily, and/or permanently impacted by construction and construction-related activities. The Biological Study Area also includes some adjoining habitats to ensure an adequate area has been studied to fully evaluate the project's biological impacts. The Biological Study Area includes an approximately 7.8-mile stretch of U.S. 101 in Monterey County, near Bradley. The Biological Study Area totals approximately 194 acres.

Physical and Biological Site Conditions

The Biological Study Area lies in the Salinas River Valley, near Bradley, in Monterey County. Surrounding land use is dominated by rangeland, recreational wildlife viewing and hunting (California Department of Fish and Wildlife Big Sandy Wildlife Area), and California Army National Guard property (Camp Roberts military installation). The Salinas River runs parallel to the Biological Study Area on the northeast side for the entire length of the project. The project elevation ranges from approximately 500 to 700 feet above sea level. The approximately 194-acre Biological Study Area contains both natural plant communities and anthropogenic areas, as described below. This region features a Mediterranean climate with hot, dry summers and mild to cool, wet winters. Most rainfall occurs during the winter months (the wettest month is February), with an average rainfall at the nearby Paso Robles Municipal Airport Station averaging approximately 14.6 inches of precipitation per year from 1952 to 2023.

The Biological Study Area crosses the Nacimiento River at approximately post mile R2.45 and crosses the San Antonio River at approximately post mile R6.7. Both streams drain to the Salinas River less than 0.5 mile from the Biological Study Area. Nacimiento River was not delineated for this project because no work (including staging) is proposed at this location and work activities will avoid the stream and riparian zone of the Nacimiento River.

At post mile R6.70, the San Antonio River crosses the Biological Study Area under existing U.S. 101 bridges. The part of the San Antonio River within the Biological Study Area is a perennial stream. Flows and releases are

controlled upstream by a dam at the San Antonio Reservoir and are eventually released into the Salinas River.

At post mile R7.78, an existing culvert under U.S. 101 outlets near the edge of the Salinas River corridor. The main channel of the Salinas River is approximately 1,000 feet east of the culvert, but the extensive riparian forest associated with the Salinas River extends into the Biological Study Area. The culvert location is accessible via an unpaved access road where cottonwood trees that are associated with the riparian zone of the Salinas River overlap the access road.

At post mile R9.66, Hames Creek also crosses through the Biological Study Area near the north end of the project area, but it is not included in the Biological Study Area because no work will occur beyond the existing paved roadway at this location.

Natural Communities

Nine land cover types and vegetation communities occur in the Biological Study Area: developed/anthropogenic, ruderal, non-native annual grassland, blue oak woodland, coastal scrub, mixed willow woodland and thicket, recovering riparian scrub, wetland, and stream. The Biological Study Area is mostly confined to areas immediately adjacent to highway facilities and ruderal/disturbed habitats (which include the road surface and shoulders), but also includes areas surrounding the bridges to be replaced and proposed drainage work locations.

Much of the Biological Study Area is developed, including paved highway, gravel shoulders, gore areas, and dirt roads totaling approximately 117.5 acres. The developed areas are not included in the descriptions of the natural communities below.

A description of the natural communities/habitats present in the Biological Study Area follows.

Willow Woodland and Thicket

Willow woodland and thicket occur in the San Antonio River floodplain within the Biological Study Area and totals approximately 1.23 acres.

Recovering Woody Riparian

In areas adjacent to and under the San Antonio River bridges, riparian habitat is mostly herbaceous. In some areas, the riparian habitat is recovering from a Caltrans seismic retrofit project (05-1F820), which disturbed portions of the site in 2020. This area includes several restoration planting areas. Recovering woody riparian habitat totals approximately 0.43 acre.

Fremont Cottonwood Forest and Woodland

Fremont cottonwood riparian forest is present in the Biological Study Area, along the Salinas River floodplain, adjacent to the culvert at post mile R7.78. Cottonwood riparian forest habitat totals approximately 1.71 acres within the Biological Study Area.

Blue Oak Woodland and Forest

Blue oak woodland occurs mostly at post mile R7.78 near the Bradley Road interchange and totals approximately 0.83 acre.

Coyote Brush Scrub

Coastal scrub habitat within the Biological Study totals approximately 4.03 acres.

Wild Oats and Annual Brome Grassland

Non-native annual grassland occurs throughout the Biological Study Area and occupies 31.35 acres of the Biological Study Area. The non-native annual grassland observed in the Biological Study Area includes maintained/mowed areas along both sides and in the medians of U.S. 101, as well as other upland and floodplain areas.

Adjacent to and under the San Antonio River bridges, riparian habitat is mostly herbaceous and recovering both from a fire in 2016 and from a Caltrans seismic retrofit project (05-1F820), which disturbed portions of the site in 2020. The 2016 fire affected the riparian habitat south of the bridges (upstream).

Ruderal/Disturbed

Ruderal/disturbed vegetation flanks the edges of U.S. 101 and vegetated medians throughout the entire Biological Study Area, totaling approximately 36.12 acres.

Stream

Mapped streams are generally unvegetated waterways distinguished by the presence of an ordinary high water mark. Three named streams are present within the Biological Study Area: Nacimiento River, Hames Creek, and San Antonio River. No work is proposed in Hames Creek or the Nacimiento River. Perennial stream totals approximately 0.54 acre, and ephemeral stream totals 0.20 acre of the Biological Study Area.

Emergent Wetland

Emergent wetlands, which are transitional areas between inundated and dry soils, are present within the Biological Study Area near the San Antonio River. Hydrophytic plants, hydric soils, and wetland hydrology were observed in the emergent wetlands, on the lower terraces on either side of the San Antonio

River channel. Emergent wetland totals approximately 0.06 acre within the Biological Study Area.

Migration and Travel Corridors

The San Antonio River is a significant migration and travel corridor that runs through the Biological Study Area.

The San Antonio River Bridges span South-Central California Coast steelhead critical habitat, and existing bridge piers are present in the active channel. A fish passage habitat assessment was conducted in July 2023, and the form was submitted to FishPAD. The new bridge piers will be fewer in number and placed outside of the active channel. During a site visit on August 28, 2024, California Department of Fish and Wildlife staff concurred with Caltrans' assessment that the existing bridges are not imposing a fish passage barrier and that the placement of new bridge piers outside of the active channel is ideal.

The post mile R7.78 culvert under U.S. 101 provides wildlife passage for small to medium-sized animals. Wildlife camera traps set up at the culvert inlet (36-inch reinforced concrete pipe) and outlet (4-foot concrete box) showed a variety of species passing through, including most frequently striped skunk, bobcat and opossum. Wildlife cameras captured mule deer investigating the culvert inlet, but not entering. An American badger was photo-captured at the inlet and did not appear to enter the culvert. The culvert will be replaced with a 48-inch-diameter reinforced concrete pipe that will have a larger inlet and a straight alignment, potentially providing wildlife a line-of-sight that the existing structure does not allow.

Post miles R1.9 to R5.7 and R9.5 to 13.8 are mapped as Connectivity Rank 5-Irreplaceable and Essential in the Terrestrial Connectivity Areas of Conservation Emphasis. Within these post mile ranges, project activities include pavement overlay, shoulder backing, guardrail improvements, and slurry seal of both rest stops. The remainder of the Biological Study Area is mapped as Connectivity Rank 3-Connections with Implementation Flexibility.

Federally Designated Critical Habitat

South-Central California Coast Steelhead Critical Habitat

San Antonio River is designated as critical habitat for the South-Central California Coast steelhead distinct population segment. There are no other federally designated critical habitat units in the Biological Study Area.

The U.S. Fish and Wildlife Service considers the Physical and Biological Features essential to the conservation of the species, called Primary Constituent Elements. The Primary Constituent Elements may require special management considerations or protection for the conservation of the species. The Primary Constituent Elements that were assessed to occur within the

Biological Study Area at the proposed bridge replacement location are: 1) South-Central California Coast steelhead Primary Constituent Element 2: freshwater rearing sites in the Biological Study Area, and 2) South-Central California Coast steelhead Primary Constituent Element 3: freshwater migration corridors free of obstruction.

The recovering riparian scrub (compared to what was present prior to 05-1F820) may have reduced constituent elements necessary for steelhead spawning and breeding, such as overhanging large wood and aquatic vegetation. The substrate within the river channel consists of sand and gravel with few cobbles and boulders. There are small, shallow pools present with sand/gravel bottoms within the Biological Study Area, but deeper pools are present upstream and downstream of the Biological Study Area.

Invasive Species

A total of 27 invasive plant species as identified by the online California Invasive Plant Council Database were observed within the Biological Study Area. Five exotic plant species with an invasiveness rating of “High” were observed in the Biological Study Area. A total of 13 plant species were observed within the Biological Study Area with a California Invasive Plant Council invasiveness rating of “Moderate,” and nine species were observed with an invasiveness rating of “Limited.” The distribution of invasive plant species is scattered throughout the Biological Study Area and most common in ruderal/disturbed areas along the edges of U.S. 101.

Regional Species and Habitats/Natural Communities of Concern

“Regional species” and “habitats of concern” are terms synonymous with “special-status” or “sensitive” species and habitats.

Special-status species include taxa that are:

1. Federally or state listed as endangered, threatened, or rare
2. Candidates for federal or state listing as endangered, threatened or rare
3. Proposed for federal or state listing as endangered, threatened, or rare
4. Considered special concern species by the federal government (i.e., U.S. Fish and Wildlife Service Federal Species of Concern) and state government (i.e., California Department of Fish and Wildlife Species of Special Concern), or those that appear on the California Natural Diversity Database Special Animals List

Sensitive species also include taxa afforded protection or considered sensitive under various laws (e.g., NEPA, CEQA, Migratory Bird Treaty Act) or under sections of the Fish and Game Code, and those taxa recognized as

locally important or sensitive by the California Native Plant Society or the scientific community. Sensitive natural communities/habitats include those that are regulated or considered sensitive by federal, state, and/or local agencies or NEPA/CEQA. The known occurrences of sensitive species have been inventoried and mapped, to varying degrees of accuracy, by the California Natural Diversity Database.

Regional Plant Species of Concern

The California Natural Diversity Database documents 30 special-status plant taxa as occurring within the search area. These plant species are federally listed, state listed, and/or California Native Plant Society California Rare Plant Rank 1B, 2, or 4. The official federal species list for the vicinity of the project area received from U.S. Fish and Wildlife Service included one additional federally listed species.

Listed plant species that have habitat present or are present within the Biological Study Area are listed in Table 2.3 below.

Table 2.3. Regional Plant Species of Concern

Common Name	Federal/ State/CA Native Plant Society and Other Status Codes	General Habitat Description	Habitat Present/ Absent?	Presence, Recommendations, and/or Determination
Indian valley spineflower	-- / -- / CA Rare Plant Rank 1B.2	Annual herb, cismontane woodland, sandy substrates; flowers May – September, 985-1,970 feet elevation	Habitat Present	Suitable habitat is present within the Biological Study Area. However, the species was not detected during appropriately timed surveys and is not expected to occur. No further studies are needed. Avoidance and minimization measures are not needed.
La Panza mariposa-lily	-- / -- / CA Rare Plant Rank 1B.3	Perennial bulbiferous herb; occurs in valley and foothill grassland, cismontane woodland, chaparral, lower montane coniferous forest; found on decomposed granite; 1,065-3,775 feet elevation; flowers April - June	Habitat Present	Suitable habitat is present within the Biological Study Area. The species was not detected within the Biological Study Area during appropriately timed surveys. No further studies are needed. Avoidance and minimization measures are not needed.

Common Name	Federal/ State/CA Native Plant Society and Other Status Codes	General Habitat Description	Habitat Present/ Absent?	Presence, Recommendations, and/or Determination
Dwarf calycadenia	-- / -- / CA Rare Plant Rank 1B.1	Annual herb; chaparral, cismontane woodland, valley and foothill grassland; meadows and seeps; open, dry meadows, hillsides, gravelly outwashes, rocky, fine soils; flowers May – October; 790-4,430 feet elevation	Habitat Present	Suitable habitat is present within the Biological Study Area. The species was not detected within the Biological Study Area during appropriately timed surveys. No further studies are needed. Avoidance and minimization measures are not needed.
Hardham's evening-primrose	-- / -- / CA Rare Plant Rank 1B.2	Annual herb; chaparral, cismontane woodland; sandy, decomposed carbonate; disturbed or burned areas; flowers March – May; 460-3,100 feet elevation	Habitat Present/ Present	Approximately 12 plants were observed within the area of potential impact during spring botanical surveys. The species is also known to be present on Camp Roberts property, and a California Natural Diversity Database occurrence overlaps with the Biological Study Area. However, the species was not detected in the portion of the Biological Study Area within Camp Roberts during spring surveys. Avoidance and minimization measures will be implemented for the species.
San Luis Obispo owl's-clover	-- / -- / CA Rare Plant Rank 1B.2	Annual herb; occurs in valley and foothill grassland, meadows, and seeps; sometimes found on serpentine; 35-1,410 feet elevation; flowers March – May	Habitat Present	Marginally suitable habitat is present within the Biological Study Area. The species was not detected during appropriately timed surveys and is not expected to occur. No further studies are needed. Avoidance and minimization measures are not needed.
Lemmon's jewelflower	-- / -- / CA Rare Plant Rank 1B.2	Annual herb; pinyon and juniper woodland, valley and foothill grassland; flowers February – May; 246-5,200 feet elevation	Habitat Present	Suitable habitat is present within the Biological Study Area. The species was not detected within the Biological Study Area during appropriately timed surveys. No further studies are needed. Avoidance and minimization measures are not needed.

Common Name	Federal/ State/CA Native Plant Society and Other Status Codes	General Habitat Description	Habitat Present/ Absent?	Presence, Recommendations, and/or Determination
Jolon clarkia	-- / -- / CA Rare Plant Rank 1B.2	Annual herb; cismontane woodland, chaparral, coastal scrub, riparian woodland; flowers April – June; 66-2,165 feet elevation	Habitat Present	Suitable habitat is present within the Biological Study Area. The species was not detected within woodland habitat during appropriately timed surveys. No further studies are needed. Avoidance and minimization measures are not needed.
Umbrella larkspur	-- / -- / CA Rare Plant Rank 1B.3	Perennial herb; cismontane woodland, chaparral; mesic sites; flowers April – June; 1,312- 5,249 feet elevation	Habitat Present	Suitable habitat is present within the Biological Study Area. The species was not detected within woodland habitat during appropriately timed surveys. No further studies are needed. Avoidance and minimization measures are not needed.
Koch's cord moss	-- / -- / CA Rare Plant Rank 1B.3	Moss; occurs in cismontane woodland soil; non-vascular; 590-3,281 feet elevation; does not flower	Habitat Present	Suitable habitat is present within the Biological Study Area. The species was not detected within woodland habitat during appropriately timed surveys. No further studies are needed. Avoidance and minimization measures are not needed.
Yellow-flowered eriastrum	-- / -- / CA Rare Plant Rank 1B.2	Annual herb; broadleaved upland forest, cismontane woodland, chaparral; on bare sandy decomposed granite slopes or gravelly areas; flowers May – June; 951-3,281 feet elevation	Habitat Present	Suitable habitat is present within the Biological Study Area. The species was not detected within woodland habitat during appropriately timed surveys. No further studies are needed. Avoidance and minimization measures are not needed.

Common Name	Federal/ State/CA Native Plant Society and Other Status Codes	General Habitat Description	Habitat Present/ Absent?	Presence, Recommendations, and/or Determination
Elegant buckwheat	-- / -- / CA Rare Plant Rank 4.3	Annual herb; cismontane woodland and valley and foothill grasslands; microhabitats are usually gravelly or sandy, often washes, and sometimes roadsides; flowers March – November; 655-5,005 feet elevation	Habitat Present/ Present	Suitable habitat is present within the Biological Study Area, and the species was detected during spring 2023 botanical surveys. A total of approximately 40 plants were observed in two locations. One location overlaps with the 0.116-acre location that encompasses the Hardham's evening-primrose plants. The other location (approximately 0.027 acre) is on Camp Roberts property in the potential staging/laydown area east of the San Antonio River bridges. Both locations were distinguished from the surrounding tall non-native annual grasslands around them by a dry sandy substrate and presence of herbaceous plants. Elegant buckwheat was blooming in August 2023 when the late season survey on Camp Roberts property was conducted. Avoidance and minimization measures will be implemented for the species.
Temblor buckwheat	-- / -- / CA Rare Plant Rank 1B.2	Annual herb; valley and foothill grassland; barren clay or sandstone substrates; flowers April – September; 984-3,280 feet elevation	Habitat Present	Marginally suitable habitat is present within the Biological Study Area. The species was not detected during appropriately timed surveys and is not expected to occur. No further studies are needed. Avoidance and minimization measures are not needed.
Santa Lucia purple amole	FE / -- / CA Rare Plant Rank 1B.1	Perennial bulbiferous herb; chaparral, cismontane woodland, valley and foothill grassland; often in grassy areas with blue oaks in foothill woodland; gravelly clay soils; flowers April – June; 787-1,280 feet elevation	Habitat Present	Suitable habitat is present within the Biological Study Area. The species was not detected within the Biological Study Area during appropriately timed surveys. No further studies are needed. The Federal Endangered Species Act effects determination is the project will have <i>no effect</i> on Santa Lucia purple amole. Avoidance and minimization measures are not needed.

Common Name	Federal/ State/CA Native Plant Society and Other Status Codes	General Habitat Description	Habitat Present/ Absent?	Presence, Recommendations, and/or Determination
Pale-yellow layia	-- / -- / CA Rare Plant Rank 1B.1	Annual herb; cismontane woodland, coastal scrub, pinyon-juniper woodland, valley and foothill grassland; alkaline or clay soils; open areas; flowers March – June; 984-5,594 feet elevation	Habitat Present	Suitable habitat is present within the Biological Study Area. The species was not detected within the Biological Study Area during appropriately timed surveys. No further studies are needed. Avoidance and minimization measures are not needed.
Abbot's bush-mallow	-- / -- / CA Rare Plant Rank 1B.1	Perennial deciduous shrub; riparian scrub; among willows, near rivers, and along roadsides; flowers May – October; 443-1,607 feet elevation	Habitat Present	Suitable habitat is present within the Biological Study Area. The species was not detected during appropriately timed surveys and is not expected to occur. No further studies are needed. Avoidance and minimization measures are not needed.
Indian Valley bush-mallow	-- / -- / CA Rare Plant Rank 1B.2	Perennial deciduous shrub; cismontane woodland, chaparral; granitic outcrops and sandy bare soil, often in disturbed soils or burned areas; flowers April – October; 492-5,577 feet elevation	Habitat Present	Suitable habitat is present within the Biological Study Area. The species was not detected during appropriately timed surveys and is not expected to occur. No further studies are needed. Avoidance and minimization measures are not needed.
Davidson's bush-mallow	-- / -- / CA Rare Plant Rank 1B.2	Perennial deciduous shrub; coastal scrub, riparian woodland, chaparral, cismontane woodland; sandy washes; flowers June – January; 607-2,805 feet elevation	Habitat Present	Suitable habitat is present within the Biological Study Area. The species was not detected during appropriately timed surveys and is not expected to occur. No further studies are needed. Avoidance and minimization measures are not needed.
Carmel Valley bush-mallow	-- / -- / CA Rare Plant Rank 1B.2	Perennial deciduous shrub; cismontane woodland, chaparral, coastal scrub; talus hilltops and slopes, sometimes on serpentine; fire dependent; flowers April – October; 98-3,609 feet elevation	Habitat Present	Suitable habitat is present within the Biological Study Area. The species was not detected during appropriately timed surveys and is not expected to occur. No further studies are needed. Avoidance and minimization measures are not needed.

Common Name	Federal/ State/CA Native Plant Society and Other Status Codes	General Habitat Description	Habitat Present/Absent?	Presence, Recommendations, and/or Determination
Shining navarretia	-- / -- / CA Rare Plant Rank 1B.2	Annual herb; cismontane woodland, valley and foothill grassland, and sometimes vernal pools; flowers March – July; 197-3,281 feet elevation	Habitat Present	Suitable habitat is present within the Biological Study Area. The species was not detected within the Biological Study Area during appropriately timed surveys. No further studies are needed. Avoidance and minimization measures are not needed.
Robbins' nemacladus	-- / -- / CA Rare Plant Rank 1B.2	Annual herb; chaparral, valley, and foothill grassland; dry, sandy, or gravelly slopes; flowers April – June; 1,148-5,577 feet elevation	Habitat Present	Suitable habitat is present within the Biological Study Area. The species was not detected within the Biological Study Area during appropriately timed surveys. No further studies are needed. Avoidance and minimization measures are not needed.
Hooked popcorn-flower	-- / -- / CA Rare Plant Rank 1B.2	Annual herb; chaparral, cismontane woodland, valley, and foothill grassland; sandstone outcrops and canyon sides; often in burned or disturbed areas; flowers April – May; 984-2,493 feet elevation	Habitat Present	Suitable habitat is present within the Biological Study Area. The species was not detected within the Biological Study Area during appropriately timed surveys. No further studies are needed. Avoidance and minimization measures are not needed.
Santa Cruz microseris	-- / -- / CA Rare Plant Rank 1B.2	Annual herb; broadleafed upland forest, closed-cone coniferous forest, chaparral, coastal prairie, coastal scrub, valley and foothill grassland; open areas in loose or disturbed soil; usually derived from sandstone, shale or serpentine, on seaward slopes; flowers April – May; 33-1,640 feet elevation	Habitat Present	Suitable habitat is present within the Biological Study Area. The species was not detected within the Biological Study Area during appropriately timed surveys. No further studies are needed. Avoidance and minimization measures are not needed.

Regional Animal Species of Concern

The California Natural Diversity Database documents 24 special-status animal taxa as occurring within the search area. Classifications for protected species include federally listed, state-listed, California Fully Protected, Species of Special Concern, Natural Diversity Database Special Animals, and/or protected by the Migratory Bird Treaty Act and Fish and Game Code.

In addition, one additional California Species of Special Concern animal, four additional federally listed species from the U.S. Fish and Wildlife Service, and one additional federally listed species from National Marine Fisheries Service were included.

Table 2.4 lists the names and legal status of each of the special-status animals with habitat present or known presence in the Biological Study Area; also included is a general description of the habitat requirements for each. The far right column of the table (Presence, Recommendations, and/or Determination) summarizes the potential for each taxon to occur in the Biological Study Area or be affected by the project.

[The following paragraph has been added since the draft environmental document was circulated.] The geotechnical investigation activities are not expected to negatively impact Species of Special Concern. This is due to the minimal expected impact, short duration, temporary nature of the work, and incorporated avoidance and minimization measures. A completed list of avoidance and minimization measures for the geotechnical drilling operation, which includes measures for species of special concern, is provided below.

Table 2.4. Regional Animal Species of Concern

Common Name	Federal/ State/and Other Status Codes	General Habitat Description	Habitat Present/ Absent in Biological Study Area?	Presence, Recommendations, and/or Determination
Amphibians— California Red-legged Frog	Federally Threatened / -- / --	Riparian and upland dispersal habitats with aquatic breeding areas within. Breeding occurs in pools, backwaters within streams, creeks, ponds, marshes, springs, sag ponds, dune ponds and lagoons. Elevation sea level – 1,500 meters.	Habitat Present	Though marginally suitable dispersal and upland habitat is present within the Biological Study Area, the species is not historically recorded in the area and is not expected to occur. The species was not observed during wildlife surveys, though protocol surveys were not conducted. The project site is not within a California red-legged frog designated critical habitat unit. The Federal Endangered Species Act determination is that the project will have <i>no effect</i> on California red-legged

Common Name	Federal/ State/and Other Status Codes	General Habitat Description	Habitat Present/ Absent in Biological Study Area?	Presence, Recommendations, and/or Determination
				frog. Avoidance and minimization measures are not needed.
Amphibians— Western spadefoot toad	Federal Proposed Threatened/ -- / California Species of Special Concern	Prefers open areas with sandy or gravelly soils in a variety of habitats, Central Valley, Central Coast and Southern California into Baja California. Spends most of the year in underground burrows. Breeding sites include vernal pools and other temporary rain pools, cattle tanks, and occasionally in pools of intermittent streams that do not have predators like bullfrogs or crayfish. Breeds in temporary shallow rain pools, January to May.	Habitat Present	No western spadefoot toads were observed during surveys within the Biological Study Area. Though vernal pools are not present, upper terraces and secondary washes of the San Antonio River provides potentially suitable spadefoot habitat. Marginally suitable western spadefoot habitat was also observed in tire ruts along a dirt access road adjacent to post mile R7.78 culvert outlet that had ponded water in winter and early spring. Suitable road rut habitat may be present on portions of the Camp Roberts property that were not surveyed during winter or early spring 2023. Follow-up botanical surveys are planned for this area during the project final design phase and will also identify any suitable spadefoot habitat. Avoidance and minimization measures are recommended. [As a result of technical assistance, the following paragraph has been edited since the draft environmental document was circulated.] The project is not likely to jeopardize the continued existence of the proposed listed western spadefoot or destroy or adversely modify proposed critical habitat. If the species is listed prior to construction, the Federal Endangered Species Act determination is that <i>the project may affect, and is likely to adversely affect</i> western spadefoot toad. Avoidance and minimization measures will be implemented for the species.
Reptiles— Coast horned lizard	-- / -- / California Species of Special Concern	Inhabits open areas of sandy soil and low vegetation in valleys, foothills and semiarid mountains, typically in sandy washes with scattered shrubs. This species is found along the Pacific	Habitat Present	Suitable habitat is present in dry sandy washes and coastal scrub habitat within the Biological Study Area. Avoidance and minimization measures will be implemented for the species.

Common Name	Federal/ State/and Other Status Codes	General Habitat Description	Habitat Present/ Absent in Biological Study Area?	Presence, Recommendations, and/or Determination
		Coast from Baja California north to the San Francisco Bay area, and inland as far north as the Shasta Reservoir and as far south as Baja California.		
Reptiles—Northern California legless lizard	-- / -- / California Species of Special Concern	Occurs from the southern edge of the San Joaquin River in northern Contra Costa County south to the Ventura County, in sandy soil and sparsely vegetated areas of beach dunes, scrub, woodlands, and sandy washes. Prefers soils with a high moisture content.	Habitat Present	Suitable habitat is present in oak woodland habitat within the Biological Study Area. Avoidance and minimization measures will be implemented for the species.
Reptiles—Southwestern pond turtle	Federal Proposed Threatened/ -- /California Species of Special Concern	Occurs in quiet waters of ponds, marshes, rivers, streams, and irrigation ditches, usually with aquatic vegetation, below 6,000 feet. Needs basking sites and suitable upland habitat like sandy banks or grassy open fields up to 0.3 mile from water for egg-laying.	Habitat Present /Present	An adult southwestern pond turtle was observed basking on a log within the San Antonio River near the bridge structures in 2023. The Biological Study Area provides suitable aquatic habitat for this species at San Antonio River, and the adjacent open grassland habitat on floodplain terraces may provide suitable upland nesting habitat as well as dispersal habitat. The nearest California Natural Diversity Database occurrence is upstream of the U.S. 101 Nacimiento River Bridges on Camp Roberts Military Base from 1994. Adult and juvenile individuals were observed along the Nacimiento River during amphibian surveys conducted at Camp Roberts in 2018. [As a result of technical assistance, the following paragraph has been edited since the draft environmental document was circulated.] The project is not likely to jeopardize the continued existence of the proposed listed southwestern pond turtle or destroy or adversely modify proposed critical

Common Name	Federal/ State/and Other Status Codes	General Habitat Description	Habitat Present/ Absent in Biological Study Area?	Presence, Recommendations, and/or Determination
				habitat. If the species is listed prior to construction, the Federal Endangered Species Act determination is that <i>the project may affect, and is likely to adversely affect</i> southwestern pond turtle. Avoidance and minimization measures will be implemented for the species.
Reptiles—San Joaquin coachwhip snake	-- / -- / California Species of Special Concern	Open, dry habitats with little or no tree cover. Found in valley grassland and saltbush scrub in the San Joaquin Valley. Needs mammal burrows for refuge and oviposition sites.	Habitat Present	Suitable habitat is present in dry sandy washes and grassland habitat within the Biological Study Area. Avoidance and minimization measures will be implemented for the species.
Birds—Tricolored blackbird	Protected by Migratory Bird Treaty Act / State Threatened / California Species of Special Concern	Highly colonial species, most numerous in Central Valley and vicinity. Largely endemic to California. Breeds in large freshwater marshes. Requires open water, protected nesting substrate of cattails or bulrushes, and foraging area with insect prey near the colony.	Habitat Present	Marginally suitable habitat is present in emergent wetland vegetation within the San Antonio River floodplain. The species was not detected during surveys and is not expected to occur within the Area of Potential Impact. The California Endangered Species Act determination is that no take of tricolored blackbird will occur. Avoidance and minimization measures will be implemented for the species.
Birds—Great blue heron	Protected by Migratory Bird Treaty Act / -- / --	Colonial nester in tall trees, cliffsides, and sequestered spots on marshes. Rookery sites in close proximity to foraging areas: marshes, lake margins, tide-flats, rivers and streams, wet meadows.	Habitat Present	Suitable habitat is present for nesting great blue heron. Known rookeries are present in the region, but none were observed within the Biological Study Area. Avoidance and minimization measures will be implemented for the species.
Birds—Burrowing owl	Protected by Migratory Bird Treaty Act / -- / California Species of Special Concern	Open, dry annual or perennial grasslands, deserts and scrublands characterized by low-growing vegetation. Subterranean nester, dependent on	Habitat Present	Marginally suitable habitat is present within the Biological Study Area. Most of the annual grasslands within the Biological Study Area are tall and do not provide ideal burrowing owl habitat. The species was not detected during surveys and is not expected to occur within the Area of Potential Impact.

Common Name	Federal/ State/and Other Status Codes	General Habitat Description	Habitat Present/ Absent in Biological Study Area?	Presence, Recommendations, and/or Determination
		mammal burrows for nests, especially California ground squirrel. Preferred nesting sites have loose soil, some elevation to avoid floods, outlooks, and a high density of burrows.		Avoidance and minimization measures will be implemented for the species.
Birds—Yellow-billed cuckoo	Federally Threatened / -- / --	Wooded habitat with dense cover and water nearby, including woodlands with low, scrubby, vegetation along streams and marshes. Nests often placed in willows along streams and rivers with nearby cottonwoods serving as foraging sites.	Habitat Present	Suitable nesting habitat is present in the Biological Study Area. The species was not detected during surveys and is not expected to occur within the Area of Potential Impact. No California Natural Diversity Database records of yellow-billed cuckoo exist within the six-quad search for this project. The Federal Endangered Species Act determination is that the project will have <i>no effect</i> on yellow-billed cuckoo. Avoidance measures for nesting birds are recommended.
Birds—Southwestern willow flycatcher	Federally Endangered, Protected by Migratory Bird Treaty Act / State Endangered / Critical Habitat	Breeds in marshes and riparian areas, while wintering in shrubby clearings and early successional growth. Nests are near water and low, especially in crotch of trees or bushes. Habitat patches of 0.25 acre and 30 feet minimum width.	Habitat Present	Suitable nesting and foraging habitat is present in the Biological Study Area. The species was not detected in the Biological Study Area during surveys for this project. The Federal Endangered Species Act determination is that the project <i>may affect but is not likely to adversely affect</i> southwestern willow flycatcher. The California Endangered Species Act determination is no take of the species will occur. Avoidance and minimization measures will be implemented for the species. Critical Habitat for the species is not present within the Biological Study Area. The project will have no effect to southwestern willow flycatcher Critical Habitat. Avoidance and minimization measures for its critical habitat are not needed.
Birds—Bald eagle	Bald and Golden Eagle Protection Act,	Ocean shore, lake margins, and rivers for both nesting and wintering. Most nests	Habitat Present/ Present	Though habitat for nesting eagles is not present in the Biological Study Area, the nearest known bald eagle nest is within about 700 feet of the

Common Name	Federal/ State/and Other Status Codes	General Habitat Description	Habitat Present/ Absent in Biological Study Area?	Presence, Recommendations, and/or Determination
	Protected by Migratory Bird Treaty Act, Federal Delisted/ State Endangered /Fully Protected	within 1 mile of water. Nests in large, old-growth, or dominant live tree with open branches, especially Ponderosa pine. Roosts communally in winter.		Biological Study Area along the Salinas River. This indicates that project activities will occur far enough away from the known nest to avoid disturbance. Bald eagles were seen soaring over the Biological Study Area on several site visits. The project will not result in take of bald eagle. Avoidance and minimization measures will be implemented for the species.
Birds— Yellow warbler	Protected by Migratory Bird Treaty Act / -- / California Species of Special Concern	Riparian deciduous habitats and plant associations. Nests in montane shrubbery in open conifer forests in Cascades, especially in cottonwoods, willows, alders. Nest is an open cup placed 2-16 feet above ground in a deciduous sapling or shrub.	Habitat Present	Suitable nesting and foraging habitat is present for yellow warbler within the Biological Study Area. Avoidance and minimization measures will be implemented for the species.
Birds— Least Bell's vireo	Federally Endangered, Protected by Migratory Bird Treaty Act / State Endangered/ --	Dense, low, shrubby vegetation, generally early successional stages in riparian areas, brushy fields, young second-growth forest or woodland, scrub oak, coastal chaparral, and mesquite brushlands, often near water in arid regions. Builds its nests with lichens and mosses. Summer resident of Monterey County and Central and Southern California coasts in low riparian areas in vicinity of water or in dry river bottoms; below 2,000 feet.	Habitat Present	Suitable nesting and foraging habitat is present within the Biological Study Area. The species was not detected in the Biological Study Area during surveys for this project. The Federal Endangered Species Act determination is that the project <i>may affect but is not likely to adversely affect</i> least Bell's vireo. The California Endangered Species Act determination is no take of the species will occur. Avoidance and minimization measures will be implemented for the species.

Common Name	Federal/ State/and Other Status Codes	General Habitat Description	Habitat Present/ Absent in Biological Study Area?	Presence, Recommendations, and/or Determination
Fish— Monterey hitch	-- / -- / California Species of Special Concern	Known from Sacramento-San Joaquin, Clear Lake, Russian River, and Pajaro-Salinas River drainages. Spawning occurs mainly in riffles of streams tributary to lakes, rivers, and sloughs, after flows increase in response to spring rains. Found in low-gradient sites with permanent water and large pools in summer. Spawning requirements are in need of further documentation.	Habitat Present	Monterey hitch was not observed in the Biological Study Area, but suitable habitat is present within San Antonio River. The species has been detected on Camp Roberts within Salinas River and Nacimiento River. The nearest California Natural Diversity Database occurrence includes the Salinas River from the ocean to approximately San Miguel and a portion of the Nacimiento River. Though not documented, the presence of Monterey hitch in San Antonio River is possible due to its hydrologic connection with the Salinas River and similar habitat suitability. Measures proposed for South-Central California Coast steelhead will also avoid and minimize impacts to Monterey hitch.
Fish— Steelhead – South-Central California Coast DPS	Federally Threatened / -- / Critical Habitat	Federal listing refers to runs in coastal basins from the Pajaro River south to, but not including, the Santa Maria River. Need adequate streamflow for return passage to streams and rivers to spawn. Require cool, clean water.	Habitat Present	Suitable habitat is present within the Biological Study Area in San Antonio River. The California Department of Fish and Wildlife has preliminarily determined that there are no fish passage issues associated with the existing San Antonio River bridges or the proposed bridge replacement. The species was not detected in the Biological Study Area during surveys for this project. The Federal Endangered Species Act determination is that the project <i>may affect, and is likely to adversely affect</i> South-Central California Coast steelhead. [The following sentence has been added since the draft environmental document was circulated.] The geotechnical investigations will have <i>no effect</i> to South-Central California Coast steelhead. Avoidance and minimization measures will be implemented for the species.

Common Name	Federal/ State/and Other Status Codes	General Habitat Description	Habitat Present/ Absent in Biological Study Area?	Presence, Recommendations, and/or Determination
Invertebrates— Crotch bumblebee	Candidate Endangered	Coastal California east to the Sierra-Cascade crest and south into Mexico. Inhabits open grasslands, shrublands, chaparral, desert margins, and semi-urban settings. Nests in abandoned rodent nests, tufts of grass, old bird nests, rock piles, or cavities in dead trees.	Habitat Present	Suitable habitat is present in the Biological Study Area. Annual grasslands and coastal scrub contain suitable flowering/nectar species for feeding and burrows/woody debris in the Biological Study Area provides potentially suitable nesting habitat. Surveys to detect the bumblebee will be conducted in the design phase. If the species is detected, Caltrans will seek a 2081 permit with California Department of Fish and Wildlife. No take of Crotch bumblebee is anticipated. Avoidance and minimization measures will be implemented for the species.
Mammals— Pallid bat	-- / -- / California Species of Special Concern	Deserts, grasslands, shrublands, woodlands and forests. Most common in open, dry habitats with rocky areas for roosting. Roosts must protect bats from high temperatures. Day roosts are in caves, crevices, mines, and occasionally in hollow trees and buildings. Night roosts may be in more open sites, such as porches and buildings. Very sensitive to disturbance of roosting sites.	Habitat Present/ Present	Suitable roosting habitat is present within the Biological Study Area. The species was detected day and night roosting in bridge structures over San Antonio River, and evidence of the species was detected in the post mile R7.78 culvert. Avoidance, minimization, and mitigation measures will be implemented for the species.

Common Name	Federal/ State/and Other Status Codes	General Habitat Description	Habitat Present/ Absent in Biological Study Area?	Presence, Recommendations, and/or Determination
Mammals— Townsend's big-eared bat	-- / -- / California Species of Special Concern	Throughout California in a wide variety of habitats. Most common in mesic sites. Roosts in the open, hanging from walls and ceilings. Roosting sites limiting. May use trees for day and night roosts; however, requires caves, mines, rock faces, bridges or buildings for maternity roosts. Maternity roosts are in relatively warm sites. Extremely sensitive to human disturbance.	Habitat Present/ Present	Suitable roosting habitat is present within the Biological Study Area. The species was detected day roosting within the post mile R7.78 culvert. Avoidance, minimization, and mitigation measures will be implemented for the species.
Mammals— Hoary bat	-- / -- / --	Prefers open habitats or habitat mosaics, with access to trees for cover and open areas or habitat edges for feeding. Roosts in dense foliage of medium to large trees. Feeds primarily on moths. Requires water.	Habitat Present	Suitable tree roosting habitat is present in large red willows and cottonwoods within the Biological Study Area. The species was not detected during project surveys. Avoidance, minimization, and mitigation measures will be implemented for the species.
Mammals— Monterey dusky-footed woodrat	-- / -- / California Species of Special Concern, included on California Natural Diversity Database Special Animals List	Forest habitats of moderate canopy and moderate to dense understory. Also in chaparral habitats. Shaded areas, can build stick homes up to 5 feet high and 8 feet in diameter on the ground or in trees.	Habitat Present/ Present	Suitable habitat is present within oak woodland and coastal scrub habitats of the Biological Study Area. Woodrats were detected at post mile R7.78. Avoidance and minimization measures will be implemented for the species.
Mammals— Salinas pocket mouse	-- / -- / California Species of Special Concern	Annual grassland and desert shrub communities in the Salinas Valley. Fine-textured, sandy, friable soils. Burrows for cover and nesting.	Habitat Present	Suitable habitat is present for Salinas pocket mouse within the Biological Study Area. The species was not detected during project surveys. Avoidance and minimization measures will be implemented for the species.

Common Name	Federal/ State/and Other Status Codes	General Habitat Description	Habitat Present/ Absent in Biological Study Area?	Presence, Recommendations, and/or Determination
Mammals— American badger	-- / -- / California Species of Special Concern	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils. Needs sufficient food, friable soils and open, uncultivated ground. Preys on burrowing rodents. Digs burrows.	Habitat Present/ Present	Suitable habitat is present within the Biological Study Area for American badger. Sign of foraging American badger was detected during project surveys within grasslands of the Biological Study Area. Avoidance and minimization measures will be implemented for the species.
Mammals— San Joaquin kit fox	Federal Endangered / State Threatened / --	Annual grasslands or grassy open stages with scattered shrubby vegetation. Needs loose-textured sandy soils for burrowing, and suitable prey base.	Habitat Present	Suitable habitat is present within the Biological Study Area for San Joaquin kit fox. The species was not detected during surveys for this project and is not expected to occur. The Federal Endangered Species Act determination is that the project <i>may affect, but is unlikely to adversely affect</i> San Joaquin kit fox. No take of the species will occur. Avoidance and minimization measures will be implemented for the species. [The following sentence has been added since the draft environmental document was circulated.] The geotechnical investigations will have <i>no effect</i> to San Joaquin kit fox.

Regional Habitats of Concern

The California Natural Diversity Database documents two regional habitats of concern that are considered sensitive as occurring within the search area, but neither one is present in the Biological Study Area. Also, U.S. Fish and Wildlife Service-designated critical habitat and the California Department of Fish and Wildlife's Classification and Mapping Program (VegCAMP) were referenced for regional habitats of concern. The only habitat of concern present in the Biological Study Area during surveys was critical habitat for steelhead, which is discussed in Table 2.5 below.

Table 2.5. Regional Habitats of Concern

Habitat/ Natural Community	Federal / State / California Department of Fish and Wildlife and Other Status Codes	Natural Community Description	Habitat Present/ Absent in Biological Study Area?	Rationale
Critical Habitat for Steelhead – South-Central California Coast Steelhead Distinct Population Segment	Critical Habitat / -- / --	The San Antonio River, Nacimiento River, and the nearby Salinas River, are designated as critical habitat for the South-Central California Coast steelhead Distinct Population Segment and identified as the Paso Robles hydrologic sub-area of the designation.	Habitat Present	Critical Habitat is present in the Biological Study Area. The project will temporarily impact Critical Habitat during bridge replacement activities at San Antonio River. The Federal Endangered Species Act determination is that the project <i>may affect, and is likely to adversely affect</i> designated Critical Habitat for South-Central California Coast steelhead. [The following sentence has been added since the draft environmental document was circulated.] The geotechnical investigations will have <i>no effect</i> to South-Central California Coast steelhead critical habitat. The avoidance and minimization measures described for jurisdictional features will also serve to avoid and minimize project-related impacts to steelhead designated critical habitat. Additional measures specific to steelhead and its habitat are included below.

Jurisdictional Features

Jurisdictional U.S. Army Corps of Engineers wetlands include areas: 1) where all three wetland parameters (i.e., hydrophytic vegetation, hydric soil, and wetland hydrology) are present, and 2) that are either confined within the ordinary high water mark of a drainage feature or exhibit a nexus/connectivity to jurisdictional waters. For the purposes of this project, Regional Water Quality Control Board jurisdiction is treated as equivalent to U.S. Army Corps of Engineers jurisdiction for Clean Water Act Section 401/404 permitting purposes. California Department of Fish and Wildlife jurisdiction encompasses rivers, streams, and lakes extending from the thalweg (lowest bed elevation) to the top of the surrounding banks and/or outer edge of adjacent riparian vegetation, whichever is greater.

Jurisdictional features were delineated within the Biological Study Area between May 8, 2023, and August 23, 2023, by Caltrans biologists.

Table 2.6 quantifies the delineated potential jurisdictional areas by resource agency.

Table 2.6. Jurisdictional Areas

Agency	Jurisdictional Types	Area (acres)	Length (linear feet)
U.S. Army Corps of Engineers	Other Waters – Perennial Streams	0.54	532
U.S. Army Corps of Engineers	Other Waters – Ephemeral Concrete Lined Streams	0.20	163
U.S. Army Corps of Engineers	Emergent Wetland	0.06	204
U.S. Army Corps of Engineers	Total U.S. Army Corps of Engineers Jurisdiction	0.8	899
Regional Water Quality Control Board	Other Waters – Perennial Streams	0.54	532
Regional Water Quality Control Board	Other Waters – Ephemeral Concrete Lined Streams	0.20	163
Regional Water Quality Control Board	Emergent Wetland	0.06	204
Regional Water Quality Control Board	Riparian Woodland Zone	2.23	485
Regional Water Quality Control Board	Recovering Woody Riparian	0.43	75
Regional Water Quality Control Board	Herbaceous Streambank	1.56	355
Regional Water Quality Control Board	Total Regional Water Quality Control Board Jurisdiction	5.02	1,814
California Department of Fish and Wildlife	Streambed/Perennial Stream	0.54	532
California Department of Fish and Wildlife	Streambed/Ephemeral Stream, Concrete Lined	0.20	163
California Department of Fish and Wildlife	Emergent Wetland (in-stream)	0.06	204
California Department of Fish and Wildlife	Riparian Woodland Zone	2.23	485
California Department of Fish and Wildlife	Recovering Woody Riparian	0.43	75
California Department of Fish and Wildlife	Herbaceous Streambank	1.56	355

Agency	Jurisdictional Types	Area (acres)	Length (linear feet)
California Department of Fish and Wildlife	Total California Department of Fish and Wildlife Jurisdiction	5.02	1,814

Below is a description of where jurisdictional features are located within the Biological Study Area, which may be affected by the project and the characteristics of these features.

San Antonio River Corridor: At post mile R6.70, within the Biological Study Area, the San Antonio River is a perennial stream that has flows and releases controlled upstream by a dam at the San Antonio Reservoir. The San Antonio River perennial stream is subject to U.S. Army Corps of Engineers, Regional Water Quality Control Board, and California Department of Fish and Wildlife jurisdiction.

The large storms in January and March of 2023 left deposits throughout the floodplain. Where the previous 2020 seismic retrofit project impacted vegetation, several patches of recently restored riparian tree and shrub plantings are present and this area is mapped as “recovering woody riparian.” A 2016 wildfire also impacted a portion of the Biological Study Area upstream of the bridges. Downstream of these recovering areas, the riparian vegetation resembles mature mixed willow riparian forest. On the southeast side of the San Antonio River, adjoining the Camp Roberts base property, the riverbank includes a narrow riparian band of sandbar willow as well as concrete slope paving under the bridges.

During delineations on August 23, 2023, it was noted that hydrophytic vegetation had grown substantially along the low terraces on either side of the San Antonio River channel. This area met all three wetland criteria for at least part of the growing season and is mapped as an instream emergent wetland. The in-stream emergent wetland is subject to U.S. Army Corps of Engineers, Regional Water Quality Control Board, and California Department of Fish and Wildlife jurisdiction and totals approximately 0.06 acre.

Salinas River Corridor: At post mile R7.78, an existing culvert under U.S. 101 outlets near the edge of the Salinas River corridor. The culvert itself does not convey jurisdictional flows; the culvert inlet is a swale feature with annual upland grasses that shows no evidence of flow. The outlet shows some evidence of flow and some sediment sorting at the culvert; however, this dissipates without reaching another feature and appears to be a function of the steep embankment slope at the culvert outlet. The outlet feature is a storm water feature that dissipates into coyote brush, upland vegetation, and eventually onto an existing unpaved access road. This location did not flow beyond the upland vegetation during the recent heavy rain year. Though the

primary channel of the Salinas River is 1,000 feet east of the culvert, the extensive riparian forest associated with the Salinas River extends into the Biological Study Area.

Environmental Consequences

Habitats and Natural Communities of Special Concern

Impacts have been quantified based on estimated ground disturbance, disturbed vegetation, and other disturbance related to the project. These impact areas make up the Area of Potential Impact. To quantify project impacts, impact areas were overlain on jurisdictional areas and habitats in a map. Estimates of impacts to various habitat types are shown in Table 2.7.

Table 2.7. Estimated Impacts to Habitats and Natural Communities of Concern

Natural Community/Habitat	Permanent Impacts (acres)	Permanent Impacts (square feet)	Permanent Benefit (acres)	Permanent Impacts (square feet)	Temporary Impacts (acres)	Temporary Impacts (square feet)
Willow Woodland and Thicket	0	0	0	0	0.804	35,020
Recovering Woody Riparian	0	0	0	0	0.426	18,544
Fremont Cottonwood Riparian Forest	0	0	0	0	0.275	11,964
Herbaceous Streambank	0.0092	400	+0.0131	+572	0.981	42,718
Blue Oak Woodland and Forest	0.0079	342	0	0	0.151	6,581
Coyote Brush Scrub	0	0	0	0	1.661	72,339
Wild Oats and Annual Brome Grassland	0.0066	288	0	0	29.276	1,275,253
Ruderal/Disturbed	0	0	0	0	35.589	1,550,251
Stream/Other Waters	0	0	+0.0074	+324	0.302	13,155
Emergent Wetland	0	0	0	0	0.041	1,779
Steelhead Critical Habitat	0	0	+0.0074	+324	0.302	13,155

Project work will occur mostly along the paved travel way and will not extend beyond 20 feet of the edge of pavement, except in specified bridge and culvert locations.

One valley oak near the southbound lane is proposed for removal due to vehicle collision history. Approximately 10 native trees are anticipated for removal in jurisdictional areas for work related to bridge replacements. Culvert replacement at post mile R7.78 may require pruning of trees within jurisdictional areas. Two blue oak trees in upland areas at post mile R7.78 may require removal. [The following sentences have been updated since the draft environmental document was circulated.] Caltrans will replace removed native trees within jurisdictional areas that are less than 12 inches in diameter at breast height at a 3-to-1 ratio, and will replace trees equal to or greater than 12 inches in diameter at breast height at a 10-to-1 ratio. Temporary impacts will occur mostly from equipment access, clearing vegetation, staging, and stock piling. Temporary impacts to jurisdictional areas will be restored at a 1-to-1 ratio.

Impacts will result mostly from the use of construction equipment and associated worker foot traffic. Trucks, bulldozers, backhoes, compactors, cranes, pile drivers, asphalt concrete rollers, clamshells, excavators, compressors, pavers, water trucks, sweepers, and any other equipment necessary for construction will be used. Staging may occur in closed lanes behind a temporary concrete protective barrier or along ruderal/disturbed medians or edges of U.S. 101. Staging for bridge replacements may occur in adjacent Camp Roberts property northeast of the bridges.

Jurisdictional Impacts

Estimated impacts to jurisdictional waters are shown in Table 2.8. These impacts were determined by overlaying the project Area of Potential Impact with the preliminary jurisdictional determination and habitat mapping. Impacts to jurisdictional features will occur at the San Antonio River Bridges location (post mile R6.7) and at the post mile R7.78 culvert.

Permanent impacts to other waters/streambed are not anticipated. Permanent impacts to riparian and streambank habitat will come from the construction of new piers in locations that are not currently hardscapes for the San Antonio River Bridges. However, due to the reduced number of support structures for both build alternatives, the project will result in a net reduction of structures within the streambed and riparian/streambank corridor. Reestablishment of streambed, riparian and streambank habitat where existing supports are removed will offset the new permanent structure.

The existing structures are each composed of six pier walls, measuring approximately 27 feet long by 6 feet wide, that support the existing bridges. Each bridge has four pier walls within jurisdictional areas. Each existing pier wall occupies approximately 162 square feet, for a total of 1,296 square feet

(0.0298 acre) of existing pier structures in jurisdictional areas. The new bridges will consist of three piers that are composed of two circular columns, each 8 feet in diameter, resulting in 50 square feet of permanent impact per column. Only four piers will be placed in jurisdictional streambank. Therefore, the new bridge will have approximately 400 square feet (0.0092 acre) of permanent pier impacts in jurisdictional areas (herbaceous streambank). Permanent removal of one existing pier below the ordinary high water mark will result in reestablishment of approximately 324 square feet (0.0074 acre) of streambed. Removal of remaining piers will result in reestablishment of approximately 972 square feet (0.0223 acre) of herbaceous streambank area for a net increase of approximately 572 square feet (0.0131 acre) of streambank.

Temporary impacts to jurisdictional features will occur due to vegetation removal/pruning and temporary access at the San Antonio River location and at the post mile R7.78 culvert. Diversion and dewatering activities will occur at the San Antonio River location. A total of approximately 13,155 square feet (0.302 acre) of U.S. Army Corps of Engineers, Regional Water Quality Control Board and California Department of Fish and Wildlife jurisdictional stream may be temporarily impacted. A total of approximately 108,246 square feet (2.485 acres) Regional Water Quality Control Board and California Department of Fish and Wildlife jurisdictional riparian may be temporarily impacted. A total of approximately 1,779 square feet (0.041 acres) of U.S. Army Corps of Engineers, Regional Water Quality Control Board and California Department of Fish and Wildlife jurisdictional in-stream emergent wetland will be temporarily impacted. Removal of existing hardscape and structural elements will reestablish jurisdictional areas and fully offset permanent impacts.

Table 2.8 quantifies impacts at the San Antonio River Bridges. Temporary impacts to jurisdictional areas will be restored. Replacement plantings also will be detailed in Caltrans' Landscape Architecture Landscape Planting Plan and the final Mitigation Monitoring Plan.

Alternative 1 and Alternative 2 bridge designs have the same footprint and therefore the same permanent and temporary impact areas to jurisdictional aquatic resources. The main difference between the two alternatives is the temporary impact. Alternative 2 will require 254 more working days to complete. Alternative 2 will incur impacts to the San Antonio River stream and riparian resources for a longer duration, including an additional season.

Table 2.8 Estimated Impacts to Jurisdictional Areas

Jurisdictional Areas	Permanent Impacts (acres)	Permanent Benefit (Reestablishment) (acres)	Temporary Impacts (acres)
Intermittent Streambed (U.S. Army Corps of Engineers, California Department of Fish and Wildlife, Regional Water Quality Control Board jurisdiction)	0	+0.0074	0.302
In-stream Emergent Wetland (U.S. Army Corps of Engineers, California Department of Fish and Wildlife, Regional Water Quality Control Board jurisdiction)	0	0	0.041
Willow Woodland and Thicket Riparian (California Department of Fish and Wildlife and Regional Water Quality Control Board jurisdiction)	0	0	0.804
Recovering Woody Riparian streambank areas (California Department of Fish and Wildlife and Regional Water Quality Control Board jurisdiction)	0	0	0.426
Herbaceous streambank (California Department of Fish and Wildlife and Regional Water Quality Control Board jurisdiction)	0.0092	+0.0131	0.981
Cottonwood Riparian Forest (California Department of Fish and Wildlife and Regional Water Quality Control Board jurisdiction)	0	0	0.275
Total Area	0.0092	+0.0205	2.829

Critical Habitat

Adverse modification of critical habitat is defined as a “direct or indirect alteration that appreciably diminished the value of critical habitat for both the species survival and recovery.” The project may result in adverse impacts to South-Central California Coast steelhead designated critical habitat, which includes temporary impacts to aquatic habitat and adjacent riparian vegetation. Temporary impacts to steelhead designated critical habitat are associated with riparian vegetation removal, stream dewatering and diversion, bridge demolition, heavy equipment operation, and bridge reconstruction activities. In total, the Biological Study Area includes approximately 18,861 square feet (0.433 acre) of steelhead aquatic habitat over a 360-linear-foot distance. Project activities are anticipated to temporarily impact approximately 0.302 acre (232 linear feet) of steelhead designated critical habitat within the Area of Potential Impact.

No permanent impacts to steelhead critical habitat are anticipated with this project. The existing bridge pier that is currently within the active channel is proposed for removal. Pilings for the new replacement structure will be placed outside of the active channel, thereby providing a net increase in stream habitat.

Approximately 0.302 acre (232 linear feet) of steelhead critical habitat will be temporarily impacted. Of the 1,240 total miles (6,546,239 linear feet) of stream within South-Central California Coast steelhead critical habitat, the total impacts associated with the proposed project equate to approximately 0.00005 percent of this critical habitat unit. However, the bridge replacements will require stream diversion/dewatering, which will temporarily alter quality of aquatic habitat and result in a temporary loss of service for steelhead over a span of up to three years. Alternative 2 would require 254 more working days (one more season) to complete than Alternative 1 would. Alternative 2 would incur impacts to critical habitat for a longer duration. The loss of service would occur in part in an area that serves as a freshwater rearing site (Primary Constituent Element 2). Diversions will be removed prior to the rainy season of each year of construction. Removal of vegetation for bridge replacement and construction equipment access into the stream channel to conduct work will affect shading and microhabitat temperature regulation characteristics. Though temporarily impacted vegetation will be replaced by in-kind replanting, the up to four-year duration of disturbance adds a temporal loss of habitat to consider. However, the project will remove concrete piers from the active channel, resulting in a long-term beneficial modification of steelhead critical habitat. The avoidance and minimization measures described for jurisdictional features will also serve to avoid and minimize project-related impacts to steelhead designated critical habitat. Additional measures specific to steelhead and its habitat are included below. No mitigation measures specific to the species are proposed.

[The following sentence has been added since the draft environmental document was circulated.] Proposed geotechnical boring locations are outside of the ordinary high water mark of the San Antonio River. Drilling will not occur in the active channel where water is present. Therefore, geotechnical drilling operations will avoid impacts to aquatic species, including steelhead.

The Federal Endangered Species Act Section 7 effects determination is that the proposed project *may affect, and is likely to adversely affect* designated critical habitat for South-Central California Coast steelhead. [The following sentence has been added since the draft environmental document was circulated.] The geotechnical investigations will have *no effect* to South-Central California Coast steelhead critical habitat.

Invasive Species

A total of 27 invasive plant species as identified by the online California Invasive Plant Council Inventory Database were observed within the Biological Study Area.

Ground disturbance and other aspects of project construction could potentially spread or introduce invasive species within the Biological Study Area. The distribution of invasive plant species is scattered throughout the Biological Study Area and most common in ruderal/disturbed areas along the edges of U.S. 101. The project has the potential to cause an increase in invasive species into communities and areas not currently dominated by them. However, the project also has an opportunity to reduce the abundance and spread of invasive species through avoidance and minimization efforts and restoration plantings. See below for a list of avoidance and minimization measures. No mitigation measures are needed.

Special-Status Plant Species

While potential habitat occurs within the Biological Study Area for several plant taxa included in Table 2.3, only two species (Hardham's evening-primrose and elegant buckwheat) were observed within the Biological Study Area during botanical surveys in 2023. During botanical surveys, Caltrans biologists also noted habitat types and suitability, soil conditions and underlying geology. Based on these observations and the requirements of regionally occurring listed plant species, Caltrans has determined that federal and state listed plant species are not present within the Biological Study Area. Of the federally listed plant species included in Table 2.3, the Federal Endangered Species Act Section 7 effects determination is the proposed project will have *no effect* on marsh sandwort and purple amole. No federally designated critical habitat for federally listed plant species occurs within the Biological Study Area.

Hardham's Evening-Primrose

The project will avoid impacts to Hardham's evening-primrose occurring within the Area of Potential Impact. The population west of the San Antonio River can be avoided and will have environmentally sensitive area fencing for protection. See below for a list of avoidance and minimization measures. No mitigation measures are needed.

Elegant Buckwheat

The project may temporarily impact elegant buckwheat occurring within the Area of Potential Impact. The population west of the San Antonio River can be avoided and will have environmentally sensitive area fencing for protection. The population east of the San Antonio River, on Camp Roberts property, may be temporarily impacted from bridge construction staging activities. See below for a list of avoidance and minimization measures. No mitigation measures are needed.

Special-Status Animal Species

South-Central California Coast Steelhead

The only suitable habitat for steelhead within the Biological Study Area occurs at the San Antonio River. The stream is an intermittent to perennial tributary to the Salinas River within the upper Salinas River watershed. No steelhead were observed during surveys in 2023, and there are no known reported occurrences of this species within 5 miles of the Biological Study Area. During a site visit with Caltrans on August 28, 2024, California Department of Fish and Wildlife staff concurred with Caltrans' assessment that the existing bridge is not imposing a fish passage barrier and that the placement of new bridge piers outside of the active channel is ideal.

If present within the Area of Potential Impacts during project activities, individual steelhead may be directly impacted during stream diversion and dewatering operations. Potential indirect impacts to steelhead from the project may also occur and include sediment deposition downstream of the work area, which may adversely impact downstream water quality. However, these potential indirect impacts to steelhead will be avoided through the use of appropriate silt and erosion control measures. Alternative 1 would require an estimated 254 fewer working days (one working season less) for construction of the northbound San Antonio River Bridge, therefore posing less of a temporary impact to the species.

The Federal Endangered Species Act Section 7 effects determination is that the proposed project *may affect, and is likely to adversely affect* South-Central California Coast steelhead. The Federal Endangered Species Act Section 7 effects determination is that the proposed project *may affect, and is not likely to adversely affect*, designated critical habitat for steelhead. [The following sentence has been added since the draft environmental document was circulated.] The geotechnical investigations will have no effect to South-Central California Coast steelhead and their critical habitat.

The project has the potential to result in take of steelhead; therefore, Caltrans must consult with National Oceanic and Atmospheric Administration Fisheries under Federal Endangered Species Act Section 7 to obtain a Biological Opinion for the project. The Biological Opinion will include several reasonable and prudent measures, terms, and conditions to reduce the effects of the project on steelhead and its habitat. The avoidance and minimization measures below will minimize potential project-related impacts to steelhead. This is in addition to avoidance, minimization, and compensatory mitigation measures for impacts to streams and riparian areas. These streams and riparian areas provide cover and shade for steelhead.

Existing human-made structures in the channel (i.e., bridge footings) that may create a migration barrier under some flow conditions will be removed to optimize fish passage. The proposed avoidance and minimization measures

will serve to reduce impacts to individual steelhead, and there will be no long-term impacts associated with the project on steelhead; therefore, no mitigation is proposed.

California Red-Legged Frog

Though suitable habitat for the California red-legged frog is present within the Biological Study Area, presence of the species is not anticipated based on recent and historical data from the area. The Federal Endangered Species Act Section 7 effects determination is that the proposed project will have *no effect* to the California red-legged frog.

Avoidance and minimizations measures are not proposed for the California red-legged frog because the project is not anticipated to affect the species. Preconstruction surveys for other listed species will be implemented and if, in the unlikely event California red-legged frogs are detected, Caltrans will immediately notify the U.S. Fish and Wildlife Service and initiate Section 7 Consultation to obtain a Biological Opinion prior to work activities.

Southwestern Pond Turtle

Project implementation could result in impacts to southwestern pond turtles, if they are present within the Area of Potential Impact during construction. Direct impacts to this species could occur if individuals are present in the construction area during activities (such as dewatering, excavating, grading, grubbing, and vegetation removal) from injury, mortality, construction-related noise, and general disturbance. See Table 2.9 for acreages of permanent and temporary habitat impacts. Project implementation has potential to indirectly affect this species via adverse effects to water quality.

Alternative 1 and Alternative 2 bridge designs have the same footprint and therefore the same permanent and temporary impact areas for the species. The main difference between the two alternatives is the temporary impact. Alternative 2 would require 254 more working days to complete. Alternative 2 would incur impacts to southwestern pond turtle habitat for a longer duration, including an extra season.

Implementation of the recommended avoidance and minimization measures outlined below, and the other measures presented in previous sections to maintain water quality are expected to fully avoid or minimize potential impacts to the southwestern pond turtle.

[As a result of technical assistance, the following paragraph has been edited since the draft environmental document was circulated.] The project is not likely to jeopardize the continued existence of the proposed listed southwestern pond turtle or destroy or adversely modify proposed critical habitat. If the species is listed prior to construction, the Federal Endangered Species Act Section 7 effects determination for the southwestern pond turtle is that the proposed project *may affect, and is likely to adversely affect* the

species. The basis for this determination is that the pond turtle was observed in the project vicinity and complete avoidance may not be feasible.

Table 2.9. Estimated Impact Area to Southwestern Pond Turtle Suitable Habitat

Habitat Type	Permanent Impact (acres)	Temporary Impact (acres)
Aquatic	+0.0074 net benefit	0.43
Upland	+ 0.0131 net benefit	2.80

See below for a list of avoidance and minimization measures. The project will have a net increase in suitable pond turtle habitat through the reestablishment of streambank along the San Antonio River. No additional mitigation for the species is proposed.

[The following paragraph has been added since the draft environmental document was circulated.] Geotechnical boring impacts to the streambanks will be minimal and temporary; a disturbance area of no more than 5 feet in diameter in three locations with a duration of 2-4 days for each boring. Avoidance and minimization measures will be implemented for the geotechnical drilling operation. With implementation of these measures, the species is not anticipated to be jeopardized by the drilling operation.

Western Spadefoot

Project construction could result in the injury or mortality of western spadefoot (if present) during clearing and grubbing operations in the areas surrounding bridge replacements and culvert repair and replacements. The potential need to capture and relocate the species could subject the animals to stresses that could result in adverse effects. Injury or mortality could occur via accidental crushing by worker foot-traffic or construction equipment.

In addition to direct adverse effects from initial ground-disturbing activities, ongoing construction activities may affect the species. Western spadefoots are sensitive to noise and may break dormancy and emerge from their burrows in response to noise disturbance. Disturbances that cause western spadefoots to emerge at inappropriate times could result in mortality or reduced fitness. Because western spadefoots are dependent on moisture from underground burrows to survive the hot and dry summers, emerging when rains are not present may cause dehydration and withering of individuals. If western spadefoots use the energy to emerge at inappropriate times, and prey species are not present, they may not have the energy available to return into underground burrows and resurface when conditions are appropriate.

Alternative 1 and Alternative 2 bridge designs have the same footprint and therefore the same permanent and temporary impact areas to the western spadefoot. The main difference between the two alternatives is the temporary impact. Alternative 2 would require 254 more working days to complete. Alternative 2 would incur impacts to western spadefoot habitat for a longer duration, including an additional season.

[As a result of technical assistance, the following paragraph has been edited since the draft environmental document was circulated.] The project is not likely to jeopardize the continued existence of the proposed listed western spadefoot or destroy or adversely modify proposed critical habitat. If the species is listed prior to construction, the Federal Endangered Species Act Section 7 effects determination for the western spadefoot is that the proposed project *may affect, and is likely to adversely affect* the species. The basis for this determination is that suitable habitat is present and there are known occurrences in the project vicinity. The project will implement avoidance and minimization measures to protect the species during construction (see below).

The project will have a net increase in suitable western spadefoot habitat through the reestablishment of streambank along the San Antonio River. No mitigation for the western spadefoot is proposed.

[The following paragraph has been added since the draft environmental document was circulated.] The geotechnical drilling operation is not anticipated to jeopardize the continued existence of the proposed listed western spadefoot. The same avoidance measures for pond turtle will be implemented for spadefoot.

San Joaquin Kit Fox

The Biological Study Area supports a prey base and is contiguous to extensive suitable habitat for the San Joaquin kit fox. This project will include all standard minimization and avoidance measures for kit fox per the standardized recommendations for protection of the San Joaquin kit fox prior to or during ground disturbance.

The Federal Endangered Species Act Section 7 effects determination is that the proposed project *may affect, and is not likely to adversely affect*, the San Joaquin kit fox. The basis for this determination is that the kit fox has not been observed in the project vicinity in recent years and the project will implement the standardized recommendations to protect the species during construction.

The standard avoidance and minimization measures below will be implemented where suitable habitat is present per the U.S Fish and Wildlife Service's standardized recommendations for protection of the San Joaquin kit fox prior to or during ground disturbance. With the inclusion of the avoidance and minimization measures, it is anticipated that the project is not likely to

adversely affect the San Joaquin kit fox. Therefore, no mitigation measures are included for the species.

[The following paragraph has been added since the draft environmental document was circulated.] San Joaquin kit fox is not expected to occur at this location. Worker training, pre-activity surveys, and biological monitoring will provide adequate avoidance measures for this species. Geotechnical investigations for the project will have *no effect* to San Joaquin kit fox and no take would occur.

Least Bell's Vireo and Southwestern Willow Flycatcher

The project will temporarily impact suitable willow woodland and thicket riparian habitat at San Antonio River. Based on historical data in the vicinity of the Biological Study Area, there is very low potential for the least Bell's vireo and southwestern willow flycatcher to be present within the Area of Potential Impact. With the implementation of avoidance and minimization measures used to protect all nesting bird species protected by the Federal Endangered Species Act, California Endangered Species Act, the Migratory Bird Treaty Act, and California Fish and Game Code, the Federal Endangered Species Act Section 7 effects determination is that the proposed project *may affect, but is not likely to adversely affect*, the least Bell's vireo and southwestern willow flycatcher.

The least Bell's vireo and southwestern willow flycatcher are also state listed taxa under the California Endangered Species Act. No California Endangered Species Act take of these species is expected. However, if either of these taxa are detected during preconstruction surveys, coordination with the California Department of Fish and Wildlife will be required.

[The following paragraph has been added since the draft environmental document was circulated.] Geotechnical drilling operations are scheduled to occur in the fall during the non-nesting season. Work is not expected to remove any trees or require vegetation removal. If minor pruning is needed, pruning would occur by hand. No large equipment will be utilized to access the streambanks. A biologist will be present for any minor pruning activities. The drilling operation will have no effect to least Bell's vireo and southwestern willow flycatcher, and no take would occur.

Bald Eagle

Bald eagles were seen soaring in the vicinity of the Biological Study Area during several site visits in 2022. In addition, overlay work is proposed at the Jolon Road interchange area, which is about 700 feet from a known bald eagle nest. Overlay work involves equipment such as cold planer/grinder, paver, asphalt truck, roller, loader, sweeper, water truck, and post driver, and foot workers (human activity). Grinders and guardrail post drivers are typically louder than ambient noise along U.S. 101 through the project area. Raptors can be sensitive to human presence, including increased noise levels

(compared to ambient), and large equipment, such as tall cranes. Activities that are above the normal vehicle and traffic conditions at this site could disturb nesting bald eagles. These activities will be restricted to the existing highway and off-ramp and are anticipated to be short in duration. No drainage work or staging is proposed in the vicinity of the known nest.

During recent technical assistance with the U.S. Fish and Wildlife Service for potential project impacts to bald eagles, the U.S. Fish and Wildlife Service Pacific Southwest Region Migratory Birds Program was suggested to help determine appropriate buffer size. This program provides recommended buffer zones for human activities around bald eagle nesting sites in California. The maximum recommended no-disturbance buffer for construction of roads and other linear utilities is 660 feet. The project Area of Potential Impact is just over 700 feet from the nest. This indicates that project activities are far enough away from the known nest to avoid disturbance.

With implementation of avoidance and minimization measures below, the project will not result in take of the bald eagle. No mitigation measures are needed.

Crotch Bumblebee

Most of the project activity involves work on the roadway itself or along highly disturbed shoulders and is not likely to result in impacts to Crotch bumblebee. However, temporary impacts to Crotch bumblebee could occur, if the species is present, during vegetation removal, staging, and ground-disturbing activities at locations beyond the highway shoulder where suitable habitat exists. Permanent impacts to the species are unlikely to occur due to the placement of bridge piers and rock slope protection at culverts in areas not suitable for nesting or foraging. Due to the limited quality and amount of foraging and nesting habitat for Crotch bumble bee within the Biological Study Area, the project is expected to have minimal impacts to Crotch bumblebee. While Crotch bumblebee is not anticipated to be nesting in the project area, additional focused surveys will be conducted during the design phase. If Crotch bumblebee is observed using the project area, Caltrans will coordinate with the California Department of Fish and Wildlife and apply for a 2081 Incidental Take Permit if necessary.

No impact to Crotch bumblebee is anticipated, therefore no mitigation is required. However, if surveys identify a Crotch bumblebee within the project area, the California Department of Fish and Wildlife will be consulted, and an Incidental Take Permit will be acquired if project activities cannot avoid impacts to the bumblebee. If impacts to the bumblebee cannot be avoided, any areas of suitable Crotch bumblebee habitat that are temporarily impacted during construction will be restored onsite at a minimum ratio of 1 to 1. Any areas of suitable Crotch bumblebee habitat that are permanently impacted will be replaced onsite at a minimum ratio of 2 to 1 and will include restoration with native flowering plants known to be used by Crotch bumblebee.

Monterey Hitch Fish

If present, individual Monterey hitch fish may be directly impacted by bridge replacement activities within San Antonio River. With implementation of avoidance and minimization measures below, these potential impacts will be avoided. Potential indirect impacts to Monterey hitch fish from the project may occur and include sediment deposition downstream of the work area, which may adversely impact downstream water quality. However, these potential indirect impacts to sensitive fish species will be avoided through the use of appropriate silt and erosion control measures. Alternative 1 requires fewer working days to complete and therefore will have less of a temporary impact to the species than Alternative 2 would.

Measures proposed for South-Central California Coast steelhead will also avoid and minimize impacts to Monterey hitch fish. Mitigation for Monterey hitch fish is not required, and none is proposed.

Monterey Dusky-Footed Woodrat

If Monterey dusky-footed woodrat nests are discovered during preconstruction surveys, direct mortality could occur to the species as a result of vegetation removal. Indirect impacts will occur to the habitat during proposed vegetation clearing of woodland habitat within the Area of Potential Impact. Avoidance and minimization measures for the species are listed below, and no mitigation is necessary.

American Badger and Salinas Pocket Mouse

If present during construction, the American badger and/or Salinas pocket mouse could be directly impacted by project activities. These species could be entombed during grading/excavating or otherwise injured by construction equipment. Noise, light, and other disturbance associated with construction could affect foraging and dispersal behaviors, if these species are present during project construction. The avoidance and minimization measures proposed for the San Joaquin kit fox will serve to avoid and minimize impacts to the American badger and Salinas pocket mouse.

Additional avoidance and minimization measures below will be implemented for the American badger and Salinas pocket mouse. No mitigation measures are necessary.

Reptile Species of Special Concern

Construction of the project could result in the injury or mortality of the northern California legless lizard, coast horned lizard, and San Joaquin coachwhip (if present) during clearing and grubbing operations in the areas surrounding bridge replacements and culvert repair and replacements. The potential need to capture and relocate these species could subject these animals to stresses that could result in adverse effects. Injury or mortality could occur via accidental crushing by worker foot-traffic or construction equipment.

The potential for these impacts is anticipated to be low because these species were not detected during surveys, and habitats bordering the highway are marginally suitable. Also, the coast horned lizard and San Joaquin coachwhip if present would likely be transient in the Biological Study Area. Avoidance and minimization measures specific to each of the potentially affected lizard species are listed below. Mitigation measures are not needed.

Townsend's Big-eared Bat, Pallid Bat, and Other Roosting Bats

Bats are present roosting in the San Antonio River bridge structures and within the post mile R7.78 culvert. Bats will be directly impacted by construction activities at these locations. Direct effects could result in injury or mortality of bats, and harassment could alter roosting behaviors. Other direct impacts to bats could result from noise and other disturbances associated with construction, which could also alter roosting behaviors. Replacing the San Antonio River Bridges may result in the permanent loss or alteration of roosting habitat, requiring mitigation. Implementation of pre-activity surveys, use of exclusionary devices prior to construction, and planning for suitable replacement habitat post-construction will reduce these potential adverse effects to roosting bat species.

Currently, Caltrans is evaluating two alternatives for the San Antonio River bridge replacements. Impacts to bats will differ depending on which structure type is selected.

Alternative 1 (Precast Wide Flange Girder): The proposed precast wide flange girder structures would be similar to the existing structures, preserving the night-roosting potential within the open cell soffits. However, the new structures would not require an expansion joint over the San Antonio River riparian area (as exists now), thereby eliminating the maternity and day-roost habitat potential. Day-roosting habitat (including maternity roosts) would need to be created within the new structures to mitigate for that loss (see measures below). Alternative 1 is anticipated to take 686 working days (three seasons) to complete.

Alternative 2 (Cast-in-Place Concrete Box Girder): The proposed cast-in-place concrete box girder would have enclosed hollow concrete cells below deck. This super-structure alternative would result in a loss of existing night-roosting habitat. Also (like Alternative 1), the new structure would not require an expansion joint over the San Antonio River riparian area, thereby eliminating the maternity and day-roosting habitat potential. Successful day-roosting mitigation has been implemented on other projects within Caltrans District 5 on new concrete box girder structures, but few examples of successful night-roosting mitigation are available. Day- and night-roosting habitat within the new structures would need to be created to mitigate for that loss (see measures below). Alternative 2 is estimated to take 940 working

days (four seasons) to complete, impacting the displaced bats for a longer period of time than Alternative 1 would.

The culvert at post mile R7.78 is proposed for replacement. The existing structure will be abandoned and replaced with new 48-inch reinforced concrete pipe and headwalls by trenchless method. The replacement structure will likely be less suitable for roosting bats due to the removal of the box culvert portion. Evidence of bat use and observations were only seen within the existing box culvert. Also, the new culvert will be straight with no angled joints. Based on several observations within Caltrans District 5, Townsend's big-eared bats prefer roosting within culverts that transition between pipe and box, and which are angled. Presumably, this is due to air flow and microclimate preferences. Replacement of the existing structure will reduce night- and day-roosting habitat for bats, including two Species of Special Concern: pallid bat and Townsend's big-eared bat. Mitigation is proposed below.

[The following paragraph has been added since the draft environmental document was circulated.] Geotechnical drilling operations are anticipated to occur between September 1 and October 31, 2025, outside of the peak bat maternity roosting season. Day roosting bats are present within the expansion joint of the bridge, and based on visual and dusk emergence surveys in 2023 and 2024, bat activity was observed to peak in July. However, by September the roosts are quiet, and no bats were observed during visual inspections or during the dusk emergence survey. This indicates that geotechnical investigations are best timed in the fall when bats are not present or in lowest numbers. A pre-activity survey will be conducted, and the activity will be monitored by a qualified Caltrans Biologist. If the geotechnical investigation is delayed and must occur in 2026, work will not occur if maternity roosting bats are present. Additionally, borings through the bridge deck will not be immediately adjacent to the expansion joint where day roosting bats present at any time of year. Bat avoidance and minimization measures for the geotechnical drilling operation are proposed below.

Tricolored Blackbird, Great Blue Heron, Yellow Warbler, Burrowing Owl, and Other Nesting Birds

The tricolored blackbird and burrowing owl were not detected during surveys and, though there is suitable habitat (marginal), the species are not expected to occur in the project area. The project will incorporate avoidance measures, and no take will occur.

Potential nesting habitat for a variety of bird species occurs throughout the Biological Study Area. Direct impacts to nesting birds could result during bridge replacement activities (nesting swallows) and if removal of vegetation occurs during the nesting season. These direct effects could result in the injury or mortality of nesting birds or harassment that could alter nesting

behaviors. Indirect impacts could also result from noise and disturbance associated with construction during the nesting season, which could alter nesting behaviors. Alternative 1 would reduce the duration of potential construction impacts to nesting birds compared to Alternative 2. Indirect impacts could also occur from the temporary loss of nesting substrate as replacement habitat establishes post-construction.

The implementation of preconstruction nesting surveys and buffer exclusion zones (if necessary) will reduce the potential for adverse effects to nesting birds. See below for avoidance and minimization measures. Impacts to vegetation will be offset by replacement plantings within the project limits, which will also replace in-kind nesting habitat. No additional mitigation is proposed.

Avoidance, Minimization, and Mitigation Measures

Jurisdictional Features

Avoidance and Minimization Measures

The project will impact U.S. Army Corps of Engineers, Regional Water Quality Control Board, and California Department of Fish and Wildlife jurisdictional areas within the Area of Potential Impact. The following avoidance and minimization measures will be implemented to reduce the potential impacts to these jurisdictional areas resulting from the project:

BIO-1. Prior to construction, Caltrans shall obtain a Section 404 Nationwide Permit from the U.S. Army Corps of Engineers, a Section 401 Water Quality Certification from the Regional Water Quality Control Board, and a Section 1602 Streambed Alteration Agreement from the California Department of Fish and Wildlife. All permit terms and conditions will be incorporated into construction plans and implemented.

BIO-2. Prior to any ground-disturbing activities, Environmentally Sensitive Area fencing shall be installed around jurisdictional features and the dripline of trees to be protected within the project limits. Caltrans-defined Environmentally Sensitive Areas shall be noted on design plans and delineated in the field prior to the start of construction activities.

BIO-3. Construction activities in jurisdictional waters and temporary stream diversion, if needed, shall be timed to occur between June 1 and October 31 in any given year, or as otherwise directed by the regulatory agencies, when the surface water is likely to be dry or at a seasonal minimum. Deviations from this work window will be made only with permission from the relevant regulatory agencies.

BIO-4. During construction, all project-related hazardous materials spills within the project site shall be cleaned up immediately. Readily accessible

spill prevention and cleanup materials shall be kept by the contractor onsite at all times during construction.

BIO-5. During construction, erosion control measures shall be implemented. Temporary large sediment barrier, fiber rolls, and barriers shall be installed as needed between the project site and jurisdictional other waters and riparian habitat. At a minimum, erosion controls shall be maintained by the contractor on a daily basis throughout the construction period.

BIO-6. During construction, the staging areas shall conform to Best Management Practices. At a minimum, all equipment and vehicles shall be checked and maintained by the contractor on a daily basis to ensure proper operation and avoid potential leaks or spills.

BIO-7. Stream contours shall be restored as close as possible to their original condition.

[The following measure was added since the draft environmental document was circulated.] BIO-8. Storage, maintenance, and fueling of equipment, vehicles, and materials, will be conducted in designated areas at least 100 feet from the jurisdictional features. If storage, maintenance, or fueling is required to occur within 100 feet, evidence and a request will need to be provided to the Regional Water Quality Control Board for review and approval. Additionally, a secondary containment measures will be in place for equipment and maintenance of equipment to occur within 100 feet of a jurisdictional feature, pending Water Board approval.

Compensatory Mitigation Measures

BIO-9. Temporary impacts to jurisdictional areas will be restored at a 1-to-1 ratio. All native trees removed within jurisdictional areas will be replaced at a 3-to-1 ratio for trees less than 12 inches in diameter at breast height and at a 10-to-1 ratio for trees equal to or greater than 12 inches in diameter at breast height. Replacement plantings will include appropriate native tree and understory species. To ensure success, monitoring and an appropriate plant establishment period will be required, which will include regular inspections, weeding, and replacement.

BIO-10. Replacement plantings will be detailed in Caltrans' Landscape Architecture Landscape Planting Plan and the final Mitigation Monitoring Plan. The Mitigation Monitoring Plan will be developed in coordination with the project biologist and will include planting specifications and grading plans to ensure survival of planted vegetation and reestablishment of functions and values. The final Mitigation Monitoring Plan will detail mitigation commitments and will be consistent with standards and mitigation commitments from the U.S. Army Corps of Engineers, Regional Water Quality Control Board, and California Department of Fish and Wildlife. The Mitigation Monitoring Plan will be prepared when more detailed construction plans are developed and will be

finalized through the permit review process with regulatory agencies. Restoration plantings will consist of native riparian species and associated riparian understory and bank species.

Invasive Species

Avoidance and Minimization Measures

BIO-11. During construction, Caltrans will ensure that the spread or introduction of invasive exotic plant species will be avoided to the maximum extent possible.

BIO-12. Only clean fill shall be imported. When practicable, invasive exotic plants in the project site shall be removed and properly disposed of. Any plant species rated as “High” on the California Invasive Plant Council Invasive Plant Inventory that are removed from the construction site shall be taken to a landfill to prevent the spread of invasive species.

BIO-13. Plant species that the California Invasive Plant Council, California Department of Agriculture, California Department of Fish and Wildlife, or other resource organizations consider to be invasive or potentially invasive will not be used in erosion control seed mix or to revegetate areas of disturbance. Caltrans erosion control mix will contain only native species to the Central Coast of California.

BIO-14. Construction equipment shall be inspected as “weed-free” by Caltrans before entering the construction site. If necessary, wash stations onsite shall be established for construction equipment under the guidance of Caltrans to avoid/minimize the spread of invasive plants and/or seed within the construction area.

Hardham’s Evening-Primrose and Elegant Buckwheat

Avoidance and Minimization Measures

BIO-15. Prior to start of construction, a Caltrans-approved Biologist shall conduct an appropriately timed botanical survey on Camp Roberts property, within the Area of Potential Impact. If Hardham’s evening-primrose or elegant buckwheat is detected, the number of individuals shall be estimated and boundaries of the occurrences shall be mapped. The mapped areas shall be noted as “sensitive plant areas” and avoided with Environmentally Sensitive Area fencing, where feasible.

BIO-16. If any of the mapped “sensitive plant areas” cannot be avoided, soil salvage shall be implemented. Salvaged soil will be stockpiled onsite and spread back over the disturbed area after construction completion.

BIO-17. Prior to start of construction, a Caltrans-approved Biologist shall conduct a worker environmental training program, including a description of Hardham’s evening-primrose or elegant buckwheat and its habitat, the species’

legal/protected status, location within the project site, avoidance/minimization measures to be implemented during the project, and the implications of violating relevant environmental commitments.

BIO-18. New observations of Species of Special Concern or other special-status plant species shall be documented on California Natural Diversity Database forms and submitted to the California Department of Fish and Wildlife upon project completion.

South-Central California Coast Steelhead

Avoidance and Minimization Measures

BIO-19. In-stream work will take place between June 15 and October 31 in any given year, when the surface water within San Antonio River is likely to be at a seasonal minimum. Deviations from this work window will be made only with permission from the relevant regulatory agencies. During in-stream work, a qualified biologist will be retained with experience in steelhead biology and ecology, aquatic habitats, biological monitoring (including diversion/dewatering), and capturing, handling, and relocating fish species. During in-stream work, the biological monitor(s) will continuously monitor placement and removal of any required stream diversions and will capture stranded steelhead and other native fish species and relocate them to suitable habitat, as appropriate. The biologist(s) will capture steelhead stranded as a result of diversion/dewatering and relocate steelhead to the nearest suitable in-stream habitat. The biologist(s) will note the number of steelhead observed in the affected area, the number of steelhead relocated, and the date and time of the collection and relocation.

BIO-20. During in-stream work, if pumps are incorporated to assist in temporarily dewatering the site, intakes will be completely screened with no larger than 0.2-inch (5-millimeter) wire mesh to prevent steelhead and other sensitive aquatic species from entering the pump system. Pumps will release the diverted water so that suspended sediment will not re-enter the stream. The form and function of pumps used during the dewatering activities will be checked daily, at a minimum, to ensure a dry work environment and minimize adverse effects to aquatic species and habitats.

BIO-21. Design replacement bridge structures without scuppers, deck drains, or other facilities that drain storm water directly into the stream in order to prevent pollutants such as 6PPD-quinone (an oxidation product of 6PPD, an additive intended to prevent damage to tire rubber from ozone that is short for N-(1,3-dimethylbutyl)-N'-phenyl-p-phenylenediamine) from directly entering waterways.

Southwestern Pond Turtle

[The following sentence was added since the draft environmental document was circulated.] Caltrans completed Technical Assistance with U.S. Fish and

Wildlife Service on August 21, 2025. If southwestern pond turtle is listed prior to construction, Caltrans will implement additional measures as recommended by U.S. Fish and Wildlife Service.

Avoidance and Minimization Measures

BIO-22. The project includes Environmentally Sensitive Areas to minimize impacts to sensitive areas and species. The project plans will delineate Environmentally Sensitive Areas that restrict access to the minimum required for construction, minimizing impacts to the southwestern pond turtle and its habitat. No vehicle access within these Environmentally Sensitive Areas will be permitted. During construction, the Resident Engineer and biological monitor will determine and agree upon the exact placement of Environmentally Sensitive Area markers, based on the project plans, and will determine and agree upon the appropriate material for marking Environmentally Sensitive Areas.

BIO-23. Prior to construction, a qualified biologist will provide an environmental awareness training to all personnel on the potential for southwestern pond turtle to occur in the area of direct impact. The contractor shall submit a written request to the Resident Engineer 14 calendar days prior to the performance of any work to schedule training.

BIO-24. Prior to the start of excavation or construction activities, a qualified biologist will conduct a preconstruction survey for southwestern pond turtle. If any are found within the Area of Potential Impact, they will be relocated to a suitable location outside of the Area of Potential Impact. The qualified biologist will use the most current survey protocols available for the species to ensure highest level of species detection including visual encounter surveys and nesting survey techniques.

BIO-25. A qualified biologist shall be present onsite during all initial vegetation removal and ground-disturbing activities. If pond turtles are encountered, only a Service-approved biologist shall handle and relocate the animal.

BIO-26. The project shall avoid altering hydrology of and causing increased sedimentation rates into San Antonio River by minimizing soil compaction and treating all storm water before it is discharged into turtle habitat.

Western Spadefoot

Avoidance and Minimization Measures

BIO-27. During the winter season prior to start of construction, a qualified biologist shall survey areas of the project with suitable habitat during the wet season when pools/puddles could be present. If spadefoots are present, Caltrans shall coordinate with the U.S. Fish and Wildlife Service and California Department of Fish and Wildlife.

BIO-28. Seasonal Avoidance: Caltrans will schedule project activities to minimize adverse effects to the western spadefoot and its habitat. Disturbance to habitat will be confined to the dry season, generally May 1 through October 31 (or the first measurable fall rain of 1 inch or greater) because that is the time period when the western spadefoots are less likely to be moving through upland areas. However, if seasonal avoidance is not possible, grading and other disturbance in pools and ponds will occur only when they are dry, typically between July 15 and October 31. Work within a pool or wetland may begin prior to July 15 if the pool or wetland has been dry for a minimum of 30 days prior to initiating work.

BIO-29. Rain Event Limitations: No construction activities will occur during rain events or within 24 hours following a rain event. Prior to construction activities resuming, a qualified biologist will inspect the project area and all equipment/materials for the presence of the western spadefoot. Construction may continue 24 hours after the rain ceases if no precipitation is forecasted within 24 hours. If rain exceeds 0.5 inch during a 24-hour period, work will cease until no further rain is forecasted.

BIO-30. Preconstruction Survey: No more than 24 hours prior to the date of initial ground disturbance and vegetation clearing, a qualified biologist with experience in the identification of all life stages of the western spadefoot will conduct a preconstruction survey within suitable habitat at the project site. The survey will consist of walking the subject area to determine possible presence of the species. The qualified biologist will investigate all areas that could be used by the western spadefoot for feeding, breeding, sheltering, movement, and other essential behaviors, such as small woody debris, refuse, burrows, etc.

BIO-31. Biological monitoring by a qualified biologist(s) will be carried out during initial ground-disturbing activities and is limited once the area of interest is cleared of species. If spadefoots are detected during initial ground disturbance monitoring, the qualified biologist(s) will periodically visit the site throughout the construction period. No construction work will be initiated until the biologist(s) determines that the work area is clear of the western spadefoot.

San Joaquin Kit Fox

Avoidance and Minimization Measures

BIO-32. Project employees will be directed to exercise caution when commuting within listed species habitats. A 20-mile-per-hour speed limit will be observed in all project areas, except on county roads and state and federal highways. Cross-country travel by vehicles will be prohibited outside of the project area unless authorized by the U.S. Fish and Wildlife Service. Project employees will be provided with written guidance governing vehicle use, speed limits on unpaved roads, fire prevention, and other hazards.

BIO-33. Prior to any ground disturbance, the contractor, all employees of the contractor, subcontractors, and subcontractors' employees will attend an employee education program conducted by a Caltrans or U.S. Fish and Wildlife Service-approved biologist. The program will consist of a brief presentation by persons knowledgeable in San Joaquin kit fox biology, legislative protection, and measures to avoid impacts to the species during project implementation.

BIO-34. A litter control program will be initiated at each project site. No pets or firearms (except for law enforcement officers and security personnel) will be allowed onsite.

BIO-35. Excavations deeper than 2 feet will be covered with plywood or similar material at the end of each workday, or escape ramps put in place to prevent any entrapment. Each excavation will be inspected thoroughly before being filled.

BIO-36. All construction pipes, culverts, or similar structures with a diameter of 4 inches or greater stored on the construction site overnight will be thoroughly inspected for San Joaquin kit foxes prior to being buried, capped, or otherwise used or moved. If a San Joaquin kit fox is discovered inside a pipe, the pipe shall not be moved until the U.S. Fish and Wildlife Service has been consulted. If the San Joaquin kit fox is in direct harm's way, the pipe may be moved to a safe location one time under the direct supervision of a qualified biologist.

BIO-37. The Resident Engineer or their designee will be responsible for implementing these conservation measures, and the Caltrans biologist will represent the point of contact for the project.

BIO-38. Restoration and vegetation work will use California endemic plant materials from onsite or local sources. Loss of soil from runoff or erosion will be prevented using fiber rolls or similar material and by implementing the best management practices from the Caltrans National Pollutant Discharge Elimination System statewide stormwater permit.

BIO-39. Prior to any ground disturbance in suitable habitat, a preconstruction survey will be conducted for San Joaquin kit fox. The preconstruction survey will be conducted no less than 14 days and no more than 30 days prior to the beginning of ground disturbance or construction activities. The survey will identify any potential kit fox dens. The status of all potential dens will be determined and mapped. Potential dens will be monitored with tracking medium or infrared camera for three consecutive days to determine the current use. If no kit fox activity is observed during this period and no other kit fox sign is observed in the vicinity, then the den is assumed unoccupied. If kit fox activity is observed at a den, Caltrans will contact the U.S. Fish and

Wildlife Service and California Department of Fish and Wildlife for further coordination.

BIO-40. [As a result of technical assistance, the following sentence has been edited since the draft environmental document was circulated.] Written results of the preconstruction survey will be submitted to the U.S. Fish and Wildlife Service within five days after survey completion and prior to the start of ground disturbance if kit fox are observed. If a natal or pupping den is discovered within the project area or within 200 feet of the project boundary, the U.S. Fish and Wildlife Service will be notified immediately. If the preconstruction survey reveals an active natal den or new information, Caltrans will notify the U.S. Fish and Wildlife Service immediately for further consultation.

Least Bell's Vireo and Southwestern Willow Flycatcher

Avoidance and Minimization Measures

BIO-41. Prior to construction, vegetation removal shall be scheduled to occur from September 2 to January 31, outside of the typical nesting bird season if possible, to avoid potential impacts to nesting birds. If tree removal or other construction activities are proposed to occur within 100 feet of potential habitat during the nesting season (February 1 to September 1), a nesting bird survey shall be conducted by a qualified biologist no more than five calendar days prior to construction.

BIO-42. [As a result of technical assistance, the following sentence has been edited since the draft environmental document was circulated.] If least Bell's vireo or southwestern willow flycatcher are observed within 300 feet of the project area during the course of construction or during the preconstruction surveys, all project activities shall cease immediately and the relevant resource agencies shall be consulted. Development of additional avoidance and minimization measures will occur as necessary in coordination with the pertinent agencies.

Bald Eagle

Avoidance and Minimization Measures

BIO-43. Work activities between February 1 and September 1 (bald eagle nesting season), including staging, within a line-of-sight of the known bald eagle nest (primarily only Jolon Road northbound off-ramp), will not occur until a qualified biologist conducts a survey to determine nest activity.

BIO-44. If the previously identified bald eagle nest is inactive, work may commence. If it is active and there is no line-of-sight, work may occur if the biologist determines work activities will not disturb the nest. If it is active and there is line-of-sight, work will not commence until the qualified biologist has determined that nesting is complete and eagles have fledged.

BIO-45. Caltrans will submit the project description, mapping, and proposed avoidance measures for review by the U.S. Fish and Wildlife Service for Technical Assistance. The U.S. Fish and Wildlife Service will provide feedback and any additional measures that can be incorporated into the project to ensure no impacts to nesting eagles.

BIO-46. If any additional bald eagle nests are identified prior to or during construction, Caltrans will conduct technical assistance with the U.S. Fish and Wildlife Service and/or California Department of Fish and Wildlife, as needed, to avoid potential adverse effects.

Crotch Bumblebee

Avoidance and Minimization Measures

BIO-47. During the design phase, a Crotch bumblebee habitat assessment will be conducted following the California Department of Fish and Wildlife's "Survey Considerations for California Endangered Species Act Candidate Bumblebee Species" dated June 6, 2023. If Crotch bumblebee habitat is determined to be present within the project site:

- A focused non-invasive survey will be conducted within suitable habitat prior to ground disturbance for Crotch bumblebee and its nests, following California Department of Fish and Wildlife guidance (2023).
- A Worker Environmental Awareness Training will be provided for all construction personnel prior to the start of any ground disturbance or vegetation removal to discuss Crotch bumblebee identification, ecology, habitat, and avoidance and minimization measures.
- Prior to any ground-disturbing activities, Environmentally Sensitive Area fencing shall be installed, as appropriate, around Crotch bumblebee feeding and nesting habitat to be avoided. Environmentally Sensitive Areas shall be noted on design plans and delineated in the field prior to the start of construction activities.

BIO-48. If Crotch bumblebee is identified in the project area, Caltrans will coordinate with the California Department of Fish and Wildlife and, if necessary, a 2081 Incidental Take Permit will be acquired and the following will be implemented:

- Any blooming flowering plants that are scoped for removal will be inspected immediately prior to work to ensure that no bumblebees are on or near the plant. If a bumblebee is identified on or adjacent to vegetation that is to be removed, work in that area will not proceed until the bumblebee leaves the area of its own accord.
- No work will occur within 50 feet of an active Crotch bumblebee nest unless approved by the California Department of Fish and Wildlife.

Monterey Dusky-Footed Woodrat

Avoidance and Minimization Measures

BIO-49. Prior to implementation of proposed project activities, a preconstruction visual survey will be conducted within suitable woodrat habitat in the Area of Potential Impact to determine the presence or absence of woodrat nests.

BIO-50. If woodrat nests are located during this survey, avoid them and establish an Environmentally Sensitive Area with a 25-foot buffer around each.

BIO-51. To the extent feasible, project activities requiring grading or vegetation removal within the 25-foot protective buffer should occur only during the non-breeding season (October 1 to December 31) to avoid noise impacts to any breeding woodrats that may occupy the nest from January through September.

BIO-52. If project activities cannot avoid impacting or removing the nest, then the nest should be dismantled by hand prior to grading or vegetation removal activities. The dismantling shall occur during the non-breeding season (October 1 to December 31) and shall be conducted so that the nest material is removed starting on the side where most impacts will occur and ending on the side where the most habitat will be undisturbed, which will allow for any woodrats in the nest to escape into adjacent undisturbed habitat. The dismantled nest materials shall be placed onto a tarp (or equivalent) and relocated to a location determined by a qualified biologist to be suitable alternative habitat.

BIO-53. If young are encountered during nest dismantling, the dismantling activity should be stopped and the material replaced back on the nest and the nest should be left alone and rechecked in two to three weeks to see if the young are out of the nest or capable of being out on their own (as determined by a qualified biologist); once the young can fend for themselves, the nest dismantling can continue.

BIO-54. Prior to construction in jurisdictional areas, Caltrans shall acquire a Streambed Alteration Agreement from the California Department of Fish and Wildlife pursuant to Fish and Game Code Section 1600 et seq. and shall incorporate any additional measures relating to this species not otherwise addressed in the Natural Environment Study.

American Badger and Salinas Pocket Mouse

Avoidance and Minimization Measures

The following additional avoidance and minimization measures will be implemented for American badger:

BIO-55. Prior to any ground disturbance, the contractor, all employees of the contractor, subcontractors, and subcontractors' employees will attend an employee education program conducted by a qualified biologist. The program will consist of a brief presentation by persons knowledgeable in American badger biology, legislative protection, and measures to avoid impacts to the species during project implementation.

BIO-56. The project plans shall delineate Environmentally Sensitive Areas to minimize impacts to sensitive areas and species by limiting access to the minimum required for construction within the Area of Potential Impact. No vehicle access within the Environmentally Sensitive Areas will occur.

BIO-57. Prior to any ground disturbance in suitable habitat, a preconstruction survey will be conducted for American badger. The survey will identify any potential badger dens. The status of all potential dens will be determined and mapped. Potentially active dens will be monitored with tracking medium or infrared camera for three consecutive days to determine the current use. If no badger activity is observed during this period, then the den will be excavated by hand or carefully with equipment provided by the contractor, under the direction of the biologist to preclude subsequent use. If American badger activity is observed at a den, Caltrans will coordinate with California Department of Fish and Wildlife for suitable buffer implementation or exclusion methods. Observations of Species of Special Concern, or other special-status species shall be documented on California Department of Fish and Wildlife forms and submitted to the California Department of Fish and Wildlife upon project completion.

The following additional avoidance and minimization measures will be implemented for Salinas pocket mouse:

BIO-58. Prior to any ground disturbance, the contractor, all employees of the contractor, subcontractors, and subcontractors' employees will attend an employee education program conducted by a qualified biologist. The program will consist of a brief presentation by persons knowledgeable in Salinas pocket mouse biology, legislative protection, and measures to avoid impacts to the species during project implementation.

BIO-59. The project plans shall delineate Environmentally Sensitive Areas to minimize impacts to sensitive areas and species by limiting access to the minimum required for construction within the Area of Potential Impact. No vehicle access within the Environmentally Sensitive Areas will occur.

BIO-60. A qualified biologist shall be present during initial ground disturbance activities to capture and relocate any Salinas pocket mice that may be encountered during construction operations. Observations of Species of Special Concern or other special-status species shall be documented on

California Natural Diversity Database forms and submitted to the California Department of Fish and Wildlife upon project completion.

Reptile Species of Special Concern

Avoidance and Minimization Measures

The following additional avoidance and minimization measures specific to Northern California legless lizard shall be implemented:

BIO-61. A qualified biologist shall conduct preconstruction surveys for legless lizards within five calendar days before initial ground disturbance proposed within coast live oak woodlands and/or prior to tree removal. Where feasible, this survey shall include systematic subsurface searching (raking suitable habitat) because legless lizards are fossorial.

BIO-62. If any legless lizards are discovered during preconstruction surveys, they will be relocated to a nearby area with suitable habitat similar to where they were discovered (as stated above for other Species of Special Concern reptiles and amphibians). Also, if discovered during preconstruction surveys, a qualified biologist will be present during oak tree removal to safely relocate any legless lizards that could be uncovered during tree removal.

The following avoidance and minimization measures will be implemented for coast horned lizard and San Joaquin coachwhip:

BIO-63. Prior to construction, a qualified biologist shall survey the Area of Potential Impact and, if present, capture and relocate any coast horned lizards and San Joaquin coachwhips to the nearest suitable habitat outside of the Area of Potential Impact. Observations of Species of Special Concern or other special-status species shall be documented on California Natural Diversity Database forms and submitted to the California Department of Fish and Wildlife upon project completion.

BIO-64. The project plans shall delineate Environmentally Sensitive Areas to minimize impacts to sensitive areas and species by limiting access to the minimum required for construction within the Area of Potential Impact. No vehicle access within the Environmentally Sensitive Areas will occur.

BIO-65. A qualified biologist shall be present during initial ground disturbance activities to capture and relocate any coast horned lizards and/or San Joaquin coachwhips that may be encountered during construction operations.

Townsend's Big-eared Bat, Pallid Bat, and Other Roosting Bats

Avoidance and Minimization Measures

The following measures are recommended to avoid and minimize potential impacts to roosting bat species:

BIO-66. Tree removal shall be scheduled to occur from September 1 to February 14, outside of the typical bat maternity roosting season, if possible, to avoid potential impacts to tree roosting bats. If tree removal or other construction activities are proposed to occur within 100 feet of potential habitat during the bat maternity roosting season (February 15 to August 31), a bat roost survey shall be conducted by a biologist determined qualified by Caltrans within 14 calendar days prior to construction. If roosting bats are found, a qualified Caltrans biologist shall determine an appropriate buffer based on the habits and needs of the species. The buffer area shall be avoided until a qualified biologist has determined that roosting activity has ceased, or exclusionary methods have successfully evicted roosting bats.

BIO-67. Since bats are known to roost on the subject bridges and culvert, a Bat Exclusion Plan will be prepared by a qualified biologist for approval at least 30 days prior to exclusion installation. If it is determined that bat exclusion is necessary and the plan feasible, a qualified biologist will be contracted to oversee implementation of passive exclusion in roosting areas. Suitable exclusionary materials may include Visqueen poly sheeting (plastic sheeting), foam filling (for crevices), or other mechanical devices. Netting is not a suitable exclusionary material. Installation of bat exclusion shall occur only during the non-maternity season (September 1 to February 14), the year prior to construction. Permanent exclusion can be installed after a qualified biologist has performed emergence surveys to confirm that all bats have been successfully evicted from the structure.

BIO-68. Preconstruction surveys will be conducted by a qualified biologist to identify potential roosting bat activity. The biologist(s) conducting the preconstruction surveys will also identify the nature of the bat use of the area (i.e., no roosting, night roost, day roost, maternity roost). If roosting bat activity is observed during the preconstruction survey process, the following measures will be implemented:

- A focused survey to determine if bats are roosting at the bridges, within suitable culverts, or in suitable trees will be conducted by a qualified biologist before commencement of construction activities and before installation of exclusionary devices. Focused surveys at the bridges site will consist of at least two daytime and two dusk surveys.
- If bridge, culvert, and/or tree removal activities are proposed during the typical maternal bat roosting season (February 15 to August 31) and exclusion has not yet been installed, an additional bat roost survey will be conducted by a qualified biologist one week prior to these activities to determine the presence/absence of roosting bats. If maternal bat roosts are observed, the roost(s) will not be disturbed or obstructed until a qualified biologist determines that the roost(s) is no longer being used.

- The roost(s) will be designated as an Environmentally Sensitive Area and all construction activities shall be avoided within 100 feet until the end of the maternity roosting season (beginning of September) and the qualified biologist confirms that the roost(s) are no longer occupied. No roost exclusion will be conducted if maternity roosts are detected.

Compensatory Mitigation Measure

BIO-69. Impacts to roosting bats will be compensated through the development and implementation of a Bat Protection and Mitigation Plan in coordination with the California Department of Fish and Wildlife. Roosting habitat will be created on the new structures. Design components of bat mitigation to be incorporated into structures will be completed between 60 percent and 95 percent designs. The plan will include post-construction monitoring of roosts for five years.

Tricolored Blackbird, Great Blue Heron, Yellow Warbler, Burrowing Owl, and Other Nesting Birds

Avoidance and Minimization Measures

BIO-70. Prior to construction, vegetation removal shall be scheduled to occur from October 1 to January 31, outside of the typical nesting bird season if possible, to avoid potential impacts to nesting birds. If tree removal or other construction activities are proposed to occur within 100 feet of potential habitat during the nesting season (February 1 to September 30), a nesting bird survey shall be conducted by a biologist determined qualified by Caltrans no more than 10 calendar days prior to construction. If an active nest is found, Caltrans shall implement an appropriate buffer or monitoring strategy based on the habits and needs of the species. The buffer area or monitoring strategy shall be implemented until a qualified biologist has determined that juveniles have fledged and are no longer reliant on the nest or nesting activity has otherwise ceased.

BIO-71. During construction, active bird nests shall not be disturbed and eggs or young of birds covered by the Migratory Bird Treaty Act and California Fish and Game Code shall not be killed, destroyed, injured, or harassed at any time.

BIO-72. Trees to be removed shall be noted on design plans. Prior to any ground-disturbing activities, Environmentally Sensitive Area fencing shall be installed around the dripline of trees to be protected within project limits.

BIO-73. All initial clearing/grubbing and vegetation removal shall be monitored and documented by a qualified biologist regardless of time of year.

The following additional avoidance measures shall be implemented for tricolored blackbird:

BIO-74. A qualified biologist will conduct preconstruction surveys for tricolored blackbird in suitable habitats within the project area, within 14 days prior to

project commencement. Observations of Species of Special Concern or other special-status species shall be documented on California Natural Diversity Database forms and submitted to the California Department of Fish and Wildlife upon project completion.

BIO-75. If a tricolored blackbird is detected within the project limits or within 250 feet of the construction activities, the qualified biologist will determine whether a nesting colony is present in the area. If nesting tricolored blackbirds are confirmed, the California Department of Fish and Wildlife will be notified, and a buffer zone for the colony will be defined. No take of tricolored blackbird shall occur.

The following additional measures shall be implemented for burrowing owl:

BIO-76. A qualified biologist will conduct preconstruction surveys for burrowing owl in grassland habitats of the project area, within 30 days prior to project commencement. The biologist will survey for burrows with molted feathers, cast pellets, prey remains, eggshell fragments, or excrement at or near the burrow entrance and listen for burrowing owl calls. If burrowing owls are confirmed, the California Department of Fish and Wildlife will be notified, and an avoidance buffer zone will be defined. No take of burrowing owls shall occur. Observations of Species of Special Concern or other special-status species shall be documented on California Natural Diversity Database forms and submitted to the California Department of Fish and Wildlife upon project completion.

[The following measures specific to the planned geotechnical drilling operation have been added since the draft environmental document was circulated.]

Geotechnical Drilling Operation

Avoidance and Minimization Measures

The following additional measures shall be implemented for the geotechnical drilling operation:

BIO-77. Work within jurisdictional areas will be limited to between June 1 – October 31 when seasonal flow is at a minimum.

BIO-78. Pre-construction surveys for sensitive species in the project area will be carried out by a qualified biologist prior to mobilization and ground disturbance activities.

BIO-79. A qualified biologist will be present to monitor initial ground disturbance.

BIO-80. A pre-construction Worker Environmental Awareness Training will be conducted prior to commencement of Geotech investigation activities and subsequent Worker Environmental Awareness Trainings are required for all

new workers before performing work. On completing the training, workers must sign a form stating they attended the training.

BIO-81. Drilling activities will not release water, remove soil, trench, or place fill materials in waters, wetlands, riparian areas or on streambanks.

BIO-82. Ensure that project related vehicles do not leak anti-freeze or other hazardous materials.

BIO-83. All boring holes must be backfilled immediately after the completion of each test. The last three feet of backfill will consist of native soil materials and be placed using hand tools.

BIO-84. Any boring holes that are left open must be covered while unattended and thoroughly inspected for trapped animals before backfilling.

BIO-85. If any sensitive species are found in the project area they will not be disturbed and will be allowed to leave of their own accord

BIO-86. Any contractor, employee, or other personnel who inadvertently kills or injures a special-status species will immediately report the incident to Caltrans who will notify the appropriate regulatory agencies.

BIO-87. No geotechnical work shall occur during or 24 hours following a significant rain event defined as 0.25 inch or more of precipitation in a 24-hour period for Bradley, CA.

BIO-88. If work is required within the typical nesting bird and bat maternity roosting season (February 1-September 30), a Caltrans biologist will perform a nesting bird and roosting bat survey prior to the start of drilling activities. Work will not occur within 50 feet of an active bird nest. Work will not occur within 50 feet of active bat maternity roost.

BIO-89. Construction pipes or similar structures with a diameter of 4-inches or greater that are stored at the project site overnight will be thoroughly inspected before the pipe is moved, buried, capped, or otherwise moved in any way.

BIO-90. Workers shall inspect under vehicles and equipment for wildlife before they are moved. A maximum speed limit of 20 miles-per-hour on unpaved roads shall be enforced.

BIO-91. All food-related trash items will be disposed of in securely closed containers and removed from the project site at least once per week.

BIO-92. Pets and firearms are prohibited within the project area.

BIO-93. Upon completion of project, all construction refuse shall be removed from the project site and disposed of properly.

2.1.5 Cultural Resources

[The following sentence has been modified since the draft environmental document was circulated.] Considering the information in the 2024 Historic Property Survey Report with attached Archaeological Survey, Extended Phase I, and Phase II Evaluation Report, and the 2025 Historic Property Survey with attached Finding of Effect report, Environmentally Sensitive Area Action Plan, Post Review Discovery and Monitoring Plan, and Supplemental Archaeological Survey Report, the following significance determinations have been made:

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

Affected Environment

A Historic Property Survey Report was prepared in July 2024. The term “cultural resources” as used in this document refers to the “built environment” (for example, structures, bridges, railroads, water conveyance systems), places of traditional or cultural importance, and archaeological sites (both prehistoric and historic), regardless of significance. Under federal and state laws, cultural resources that meet certain criteria of significance are referred to by various terms including “historic properties,” “historic sites,” “historical resources,” and “tribal cultural resources.”

Area of Potential Effects

The Area of Potential Effects was established as the entire area where project activities may directly or indirectly affect cultural resources. The Area of Potential Effects encompasses U.S. 101 within the project limits, the two Camp Roberts rest areas, the area below the San Antonio River Bridges, as well as the entire site boundary for one archaeological resource.

Project Area Cultural Resources

Background Research

Table 2.9 shows the chronology of the Central Coast area, from the Late period (some 700 years ago) back to the Millingstone period (5,500 to 10,000 years ago). For the Native American population, its social structure, territory, and means of obtaining food evolved over time, as noted in the Interpretations column of the table.

Table 2.9. Central Coast Chronology

Period	Years Before Present (BP) Range	Interpretations
Late	700–Historic Contact	Population increase; acorn important; increased territoriality; intensified subsistence.
Middle/Late Transition	1,000–700	Medieval Climatic Anomaly: droughts, settlement disruptions, decrease in regional trade, population decline.
Middle	2,600–1,000	Logistically organized subsistence-settlement; continued importance of acorn; fishing and large game more important.
Early	5,500–2,600	Beginning of intensified acorn use; more inter-group and inter-regional exchange.
Millingstone	10,000–5,500	Broad-spectrum foraging.

In July 2024, Caltrans completed a Historic Property Survey Report for the current project's Area of Potential Effect, which included an Archaeological Survey, Extended Phase I, and Archaeological Evaluation Report. Archaeological studies resulted in the identification of nine cultural resources within the Area of Potential Effect, as well as four areas with elevated sensitivity for buried archaeological deposits. Five of the cultural resources were determined exempt from further study and evaluation: a historic highway segment, and four newly recorded isolated artifacts. One of the previously recorded archaeological sites was previously determined ineligible for listing on the National Register of Historic Places, with concurrence from the State Historic Preservation Officer. Three archaeological sites were evaluated as a result of archaeological studies. Two of the three sites were determined ineligible for listing on the National Register of Historic Places. One of these sites could not be evaluated entirely, due to the size of the resources and limited access. The areas identified as highly sensitive for buried archaeological deposits were negative of any cultural resources.

Native American Consultation

Native American consultation is being conducted by Caltrans. A list of Native American contacts and a search of the Sacred Lands File from the Native

American Heritage Commission were requested on November 10, 2022. The Native American Heritage Commission responded on December 6, 2022, that the results of the Sacred Lands File check were negative and provided a list of Native American tribes and individuals who may have knowledge of cultural resources in the proposed project area. On December 6, 2022, Caltrans distributed letters via email to the Native American contacts provided by the Sacred Lands File, thereby initiating consultation under Assembly Bill 52 and Section 106 of the National Historic Preservation Act.

The Salinan Tribe of Monterey and San Luis Obispo Counties, Xolon-Salinan Tribe, and Amah Mutsun Tribal Band of Mission San Juan Bautista would like to consult on the project. All three groups have asked to monitor during construction. Also, the Amah Mutsun Tribal Band of Mission San Juan Bautista requested cultural sensitivity training be provided to construction personnel.

A member of the Salinan Tribe of Monterey and San Luis Obispo Counties was present for all archaeological excavations. All artifacts recovered from the Caltrans right-of-way were repatriated in consultation with the Salinan Tribe of Monterey and San Luis Obispo Counties. Native American consultation will be ongoing throughout the life of the project.

Environmental Consequences

National Register of Historic Places Eligibility

The significance of Native American archaeological resources that may be discovered within the study area is best measured by applying National Register eligibility criteria (36 Code of Federal Regulations 60.4). These criteria state, in part, that: The quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, materials, workmanship, feeling, and association, and

- (A) That are associated with events that have made a significant contribution to the broad patterns of our history; or
- (B) That are associated with the lives of persons significant in our past; or
- (C) That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- (D) That have yielded, or may be likely to yield, information important in prehistory or history.

Pre-contact sites may be found eligible for the National Register using any of the four criteria, or any combination thereof.

The State Historic Preservation Officer concurred with all the District 5 recommendations and eligibility determinations in July 2024. As a result of cultural studies, one archaeological site remains in the project Area of Potential Effect. The site was not evaluated in its entirety due to size of the resource, restricted access, and low potential project impacts outside of the Area of Direct Impacts. Only the portion of the site within the Area of Direct Impacts was subject to evaluation. The portion evaluated did not meet requirements to address research themes and was determined to not contribute to the site's eligibility for listing on the National Register of Historic Places. The State Historic Preservation Officer concurred on July 18, 2024. As a result of some of the site remaining untested, Caltrans assumed the resource is eligible for listing on the National Register, under Criterion D, for the purposes of this project only.

[The following two sentences have been updated since the draft environmental document was circulated.] Caltrans consulted with the State Historic Preservation Officer for a determination of project effects. The State Historic Preservation Officer concurred with a Finding of No Adverse Effect – Non-Standard Conditions, Environmentally Sensitive Area.

The portion of the site beyond the Area of Potential Effect will be protected by the establishment of an Environmentally Sensitive Area. Project impacts will not adversely affect the site because they are proposed within the non-contributing portion of the site. Standard Specification 14-2.03B shall be complied with. Archaeological monitoring areas will be determined during the project's final design phase and delineated prior to the start of construction. In addition, there will be tribal monitoring during construction.

Despite efforts to identify cultural resources, a slight possibility remains that additional resources may be encountered. Standard Specification 14-2.03A shall be complied with. This Standard Specification states that if previously unidentified cultural materials are unearthed during construction, it is Caltrans' policy that work be halted within a 60-foot radius of the discovery until a qualified archaeologist can assess the significance of the finding and give authorization to resume work.

Impacts to cultural resources will be less than significant.

Avoidance and Minimization Measures

ARCH-1. An Environmentally Sensitive Area Action Plan will be prepared prior to project construction. All measures and guidance included in the plan will be complied with.

[The following measure has been updated since the draft environmental document was circulated.] ARCH-2. All ground disturbance during construction will be monitored by tribal monitors. Ground disturbance at San Antonio River Bridges will be monitored by a qualified archaeologist during construction.

2.1.6 Energy

Project construction will require the use of energy resources. Construction of the project is necessary to restore assets to good condition and to meet current standards. [This sentence has been updated since the draft environmental document was circulated.] During operation, the one replaced traffic count/census station will continue to use electricity as necessary to maintain operation. Though energy will be required to construct and operate the project, the use of energy will not be wasteful, inefficient, or unnecessary. Therefore, the following significance determinations have been made:

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

2.1.7 Geology and Soils

Considering the information in the paleontological identification report completed on June 13, 2024, and Geologic Hazards Report completed on June 5, 2024, the following significance determinations have been made:

Question—Would the project:	CEQA Significance Determinations for Geology and Soils
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	Less Than Significant Impact

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

Affected Environment

Geologic and Soil Conditions

The California Geological Survey record and U.S. Geological Survey Quaternary Fault and Fold database indicate the proposed project improvements are not within an Alquist Priolo Earthquake Fault Zone. The project improvements also are not within 1,000 feet of any mapped fault that is Holocene (up to 11,000 years old) or younger.

The San Andreas fault zone is about 16 miles east of the project limit, and the Rinconada Fault zone is about 5 miles west of the project limits. Both could be sources of strong seismic ground shaking. The Rinconada Fault has a maximum magnitude of 7.4, while the San Andreas Fault has a maximum magnitude of 7.9 according to the foundation report for the San Antonio River Bridges. The risk of strong seismic ground shaking on this section of U.S. 101 will likely be due to major events occurring in either of these two fault zones.

The Geologic Hazards Map Geographic Information Systems application from Monterey County's website contains liquefaction data along U.S. 101. The

Geologic Hazards Map indicates that within the project limits, liquefaction potential ranges from low to high. Table 2.11 shows the soil liquefaction potential within the project limits.

Table 2.11. Summary of Liquefaction Potential

Post Mile Start	Post Mile End	Liquefaction Potential
R1.9	R2.2	Moderate
R2.2	R2.45	High
R2.45	R2.6	Moderate
R2.6	R3.9	Low
R3.9	R6.7	Moderate
R6.7	R6.8	High
R6.8	R7.54	Moderate
R7.54	R9.6	Low
R9.6	R9.7	Moderate

The alignment of U.S. 101 runs along mostly gently sloping terrain with minimal landslide risk. According to the California Geological Survey's landslide inventory database and the Geologic Hazards Map application from Monterey County's Geographic Information Systems Department, landslide hazards are low. Both seismic and/or heavy rainfall events may contribute to landslide hazards along cut slopes along embankment or cut slopes in localized areas.

Monterey County's online Geologic Hazards Map rated the soil erosion potential on certain sections of U.S. 101. The soil erosion potential ranges from low to high within the project limits. The results are shown in Table 2.12.

Table 2.12. Summary of Soil Erosion Potential

Post Mile Start	Post Mile End	Soil Erosion Potential
R1.9	R2.2	Low
R2.2	R2.46	Moderate
R2.46	R3.23	Low
R3.23	R3.55	Moderate
R3.5	R5.34	Low
R5.34	R7.1	Moderate
R7.1	R7.39	High
R7.39	R7.5	Moderate
R7.5	R7.85	High
R7.85	R9.6	Moderate
R9.6	R9.63	High

R9.63	R9.7	Moderate
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Upon review of geologic maps available in the U.S. Geological Survey's database, all proposed improvements in the project limit are mostly situated on structural fill underlain with stream fill alluvium and old terrace alluvium composed of clay, sand, and gravel associated with the Paso Robles Formation. The Paso Robles Formation is generally made up of an alluvial conglomerate of pebbles and shale from the Monterey Formation. All alluvium outside of the Paso Robles Formation is susceptible to liquefaction, as addressed above.

Paleontology

Paleontological resources are the remains or traces of once-living organisms that are preserved in the geologic record as fossils. Paleontological resources can include body fossils (e.g., bones, teeth, shells, leaves), trace fossils (e.g., tracks, trails, burrows, coprolites), and microfossils (e.g., pollen grains, spores, diatoms). Fossils are generally considered to be older than about 11,700 years (the end of the Pleistocene Epoch), but organic remains older than middle Holocene age (about 5,000 years) can also be considered to represent fossils because they are part of the record of past life. Paleontological resources also include fossil localities and the formation or rock unit containing the fossils.

Fossils are considered important scientific and educational resources because they serve as direct and indirect evidence of past life and are used to understand the history of life on Earth, and of past environments, ecosystems, and climates. Fossils can answer questions relating to patterns and processes of evolution and extinction, and how life has responded to changes in climates and environments through time.

Caltrans uses a three-part scale for assessing paleontological potential. An abbreviated description of each potential ranking is provided below:

- **High Potential** - Rock units which, based on previous studies, contain or are likely to contain significant vertebrate, significant invertebrate, or significant plant fossils. Generally, earthwork that disturbs geologic units with a high paleontological potential will require monitoring and mitigation.
- **Low Potential** - This category includes sedimentary rock units that are potentially fossiliferous but have not yielded significant fossils in the past, or contain common and/or widespread invertebrate fossils. Geologic units with a low paleontological potential generally do not require monitoring and mitigation, but it is possible that unanticipated fossil discoveries may arise during construction, requiring a Construction Change Order in order for a Principal Paleontologist to evaluate the resource.

- No Potential - Rock units of intrusive igneous origin, most extrusive igneous rocks, and moderately to highly metamorphosed rocks are classified as having no potential for containing significant fossils. For projects encountering only these types of geologic units, paleontological resources can generally be eliminated as a concern, and no further action taken.

Geology as it Relates to Paleontology

Evaluation of the project paleontology, and geology as it relates to paleontology, included a review of available geologic mapping, geological and paleontological literature, the Caltrans paleontology mapping tool, and Google Street View Imagery. No field survey was conducted.

The project lies in the Coast Ranges Geomorphic Province of California, the greater geologic history of which is characterized by the subduction of the Farallon Plate beneath the North American Plate between 20 to 30 million years ago. The Coast Ranges extend along the majority of California's coast from the California-Oregon border to Point Arguello in Santa Barbara County in the south and consist of northwest-trending mountain ranges and valleys. The Coast Ranges are composed of Mesozoic and Cenozoic sedimentary, igneous, and metamorphic strata. The Bradley Capital Preventative Maintenance project lies within the southern portion of the Coast Ranges.

The complex geologic history of the southern Coast Ranges is dominated by the development of and lateral movement along the San Andreas Fault Zone over the last 30 million years. Right-lateral movement along the fault initially opened up deep marine basins that filled with great thicknesses of marine sediments. Near the close of the Miocene, compressional tectonics across the region began a period of folding, faulting, and uplift of the Miocene and older sediments that initiated the emergence of the northwest-trending linear fabric that characterizes the modern Coast Ranges. During the Pliocene and Pleistocene, renewed subsidence resulted in the accumulation of thick sequences of marine and nonmarine sediments, many of which were subsequently uplifted and deformed by compressional tectonics.

U.S. 101 through the project limits roughly follows the course of the San Antonio River to the northwest while crossing a series of rolling hills and valleys carved by tributaries. There is a total elevation gain of 66 feet from northwest to southeast through the project limits.

Project Lithology

The lithology (scientific study and description of rocks) within the project limits is described below.

- Artificial fill/previously disturbed deposits: It is assumed that unmapped artificial fill is present within the project vicinity. These deposits were placed/disturbed during original construction of the highway, installation of utilities, and maintenance activities. Further, these activities likely

disturbed native sediments adjacent to U.S. 101, so the presence of previously disturbed deposits in the project area is inferred. These previously disturbed deposits are presumed to exist within the uppermost 3 feet of the ground beneath the roadway prism.

- Holocene alluvial wash deposits (Qg): Youngest alluvial sediments composed of unconsolidated sand and gravel underlie the project limits between post miles R2.25 and 2.5, and post miles R6.7 and R6.9. This unit refers to sediments that have been deposited within recent and active stream channels associated with the San Antonio River and its tributaries.
- Holocene alluvial valley deposits (Qa): Young alluvial sediments composed of unconsolidated clay and sand underlie the project limits between post miles R1.9 and R2.25, post miles 2.5 and 6.7, post miles R6.9 and R7.1, and post miles R9.6 and R9.7. These deposits are associated with a depositional environment characterized by periodically flooding streams/rivers along a valley floor. Differentiating between alluvial valley and alluvial wash deposits can be difficult, as their appearance is similar, and the thickness of the alluvial wash sediments can vary significantly within the project area.
- Pleistocene Paso Robles Formation (QTp): Pleistocene Paso Robles Formation sediments are mapped as being present beneath the project post mile limits. Discerning the contact between old alluvial valley deposits and the Paso Robles Formation can be difficult to discern, and some previous investigations have arbitrarily placed the contact at the base of the hills that border the Hames and San Antonio Valleys.

Most of the Paso Robles Formation consists of weakly hardened pebble conglomerate within a sand and clay matrix that is Pliocene to Pleistocene in age. These pebbles consist mainly of white siliceous shale originating from the Miocene-aged Monterey Formation. Smaller areas of the Paso Robles Formation consist of clay beds. The Paso Robles Formation represents deposition within large valleys formed by tectonic folding.

Project Paleontology

The paleontology (scientific study of ancient life from fossils and other remains from the geologic past) within the project limits is described below.

- Artificial fill/previously disturbed deposits: Previously disturbed deposits and artificial fill have no paleontological potential because any contained fossils have lost their original stratigraphic and geographic context and are not scientifically significant.
- Holocene alluvial wash deposits (Qg): Deposits of Holocene age have a low paleontological potential because their geologic age is too young to

contain fossils. Unanticipated fossil discoveries within this unit as a result of project activities are unlikely.

- Holocene alluvial valley deposits (Qa): Deposits of Holocene age have a low paleontological potential because their geologic age is too young to contain fossils. Unanticipated fossil discoveries within this unit as a result of project activities are unlikely.
- Pleistocene Paso Robles Formation (QTp): The Paso Robles Formation is composed of Plio-Pleistocene sediments of both terrestrial and marine origin, and portions of the unit are known to host terrestrial and marine vertebrate fossils as well as marine invertebrate fossils. Examples of significant fossils sourced from the Paso Robles Formation include marine vertebrates like walrus, terrestrial vertebrates like lizards, birds, horses and camel and marine invertebrates like mollusks, crustaceans, and brachiopods.

Environmental Consequences

Geology and Soils

Geological information is gathered throughout the project design process and is being carefully considered when design decisions are made to ensure safety and reliability.

This project involves a bridge replacement, repaving, and culvert repair and replacement. The project lies in an area that could experience soil instability or the effects of earthquakes. However, the project itself will not increase risks associated with these geologic and soil conditions.

This project will not result in rupture of a known earthquake fault, strong seismic ground shaking, seismic-related ground failure, or landslides. The project is not anticipated to increase risk of these occurrences, and the project will not increase safety risk during any of these events. The project will have a less than significant impact in these areas.

The project will include best management practices for reducing erosion during construction. During operation, the replaced and repaired culverts will efficiently convey water during storm events and reduce erosion. A less than significant impact will occur.

The project will not increase risks related to liquefaction of soil. Though the project will in part occur on soils that are prone to liquefaction, the project will not increase the likelihood of a liquefaction event or increase safety risks in the event of liquefaction.

The project will not directly or indirectly cause potential substantial adverse effects due to geologic or soil conditions. A less than significant overall impact will occur. No avoidance, minimization, or mitigation measures are necessary for geologic and soils conditions.

Paleontology

Direct impacts to paleontological resources occur when earthwork operations cut into the geologic units where fossils are buried and physically destroy the fossil remains. Therefore, only projects that involve earthwork (e.g., grading, trenching, large-diameter drilling), and disturb potential fossil-bearing sedimentary rocks (i.e., those with a high paleontological potential rating) have the potential to significantly impact paleontological resources.

Project activities involving structures and drainage improvements will require earthwork that could extend to depths that will disturb potential fossil-bearing sedimentary rocks. These activities include the replacement of the San Antonio River Bridges and the North Bradley Undercrossing, as well as the culvert replacements.

All other project activities, including roadway rehabilitation, guardrails and barriers, and transportation management system and signs, will involve minimal earthwork. The depth of excavation associated with these activities would likely be confined within previously disturbed deposits, which have no paleontological potential.

Table 2.12 shows the geologic units that may be affected by project earthwork and their sensitivity for impacts to paleontological resources.

Table 2.12. Paleontological Potential Ranking of Geologic Formations Affected by Project Earthwork

Post Mile	Planned Improvement	Geologic Unit Name and Age	Paleontological Potential Rating	Impacts to Paleontological Resources
5.35	Cut and cover culvert replacement	Artificial fill/previously disturbed deposits- Recent	None	None: Any fossils present are not scientifically significant because they have lost their original stratigraphic and geographic context.
6.66	Replacement of San Antonio River Bridges	Alluvial valley deposits (Qa)- Holocene	Low	Unlikely: Geologic age is too young to contain fossils.
7.78	Jack and bore culvert replacement	Paso Robles Formation (QTp)- Pleistocene	High	Possible: Significant fossils documented in the unit, including limited occurrence of terrestrial and marine vertebrates, and marine invertebrates.
7.92	Cut and cover culvert replacement	Artificial fill/previously disturbed deposits- Recent	None	None: Any fossils present are not scientifically significant because they have lost their original stratigraphic and geographic context.

Post Mile	Planned Improvement	Geologic Unit Name and Age	Paleontological Potential Rating	Impacts to Paleontological Resources
7.94	Replacement of North Bradley Undercrossing Structure	Paso Robles Formation (QTp)- Pleistocene	High	Possible: Significant fossils documented in the unit, including limited occurrence of terrestrial and marine vertebrates, and marine invertebrates.
9.16	Cut and cover culvert replacement	Artificial fill/previously disturbed deposits- Recent	None	None: Any fossils present are not scientifically significant because they have lost their original stratigraphic and geographic context.
9.66	Cut and cover culvert replacement	Artificial fill/previously disturbed deposits- Recent	None	None: Any fossils present are not scientifically significant because they have lost their original stratigraphic and geographic context.

The Paso Robles Formation is exposed in the hills on both sides of the project area, so it is likely that it underlies the Holocene alluvial valley deposits in a manner that does not conform to a regular geologic sequence and that Paso Robles Formation sediments are present beneath the project limits. The depth at which the Paso Robles Formation occurs in areas mapped as younger alluvium is unknown, but the depth of excavation associated with project activities within these alluvial valley and wash units are unlikely to affect Paso Robles Formation sediments.

The replacement of the culvert at post mile R7.78 via jack and bore methods and the replacement of the North Bradley Undercrossing have the potential to affect native Paso Robles Formation sediments that host significant fossils. Also, the exact depth of excavation that will be required for installation of the bents of the North Bradley Undercrossing is not known at this time.

Preparation of a Paleontological Mitigation Plan prior to construction will identify sensitive locations where monitoring could be required, procedures for collecting fossils, and provisions for the fossils to be curated at an appropriate repository and catalogued for scientific study in perpetuity. Preparation of the Paleontological Mitigation Plan will reduce the potential for significant impacts to paleontological resources.

Conclusions and Recommendations

No adverse effects to paleontological resources are expected for most of work locations included in the project. Structure replacement and culvert replacement activities at post mile R7.78 and post mile R7.94, respectively, have the potential to adversely affect paleontological resources due to high paleontological sensitivity of the underlying geologic unit and method of construction. Preparation of a Paleontological Mitigation Plan during the

project design phase will mitigate any potentially negative effects that could result from construction of the proposed project (see mitigation measure PALEO-1, below). Standard Specification 14-7.03 will be followed in the event that fossils are unearthed during construction. This Standard Specification provides protocols to follow for the evaluation and treatment of unanticipated discoveries.

Avoidance, Minimization, and Mitigation Measures

Compensatory Mitigation Measure

PALEO-1. Caltrans shall retain a Principal Paleontologist that meets Caltrans qualifications to prepare or oversee preparation of a Paleontological Mitigation Plan during the project Plans, Specifications, and Estimates phase once more detailed project plans are available. Elements of the Paleontological Mitigation Plan shall conform to Caltrans guidelines (Standard Environmental Reference, Volume 1, Chapter 8). Paleontological Monitoring during construction may be required as a component of the Paleontological Mitigation Plan.

2.1.8 Greenhouse Gas Emissions

Considering the information in the Greenhouse Gas Technical Memo dated July 3, 2024, and the Climate Change Technical Report dated July 5, 2024, the following significance determinations have been made:

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

Affected Environment

The Transportation Agency for Monterey County serves as Monterey County's Regional Transportation Planning Agency. The Transportation Agency for Monterey County is responsible for developing a Regional Transportation Plan for the county that serves as a basis for the allocation of state and federal transportation funds to transportation projects within the county over a long-range timeframe. The Transportation Agency for Monterey County is one of three regional transportation planning agencies within the larger Metropolitan Planning Organization area of the Association of Monterey Bay Area Governments. The Association of Monterey Bay Area Governments

is responsible for developing the 2040 Metropolitan Transportation Plan/ Sustainable Communities Strategy, which aims to maintain and improve the transportation system to meet the diverse needs of the region through 2040.

Environmental Consequences

The purpose of the project is to improve roadway assets in poor condition. The project will not increase the vehicle capacity of the roadway. This type of project is not expected to alter operational greenhouse gas emissions. Because the project will not increase the number of travel lanes on U.S. 101, no increase in vehicle miles traveled will occur as a result of project implementation. Some greenhouse gas emissions will be generated during the construction period.

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

While construction greenhouse gas emissions are produced for only a short time, they have long-term effects in the atmosphere, so cannot be considered “temporary” in the same way as criteria pollutants that subside after construction is completed.

In general, the use of long-life pavement, improved traffic management plans, and changes in materials, can also help offset emissions produced during construction by allowing longer intervals between maintenance and rehabilitation activities.

Construction Climate Change emissions were estimated using the CAL-CET modeling tool using default settings for a Bridge Construction and Preservation project. The estimated average carbon dioxide emissions total is 597 metric tons per year and 389 metric tons per year for Alternative 1 and Alternative 2, respectively. Also, the estimated average carbon dioxide equivalent emissions total for each alternative is about 1,047 metric tons and 951 metric tons generated over the respective construction periods for Alternative 1 and Alternative 2, respectively. The carbon dioxide equivalent is calculated by combining estimates of carbon dioxide, methane, nitrous oxide, and hydrofluorocarbons emissions. Note that these estimates are based on assumptions made during the environmental planning phase of the project and are considered a “ballpark” of energy usage.

All construction contracts include Caltrans Standard Specifications related to air quality. Section 7-1.02A and 7-1.02C, Emissions Reduction, which require contractors to comply with all laws applicable to the project and to certify they are aware of and will comply with all California Air Resources Board emission

reduction regulations; and Section 14-9.02, Air Pollution Control, which requires contractors to comply with all air pollution control rules, regulations, ordinances, and statutes. Certain common regulations, such as equipment idling restrictions, that reduce construction vehicle emissions also help reduce greenhouse gas emissions.

Another Standard Specification that shall be complied with during construction of the project and will reduce greenhouse gas emissions during construction is Section 14-10 Solid Waste Disposal and Recycling. Recycling greater quantities of construction waste will help offset greenhouse gas emissions. Furthermore, Standard Specification Section 12, Temporary Traffic Control, outlines the standards for properly implementing traffic controls during construction. Standard Specification 21-2.02K, Compost, will guide the inclusion of compost or mulch in the landscape plan where it is appropriate. Landscaping components, such as mulch and compost, improve carbon sequestration rates in soils and reduce organic waste.

While the project will result in greenhouse gas emissions during construction, the project will not result in an increase in operational greenhouse gas emissions. Operational greenhouse gas emissions will not result from the project because the project is not capacity-increasing. The 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 greenhouse gas reduction measures, the project's construction-related greenhouse gas emissions will not be notable. Construction greenhouse gas emissions are those produced by construction equipment and construction-related activities. Construction emissions are independent of any operational emissions produced by vehicles traveling through the project limits after construction is completed.

Caltrans is firmly committed to implementing measures to help reduce greenhouse gas emissions. With the implementation of construction greenhouse gas reduction measures, the project's greenhouse gas emissions will be less than significant.

Avoidance and Minimization Measures

To minimize the project's greenhouse gas emissions during construction, the following measures will be implemented:

GHG-1: Where feasible, schedule truck trips outside of peak morning and evening commute hours. Traffic operations shall specify this in the lane closure charts.

GHG-2: Where feasible, use alternative fuels such as renewable diesel for construction equipment. If use of alternative fuels is not possible, substitute gasoline-powered equipment for diesel-powered equipment. Comply with Section 3-517- Equipment, of the Construction Manual.

GHG-3: Where feasible, use solar-powered construction equipment.

GHG-4: Supplement existing construction environmental training with information on methods to reduce greenhouse gas emissions related to construction. This information will be shared using a handout. The information in the handout should include, but is not limited to, the following:

- For improved fuel efficiency from construction equipment, maintain equipment in proper tune and working condition, use right sized equipment for the job, and use equipment with new technologies when feasible.
- Limit idling to 5 minutes for delivery and dump trucks and other diesel-powered equipment when not used in active operations.
- Reduce construction waste. For example, reuse or recycle construction and demolition waste. Maximize use of recycled materials in the project construction to the extent feasible, including but not limited to stockpiling pavement grindings for future use, salvaging rebar from demolished concrete, and processing waste to create usable fill (i.e., crushing concrete for aggregate bases). Also see Standard Specifications Section 14-10-Solid Waste Disposal and Recycling.
- Use on-road heavy-duty trucks that meet the California Air Resources Board's 2007 or cleaner certification standard for on-road heavy-duty diesel engines, and comply with the State On-Road Regulation. See Standard Specifications Section 7-1.02C-Emissions Reduction and comply with Construction Manual Section 7-1.04A (1)- Air Quality.

GHG-5: Reduce the need for transport of earthen materials by balancing cut and fill quantities. See Standard Specifications Section 19-2.03B-Surplus Material.

GHG-6: If feasible, use the accelerated bridge construction method. (Reduces construction windows, uses more precast elements that in turn reduce need for additional falsework, forms, bracing, etc.)

GHG-7: Salvage rebar from demolished concrete, and process waste to create usable fill.

GHG-8: Maximize use of recycled materials in the project construction to the extent feasible.

GHG-9: Recycle existing project features onsite, where feasible.

GHG-10: Reduce construction waste. For example, reuse or recycle construction and demolition waste.

GHG-11: Conserve water during construction, and prioritize the use of recycled water for construction needs. See Standard Specifications Section 10-4-Water Usage.

2.1.9 Hazards and Hazardous Materials

Considering the information in the Initial Site Assessment that was prepared for hazardous waste on June 13, 2024, and the Geologic Hazards Report that was completed on June 5, 2024, the following significance determinations have been made:

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

Question—Would the project:	CEQA Significance Determinations for Hazards and Hazardous Materials
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	Less Than Significant Impact

Affected Environment

The project lies on U.S. 101 near the town of Bradley in Monterey County. U.S. 101 serves as a major arterial, evacuation route, and route used by emergency responders.

The project is split between a high and low fire hazard severity zone in a State Responsibility Area. A very small portion of the project area (southeast of the town of Bradley and southeast of the highway itself) is within a very high fire hazard severity zone in a State Responsibility Area, according to the California Department of Forestry and Fire Protection's (CalFire's) Fire Hazard Severity Zone Viewer, effective April 1, 2024. However, portions of the project limits fall within the county's designated Wildland Urban Interface Fire Area.

At the closest point, the project is located less than 1,000 feet from Bradley Elementary School.

To provide information for the hazardous waste study, known as the Initial Site Assessment, the project description and hazardous waste databases were reviewed. There are hazardous waste sites and businesses commonly associated with hazardous waste generation in the project vicinity, but none are likely to have an impact due to project activities. Following is a discussion regarding typical hazardous materials and wastes that are routinely encountered during highway construction projects.

Hazardous Waste Sites

A review of environmental records and agency databases pursuant to Government Code Section 65962.5 was performed.

The GeoTracker database identified one active contaminant cleanup site within 1,000 feet of the project limits, and no closed sites. The site is located within Camp Roberts and is associated with Per- and Polyfluoroalkyl Substances in an aquifer used for drinking water and other groundwater not used for drinking water. Groundwater flows west toward the Salinas and Nacimiento Rivers. The Army National Guard performed an Initial Site Assessment in 2020 that is currently being reviewed by the Central Coast Regional Water Quality Control Board.

In 2017, groundwater was analyzed for Per- and Polyfluoroalkyl Substances from various camp facilities and, while Perfluorotetradecanoic acid was found in all samples, no Perfluorooctanoic acid or Per- and Polyfluoroalkyl Substances were found. This was part of a nationwide federal investigation on the impacts of human health at Army National Guard facilities that used Per- and Polyfluoroalkyl Substances in operations. The current investigated area is not the result of a specific spill or plume. Previous investigations into shallow soil reported no significant detections of contamination. The Camp Roberts Per- and Polyfluoroalkyl Substances Investigation is located about 600 feet west of the project site. The planned project improvements in the vicinity of the site indicate that the project is not likely to encounter contamination.

Caltrans Standard Special Provision 14-11.02, which addresses unanticipated discoveries of contaminated soils and groundwater, will be included in the project bid package so that the District 5 emergency on-call contract can be used in the event that residual contamination is encountered.

Aerially Deposited Lead

The historic use of leaded gasoline in automobiles has resulted in soils along roadways throughout California containing elevated concentrations of lead. Soil with lead concentrations exceeding stipulated thresholds must be managed under the July 1, 2016 Aerially Deposited Lead Agreement between Caltrans and the California Department of Toxic Substances Control. The Aerially Deposited Lead Agreement outlines which soils can be safely reused within the project limits and which soils must be exported and disposed of as hazardous waste.

Aerially deposited lead may be present in regulated quantities within the project limits. There have not been aerially deposited lead studies within the project limits, aside from one conducted on the San Antonio River Bridges in 2001. Though aerially deposited lead was not found in regulated quantities, the study did not cover a significant portion of the project limits.

During the project design phase, the hazardous waste specialist will work with the project design team to determine the extent to which such soils will be disturbed during construction, and whether soil will be exported from the project or reused onsite. A site-specific aerially deposited lead assessment that includes soil sampling and analysis with a handheld X-Ray Fluorescence machine may be performed by Caltrans District 5 Environmental Engineering staff to confirm that soils within the project limits are unregulated for aerially deposited lead. If soils with elevated concentrations of lead are documented by X-Ray Fluorescence analysis, then a task order to have a consultant perform laboratory analyses of soil samples will be required.

If soil is excavated and disposed of outside of the highway right-of-way, then a task order must be written to have site-specific soil sampling performed. This must be done to document the site-specific lead concentrations so this material

can be properly handled, reused, or disposed of. The aerially deposited lead study will be completed during the project design phase once the limits of excavation are known and will take four to six months to complete. The appropriate Caltrans Standard Special Provisions for aerially deposited lead soil management will be determined during the project design phase.

Yellow Thermoplastic or Traffic Stripe

Yellow traffic paint purchased by Caltrans prior to 1997 contained high concentrations of lead. Application of yellow thermoplastic material containing high concentrations of lead continued until at least 2004 to 2006. The lead concentrations in the older yellow paint and yellow thermoplastic are high enough to make these materials hazardous wastes when they are removed.

Older hazardous yellow traffic stripe within the project limits was removed under a different project in 2018. The residue from removal of the existing traffic paint and thermoplastic within the project limits will be a non-hazardous waste. The appropriate Standard Special Provisions for removal of traffic stripe and pavement markings will be determined during the project design phase once the removal method is known (e.g., separate removal of the paint/stripe, or cold planning or grinding).

In addition, a Lead Compliance Plan will need to be developed and implemented by the construction contractor and should be included as a bid item.

Naturally Occurring Asbestos

Naturally occurring asbestos refers to silicate minerals that occur as asbestiform fibers and are found as a natural component of soils or rocks. Disturbance of rocks containing naturally occurring asbestos can release asbestos fibers into the air, which pose a human health risk when inhaled. In District 5, naturally occurring asbestos can be found within serpentine and ultramafic rocks of the Coast Ranges, and within fault zones.

A review of geologic mapping and mineral hazard maps indicates that naturally occurring asbestos is not present within the project limits.

Lead-Containing Paint and Asbestos-Containing Materials

Bridges and structures may have materials with lead-containing paint and asbestos.

A site investigation was conducted on the San Antonio River Bridges in 2002, and found no lead-containing paint. Asbestos-containing materials were detected in barrier railing shims used on the bridges.

A site-specific lead-containing paint/asbestos-containing materials survey and assessment will be completed during the Plans, Specifications, and Estimates phase to determine proper handling and disposal methods.

Treated Wood Waste

Caltrans guardrail supports and signposts often consist of wood that has been treated with chemical preservatives to prevent rot or insect attack. Treated wood waste is considered to be a California hazardous waste but is subject to alternative management standards under Health and Safety Code Section 25230 that allow for simplified management and transport of treated wood waste, and disposal at non-hazardous waste landfills that meet certain requirements. The North Bradley Undercrossing Structure has not been tested for lead-containing paint or asbestos-containing material.

Treated wood waste may be generated by the project via guardrail and signpost replacement. If treated wood waste will be disposed of as part of the project, Standard Special Provision 14-11.14 will be included in the construction contract for proper management and disposal of treated wood waste for both the San Antonio River Bridges and the North Bradley Undercrossing Structure.

Electrical Waste

Replacement of Transportation Management System elements may generate hazardous waste. Electrical equipment includes mercury-containing switches, sensors, timers, ballasts with polychlorinated biphenyl, and other electrical components. All electrical equipment requiring disposal will be packaged and transported to an appropriate permitted disposal facility. Caltrans Standard Specification 14-11.15 contains the requirements for management of the electrical equipment and will be complied with by the contractor.

Environmental Consequences

The completed project will improve highway reliability and will not interfere with emergency response or emergency evacuation plans. During project construction, any traffic controls necessary will be implemented in accordance with the traffic control plan to not significantly impede fire or other emergency evacuation or emergency response traffic. Emergency responders will be made aware of any traffic disruptions, delays, or detours in advance. The project will not increase the risk of loss, injury, or death due to wildland fires.

Though there is one school within 0.25 mile of the project limits, all hazardous waste will be handled according to appropriate standard specifications. The release of hazardous materials is not anticipated.

Routine hazardous waste issues may be encountered during construction, but will be appropriately handled, treated, and disposed of (if required) with implementation of Caltrans Standard Specifications. During the project design phase, an aerially deposited lead study may be completed, and the hazardous waste specialist will work with the project design team to determine the appropriate Standard Special Provisions to include in the construction contract.

With implementation of appropriate Standard Special Provisions, adverse effects to human health or the environment are not anticipated.

Avoidance and Minimization Measures

HAZ-1. Caltrans Standard Special Provision 14-11.02, which addresses discovery of unanticipated discoveries of contaminated soils and groundwater, should be included in the project bid package so that the District 5 emergency on-call contract can be used in the unlikely event that contamination is encountered.

HAZ-2. The appropriate Caltrans Standard Special Provisions for aerially deposited lead soil management will be determined during the project design phase.

HAZ-3. A Lead Compliance Plan will need to be developed and implemented by the construction contractor and should be included as a bid item.

HAZ-4. A site-specific lead-containing paint/asbestos-containing materials survey and assessment for the San Antonio River Bridges and the North Bradley Undercrossing Structure will be completed during the Plans, Specifications, and Estimates phase.

HAZ-5. Standard Special Provision 14-11.14 will be included in the construction contract for proper management and disposal of treated wood waste.

[The following measure has been added since the draft environmental document was circulated.] HAZ-6. During project construction, notify California Geologic Energy Management Division and other appropriate agencies if soils containing significant amounts of hydrocarbons are discovered during soil-disturbing activities. Caltrans will also notify California Geologic Energy Management Division if any wells that were not part of this review are encountered during surveys or construction activities.

2.1.10 Hydrology and Water Quality

Considering the information in the Water Quality Assessment Report dated June 21, 2024, the Location Hydraulic Study dated November 14, 2022, and the updated Floodplain Evaluation dated June 20, 2024, the following significance determinations have been made:

Question—Would the project:	CEQA Significance Determinations for Hydrology and Water Quality
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface water or groundwater quality?	Less Than Significant Impact

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

Affected Environment

Groundwater is the principal source of water in Monterey County, accounting for more than 80 percent of the total water use. There are six groundwater basins within Monterey County: Pajaro Valley, Prunedale, Salinas Valley, Marina-Fort Ord, Carmel, and El Toro. Most of these areas include sub-basins that help further define and localize water issues.

Wells that are used to obtain groundwater are operated by many different entities (cities, special assessment districts, investor-owned utilities, mutual water companies and individual property owners), making groundwater

resource management difficult. Increases in groundwater pumping practices have resulted in localized over drafting and have caused saltwater intrusion in the Pajaro and Salinas River groundwater basins.

Water is necessary for domestic, industrial, agricultural, and recreational uses, as well as for sustaining fish and wildlife habitats. Five aquatic areas within Monterey County have been designated by the state as areas of special biological significance and therefore require special protection (Pacific Grove Marine Gardens Fish Refuge and Hopkins Marine Life Refuge, Point Lobos Ecological Preserve, Carmel Bay, Julia Pfeiffer Burns Underwater Park, and the ocean area surrounding the mouth of Salmon Creek). However, the project is not located within the limits of areas of special biological significance.

Water quality problems are mostly related to waste discharges from point and nonpoint sources and geologic limitations. Typical point sources are domestic and industrial wastewater sites. Non-point sources are more difficult to address and may include animal husbandry operations, natural mineralization, automobile emissions, and urban runoff. Three principal problems affect the county's groundwater basins (saltwater intrusion, nitrate pollution, natural reactions). Suspected sources of nitrate pollution include wastewater discharges, agriculture return water, and onsite wastewater treatment system overloading.

This project sits within the Salinas Hydrologic Unit, the Paso Robles Hydrologic Area, and the Atascadero Hydrologic Sub-Area. The receiving water bodies for this project are Salinas River, Nacimiento River, Hames Creek, and the San Antonio River.

The receiving water bodies have several beneficial uses designated in the Regional Water Quality Control Board's Basin Plan (Basin Plan). These beneficial uses are listed in Table 2.13.

Table 2.13. Beneficial Uses of the Receiving Water Bodies for the Project

Receiving Water	Beneficial Uses
Salinas River (middle, near Gonzales Road crossing to confluence with Nacimiento River)	Agricultural Supply, Cold Fresh Water Habitat, Commercial and Sport Fishing, Groundwater Recharge, Industrial Service Supply, Fish Migration, Municipal and Domestic Supply, Industrial Process Supply, Reservation of Rare and Endangered Species, Water Contact Recreation, Non-contact Water Recreation, Fish Spawning, Warm Fresh Water Habitat, Wildlife Habitat
Salinas River (upper, confluence of Nacimiento River to	Agricultural Supply, Cold Fresh Water Habitat, Commercial and Sport Fishing, Groundwater Recharge, Fish Migration, Municipal and Domestic Supply, Industrial Process Supply, Reservation of Rare and Endangered Species, Water Contact Recreation, Non-

Receiving Water	Beneficial Uses
Santa Margarita Reservoir)	contact Water Recreation, Fish Spawning, Warm Fresh Water Habitat, Wildlife Habitat
San Antonio River (below San Antonio Reservoir)	Agricultural Supply, Commercial and Sport Fishing, Groundwater Recharge, Industrial Service Supply, Fish Migration, Municipal and Domestic Supply, Reservation of Rare and Endangered Species, Water Contact Recreation, Non-contact Water Recreation, Fish Spawning, Warm Fresh Water Habitat, Wildlife Habitat
Nacimiento River (below Nacimiento Reservoir)	Agricultural Supply, Cold Fresh Water Habitat, Commercial and Sport Fishing, Groundwater Recharge, Industrial Service Supply, Fish Migration, Municipal and Domestic Supply, Reservation of Rare and Endangered Species, Water Contact Recreation, Non-contact Water Recreation, Fish Spawning, Warm Fresh Water Habitat, Wildlife Habitat

The Basin Plan does not list any beneficial uses for Hames Creek. Surface water bodies without any assigned beneficial uses listed in the Basin Plan have the following designations: municipal and domestic water supply [and] protection of both recreation and aquatic life. There are no drinking water and/or water recharge facilities within the project limits.

Most of the receiving water bodies for this project are 2020/2022 303(d) listed as impaired. Table 2.14 lists the project's receiving water bodies and the associated 303(d) pollutant. Caltrans is not identified as a responsible party for any Total Maximum Daily Load pollutant within the project limits.

Table 2.14. Pollutants by Water Body

Water Body	303(d) Pollutant
Salinas River (middle, near Gonzales Road crossing to confluence with Nacimiento River)	Benthic Community Effects, pH , Temperature, Toxicity, Turbidity
Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)	Benthic Community Effects, Chloride, Dissolved Oxygen, pH, Sodium, Toxicity
San Antonio River (below San Antonio Reservoir)	<i>Escherichia coli</i> (<i>E. coli</i>), pH
Nacimiento River (below Nacimiento Reservoir)	pH

Per the project's Structure Preliminary Geotechnical Report, the nearest water wells found in the California Department of Water Resources database are about 5 miles north of the site. Groundwater elevations in the vicinity of the bridge site are anticipated to be that of surface flow in the adjacent Salinas River at an elevation of about 490 feet, corresponding to approximately 70 feet below the ground surface. According to the final Seismic Design Recommendations and Lateral Soil Springs report prepared for the prior retrofit of San Antonio River Bridges, groundwater was

encountered around 33 to 34 feet below ground near the two abutments and about 6 to 8 feet below ground within the riverbed and the piers.

According to the project's Location Hydraulic Study, the proposed work would be within Federal Emergency Management Agency (FEMA) regulated floodplains. And based on the project's Natural Environment Study, the following stream/riparian habitats are present in the Biological Study Area: willow woodland and thicket, recovering woody riparian, cottonwood riparian forest, stream, and emergent wetland. The project will require a Clean Water Act Section 404 permit from the U.S. Army Corps of Engineers, a Clean Water Act Section 401 Water Quality Certification from the Regional Water Quality Control Board, and a Section 1602 Lake and Streambed Alteration Agreement from the California Department of Fish and Wildlife. See Section 2.1.4 Biology for details on impacts to jurisdictional areas.

Environmental Consequences

Temporary Impacts to Storm Water

Generally, as the Disturbed Soil Area increases, the potential for temporary water quality impacts also increases. The total proposed Disturbed Soil Area across the project area is 16.86 acres (out of the total project area of 258 acres). [The following sentence has been modified since the draft environmental document was circulated.] Since the project disturbs more than one acre of soil, it will require coverage under the National Pollutant Discharge Elimination System Construction General Permit. The project is anticipated to minimally increase impervious surface area, by about 0.1 acre (4,356 square feet).

The temporary effects that disturbing 16.86 acres of soil could have on the receiving waters will be minimized by implementing temporary best management practices proposed in the Water Quality Assessment Report, and listed in the Avoidance and Minimization Measures section below. The Salinas River is identified as an impaired water body on the 303(d) list for turbidity. However, no source of turbidity has been identified.

A preliminary project risk level assessment has determined this project to be a risk level 2 out of 3, in regard to temporary impacts to storm water. The risk level was determined using the combined project sediment risk and receiving water risk. The project sediment risk was calculated to be medium (59.9 tons per acre). The receiving water risk is classified as high due to Salinas River having beneficial uses for Cold Fresh Water Habitat, Fish Spawning, and Fish Migration. Monitoring and reporting requirements increase as the risk level increases from 1 to 3.

Temporary Impacts to Water Resources

Temporary impacts to aquatic resources will take place as a result of construction. Construction of new bridges will also require clear water

diversion from the creek. Further information on temporary impacts to water resources can be found in Section 2.1.4 Biological Resources.

Temporary Impacts to Groundwater

Based on preliminary studies performed for this project and on prior studies completed for the prior San Antonio River Bridge Retrofit Project, temporary impacts to groundwater are not anticipated. This will be confirmed during the design phase, once the geotechnical drilling required for further studies is completed.

Permanent Impacts to Storm Water

The project will produce 4,356 square feet of net impervious surface. Since that total is less than 10,000 square feet, no permanent best management practices are required to be installed. However, increase in impervious surface will increase the amount of storm water runoff, which in turn has the potential to affect receiving water quality. The nature of these impacts depends on the uses and flow rate or volume of the receiving water, rainfall characteristics, and highway characteristics. Heavy metals associated with vehicle tire and brake wear, oil and grease, and exhaust emissions are the primary pollutants associated with transportation corridors. There are no existing treatment best management practices along U.S. 101 within the project limits to treat roadway runoff. [The following sentence has been added since the draft environmental document was circulated.] However, prior to construction of this project, Caltrans plans to designate some treatment best management practices within the project limits for another Caltrans project in the region. [The following sentence has been modified since the draft environmental document was circulated.] The water quality of the receiving water bodies may be affected by highway runoff as a result of this project. Typically, highway projects increase impervious areas and therefore potentially increase the volume and velocity of storm water flow to downstream receiving water bodies. However, with effective combinations of temporary and permanent erosion and sediment controls, these water quality affects are anticipated to be minimal.

Permanent Impacts to Water Resources

Permanent impacts to other waters/streambed are not anticipated. Permanent impacts to riparian and streambank habitat will be composed of the construction of new piers in locations that are not currently hardscapes. However, due to the reduced number of support structures, the project will result in a net reduction of structures within the streambed and riparian/streambank corridor. Reestablishment of streambed, riparian and streambank habitat where existing supports are removed will offset the new permanent structure. Further information on impacts to water resources can be found in Section 2.1.4 Biological Resources.

Floodplains

According to the project's Location Hydraulic Study, the proposed work will be within Federal Emergency Management Agency (FEMA) regulated floodplains, and no significant floodplain encroachments have been identified with the proposed project. The project will not significantly impact the 100-year floodplains.

Avoidance and Minimization Measures

See Section 2.1.4 Biological Resources for avoidance, minimization, and mitigation measures for jurisdictional areas.

According to the project's Water Quality Assessment Report, during construction, effective combinations of temporary and permanent erosion and sediment controls will be used. Storm water management for the site will be coordinated through the contractor with Caltrans construction personnel to effectively manage erosion from the Disturbed Soil Areas by implementing a Storm Water Pollution Prevention Plan. Selected Best Management Practices that will be implemented are listed below. These Best Management Practices are subject to further refinement in the Plans, Specifications, and Estimates phase. Most of these Best Management Practices will be included in the Storm Water Pollution Prevention Plan for the project.

Temporary Soil Stabilization

HYDRO-1. Minimize active disturbed soil areas during the rainy season by using scheduling techniques.

HYDRO-2. Preserve existing vegetation to the maximum extent feasible.

HYDRO-3. Implement temporary protective cover/erosion control on all non-active disturbed soil areas and soil stockpiles.

HYDRO-4. Control erosive forces of storm water runoff with effective storm flow management, such as temporary concentrated flow conveyance devices, earthen dikes, drainage swales, lined ditches, outlet protection/velocity dissipation devices, and slope drains; as determined feasible.

Temporary Sediment Controls

[The following measure has been modified since the draft environmental document was circulated.] HYDRO-5. Implement linear sediment controls such as fiber rolls, check dams, temporary large sediment barriers, or gravel bag berms on all active and non-active disturbed soil areas during the rainy season.

HYDRO-6. To further help prevent sediment discharge, stabilize construction site entrances, implement temporary drainage inlet protection, and implement street sweeping and vacuuming.

HYDRO-7. Implement appropriate wind erosion controls year-round.

Non-Storm Water Management

The appropriate non-storm water Best Management Practices will be implemented year-round as follows:

HYDRO-8. Water conservation practices shall be implemented on all construction sites and wherever water is used.

HYDRO-9. Paving and grinding procedures shall be implemented where paving, surfacing, resurfacing, grinding, or saw cutting may pollute storm water runoff or discharge to the storm drain system or watercourses.

HYDRO-10. Follow appropriate procedures and practices designed for construction contractors to recognize illicit connections or illegally dumped or discharged materials on a construction site and report incidents to the Resident Engineer.

HYDRO-11. Stockpiling materials, storing equipment and liquid waste containers, washing vehicles or equipment, and fueling and maintaining vehicles and equipment must be performed at least 100 feet from concentrated flows of storm water, drainage courses, and inlets if within the floodplain. The activities must be performed at least 50 feet from the aforementioned areas if outside of the floodplain.

HYDRO-12. Pile driving operations will be considered part of the construction activities.

HYDRO-13. Concrete curing will be used in the construction of structures such as bridges and abutments. Concrete curing includes the use of both chemical and water methods. Proper procedures will minimize pollution of runoff during concrete curing.

HYDRO-14. Since the project involves structure demolition/removal over the San Antonio River, proper procedures will be implemented to minimize pollution during these activities.

HYDRO-15. The following construction site best management practices shall be bid items for this project to ensure they are implemented during construction:

- Job Site Management
- Prepare Stormwater Pollution Prevention Program
- Storm Water Sampling and Analysis Day
- Stormwater Annual Report

- Move In/Move Out (Temporary Erosion Control)
- Temporary Hydraulic Mulch (Bonded Fiber Matrix)
- Temporary Check Dam
- Temporary Drainage Inlet Protection
- [The following item has been added since the draft environmental document was circulated.] Temporary Creek Diversion
- Temporary Fiber Roll
- Temporary Large Sediment Barrier
- Temporary Construction Entrance
- Street Sweeping
- Temporary Concrete Washout
- Temporary Fence (Environmentally Sensitive Area-type fence)

Supplemental Items

HYDRO-16. Concurrence from Construction regarding the temporary Construction Site best management practices implementation strategy and associated quantities will be obtained during the Plans, Specifications, and Estimates phase.

Maintenance Best Management Practices

HYDRO-17. Continue coordination with Maintenance regarding the incorporation of best management practices. Finalize plan for best management practices prior to construction. Maintenance best management practices may include maintenance vehicle pullouts, access gates and roads, and maintenance worker safety features.

2.1.11 Land Use and Planning

Project activities will occur mostly on existing Caltrans right-of-way on or adjacent to U.S. 101. For some of the culvert-related work and the bridge replacements, the project will require temporary construction easements. However, use of construction easements will not alter existing land use or planning in the region. Project activities will not divide any existing communities and is not anticipated to conflict with any existing land use plan, policy, or regulations in the region. Considering this information, the following significance determinations have been made:

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

2.1.12 Mineral Resources

Project activities will involve work on highway features that are located within or immediately adjacent to the Caltrans right-of-way along U.S. 101. The project will not include the removal or extraction of mineral resources or preclude the extraction of mineral resources in the area. Considering this information, the following significance determinations have been made:

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

2.1.13 Noise

Considering the information in the Noise Technical Memo dated July 3, 2024, the following significance determinations have been made:

Question—Would the project result in:	CEQA Significance Determinations for Noise
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	Less Than Significant Impact
b) Generation of excessive groundborne vibration or groundborne noise levels?	Less Than Significant Impact

Question—Would the project result in:	CEQA Significance Determinations for Noise
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	No Impact

Affected Environment

The overall project setting consists of rolling terrain and mostly rural neighborhood with two rest areas in the project vicinity. U.S. 101 through the project limits is two lanes in each direction. The closest sensitive receptors (an elementary school, library, and homes) are over 1,000 feet away. However, people access the project site to use the San Antonio Unit of the Big Sandy Wildlife Area for recreation. Wildlife, including protected species, also inhabit the project area. Part of the project site is also within the Camp Roberts Military Base, where military exercises are sometimes carried out.

Regulatory Setting

CEQA considers there to be a significant noise impact when noise levels increase substantially compared to the ambient noise levels for adjoining areas. Caltrans and the Federal Highway Administration require consideration of noise abatement when predicted noise levels of Type I projects substantially exceed the existing noise levels, or when they approach or exceed 67 decibels equivalent continuous sound level in residential areas. A Type II project involves construction of noise abatement on an existing highway with no changes to highway capacity or alignment. A Type III project is a project that does not meet the classifications of a Type I or Type II project. Type III projects do not require a noise analysis. Since no capacity will be added to the highway, and because the highway will not be realigned, this is considered a Type III project.

Environmental Consequences

Permanent (Long-term) Impacts

Since no capacity will be added to the highway, and because the highway will not be realigned, this is considered a Type III project. Local noise levels will be the same after completion of the project as they were before. Long-term noise abatement measures will not be recommended with this project.

Temporary (Construction) Impacts

It is inevitable that local noise levels in the vicinity of construction will experience a short-term increase due to construction activities. The amount of

construction noise will vary with the models and types of equipment used by the contractor. Caltrans policy states that normal construction equipment will not emit noise levels greater than 86 decibels at 50 feet from the source.

It is anticipated that some construction activities will occur at night, including cold planing and overlay, K-rail placement, placing girders and falsework, and placing rumble strips. However, the project is not directly adjacent to any homes or other sensitive receptors (the closest sensitive receptor is over 1,000 feet away). In addition, Caltrans Standard Specifications and several avoidance and minimization measures will be implemented to minimize construction noise.

To minimize impacts on residents' normal nighttime sleep activities, it is recommended that, whenever possible, construction work be done during the day. If nighttime construction is necessary, the noisiest construction activities should be done as early in the evening as possible. Caltrans Standard Specifications Section 14-8.02 requires the contractor to control and monitor noise resulting from work activities and not to exceed 86 A-weighted decibels at 50 feet from the job site from 9:00 p.m. to 6:00 a.m.

Adverse noise impacts from construction are not anticipated because construction will be temporary and intermittent, conducted in accordance with Caltrans Standard Specifications, and because local noise levels are significantly influenced by local traffic noise.

Avoidance and Minimization Measures

Include the following general measures in the Resident Engineer's binder and implement as appropriate to further minimize temporary construction-noise impacts.

NOI-1. Each internal combustion engine, used for any purpose on the job, or related to the job, shall be equipped with a muffler of a type recommended by the manufacturer. No internal combustion engine shall be operated on the job site without an appropriate muffler.

NOI-2. Notify the public in advance of the construction schedule when construction noise and upcoming construction activities likely to produce an adverse noise environment are expected. This notice shall be given two weeks in advance. Notice should be published in local news media of the dates and duration of proposed construction activity. The District 5 Public Information Office posts notice of the proposed construction and potential community impacts after receiving notice from the Resident Engineer.

NOI-3. Shield especially loud pieces of stationary construction equipment.

NOI-4. Locate portable generators, air compressors, etc. away from sensitive noise receptors.

NOI-5. Limit grouping major pieces of equipment operating in one area to the greatest extent feasible.

NOI-6. Place heavily trafficked areas such as the maintenance yard, equipment, tool, and other construction-oriented operations in locations that will be the least disruptive to surrounding sensitive noise receptors.

NOI-7. Use newer equipment that is quieter and ensure that all equipment items have the manufacturers' recommended noise abatement measures, such as mufflers, engine covers, and engine vibration isolators intact and operational. Internal combustion engines used for any purpose on or related to the job shall be equipped with a muffler or baffle of a type recommended by the manufacturer.

NOI-8. Consult District noise staff if complaints are received during the construction process.

2.1.14 Population and Housing

The project does not propose to alter the existing capacity or alignment of U.S. 101. No right-of-way acquisitions are required. Therefore, the project is not anticipated to induce growth or displace people or housing units in the region. Considering this information, the following significance determinations have been made:

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

2.1.15 Public Services

Project activities will be limited to the existing alignment of U.S. 101. The project will not impact any planned or existing governmental facilities. The project will maintain public access on U.S. 101 during project construction, and access to any existing governmental facilities in proximity of project work locations will be maintained. Considering this information, the following significance determinations have been made:

Question:	CEQA Significance Determinations for Public Services
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: Fire protection?	No Impact
Police protection?	No Impact
Schools?	No Impact
Parks?	No Impact
Other public facilities?	No Impact

2.1.16 Recreation

The project will occur within a small portion of the San Antonio Unit of the Big Sandy Wildlife Area. However, the project will not include recreational facilities in the scope, or require the construction or expansion of recreational facilities. The project will not increase the use of parks or recreational facilities. See Appendix A for further discussion of the Big Sandy Wildlife Area and proposed *de minimis* 4(f) determination. Considering this information, the following significance determinations have been made:

Question—Would the project:	CEQA Significance Determinations for Recreation
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	No Impact
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	No Impact

2.1.17 Transportation

The project will not alter the existing alignment or capacity of U.S. 101 and is not anticipated to conflict with any existing or planned transportation-related programs or facilities in the region. The project will not increase existing vehicle miles traveled on U.S. 101. Emergency access on U.S. 101 will be maintained during project construction and will not be altered once the project is completed. Considering this information, the following significance determinations have been made:

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

Affected Environment

The project runs about 7.8 miles along U.S. 101 in Monterey County. This portion of U.S. 101 is a four-lane major highway through the region, with a posted speed limit of 65 miles per hour throughout most of the project limits. This is a major route for the traveling public and agricultural vehicles.

Environmental Consequences

The completed project will improve highway reliability by maintaining the road and bridges in good condition. Traffic delays will occur during construction due to temporary closures, ramp closure, and/or one-way traffic control. However, traffic stops and detours will be executed in accordance with the traffic control plan. Emergency services will be notified of potential disruptions, delays, or detours in advance to minimize impacts to emergency access.

The project will implement standard Caltrans measures, including the preparation of a Transportation Management Plan during construction. A Transportation Management Plan will include measures for traffic delays, lane closures, and detours. Caltrans' Resident Engineer will coordinate through

the construction process to reduce any delay in response times as much as possible. No additional avoidance, minimization, and/or mitigation measures are proposed.

2.1.18 Tribal Cultural Resources

[The following sentence has been modified since the draft environmental document was circulated.] Considering the information in the 2024 Historic Property Survey Report with attached Archaeological Survey, Extended Phase I, and Phase II Evaluation Report, and the 2025 Historic Property Survey with attached Finding of Effect report, Environmentally Sensitive Area Action Plan, Post Review Discovery and Monitoring Plan, and Supplemental Archaeological Survey Report, the following significance determinations have been made:

Will the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

Question:	CEQA Significance Determinations for Tribal Cultural Resources
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k), or	Less Than Significant Impact
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	Less Than Significant Impact

Affected Environment

This section of the environmental document, as compared to Section 2.1.5 Cultural Resources, is meant to focus exclusively on impacts to California Native American Tribes. In this instance, the cultural resources that the project may affect are exclusively California Native American Tribe resources.

Environmental Consequences

Caltrans was unable to evaluate a previously identified site in its entirety due to size of the resource, restricted access, and low potential project impacts. As a result of some of the site remaining untested, Caltrans assumed the resource is eligible for listing on the National Register, under Criterion D, for the purposes of this project only.

[The following two sentences have been updated since the draft environmental document was circulated.] Caltrans consulted with the State Historic Preservation Officer for a determination of project effects. The State Historic Preservation Officer concurred with a Finding of No Adverse Effect – Non-Standard Conditions, Environmentally Sensitive Area.

If previously unidentified cultural materials are unearthed during construction, it is Caltrans' policy that work be stopped in that area until a qualified archaeologist can assess the significance of the find. Additional archaeological surveys will be needed if project limits are extended beyond the present survey limits.

In addition, as specified in the Avoidance and Minimization measures section of Section 2.1.5, an Environmentally Sensitive Area Action Plan will be prepared prior to project construction and ground disturbance during construction will be monitored by archaeological and tribal monitors. [The following sentence has been added since the draft environmental document was circulated.] Tribal monitors will be present for all ground disturbance during construction, and archaeological monitors will monitor ground disturbance at the San Antonio River Bridges. The portion of the site beyond the Area of Potential Effect will be protected by the establishment of an Environmentally Sensitive Area. Project impacts will not adversely affect the site because they are proposed within the non-contributing portion of the site. A less than significant impact will result. See Section 2.1.5 for applicable avoidance and minimization measures.

2.1.19 Utilities and Service Systems

Based on an evaluation of the utilities and service systems within the project area, the following significance determinations have been made:

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

Affected Environment

The project will rehabilitate the roadway surface, replace two bridges, and repair or replace other satellite assets.

Environmental Consequences

There are existing utilities within the work area that will require Positive Location Determination during the upcoming final project design stage. Avoidance and utility encroachment exceptions will be considered before relocation is proposed. At this stage, no utility conflicts or relocations are anticipated.

Neither project construction nor operation will significantly increase demand for water or wastewater supply or demand. The project also will not alter the functions or demand for electrical, natural gas, or telecommunications facilities in the region.

The project is not anticipated to generate excessive amounts of solid waste that will overwhelm capacities of existing waste management facilities. Any recyclable waste materials generated from project construction will be recycled. Waste materials generated by project construction will be collected and disposed of properly to meet all state and federal requirements.

The project will not generate solid waste during operation. During construction, some solid waste will be generated, but not in excess of infrastructure capacity or state or local standards. To the extent safe and feasible, construction materials will be reused or recycled. In addition, waste materials generated by project construction will be collected and disposed of properly. Impacts to utilities and service systems will be less than significant.

2.1.20 Wildfire

The project limits were reviewed using the California Department of Forestry and Fire Protection's (CalFire's) Fire Hazard Severity Zone Viewer (effective April 1, 2024). Considering this information, the following significance determinations have been made:

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

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

Affected Environment

The project is split between a high and low fire hazard severity zone in a State Responsibility Area. A very small portion of the project area (southeast of the town of Bradley and southeast of the highway itself) is within a very high fire hazard severity zone in a State Responsibility Area.

Environmental Consequences

The completed project will improve highway reliability and will not interfere with emergency response or emergency evacuation plans. In addition, the project will not increase the risk of loss, injury, or death due to wildland fires. A traffic control plan will be implemented during construction and emergency responders will be made aware of any traffic disruptions, delays, or detours in advance. Caltrans 2018 Revised Standard Specification 7-1.02M(2) will be implemented and mandates fire prevention procedures during construction, including a fire prevention plan.

2.1.21 Mandatory Findings of Significance

Question:	CEQA Significance Determinations for Mandatory Findings of Significance
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	Less Than Significant Impact With Mitigation Incorporated
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)	Less Than Significant Impact
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	Less Than Significant Impact

Affected Environment

The project will replace two bridges, replace and rehabilitate culverts, and pave just under 7 miles of U.S. 101 near Bradley. The project will require some off-pavement work. The potential for cumulative impacts to resources has been analyzed and is explained further below. The project also has potential to affect the human environment. The human environment refers to how environmental factors, such as noise levels or water quality, affect human quality of life.

Environmental Consequences

Natural and Historical Resources

Biological Resources

The project may affect several protected habitat areas and plant and animal species. Avoidance, minimization, and mitigation measures will be implemented to reduce impacts to biological resources. Mitigation is required to prevent significant impacts to jurisdictional wetlands, other waters, riparian habitat, and bats. See Section 2.1.4 for more information.

Paleontological Resources

Construction of the North Bradley Undercrossing Bridge has potential to impact paleontological resources. The replacement of the culvert at post mile R7.78 via jack and bore methods and the replacement of the North Bradley Undercrossing have the potential to affect native Paso Robles Formation sediments that host significant fossils.

Preparation of a Paleontological Mitigation Plan prior to construction will identify sensitive locations where monitoring could be required, procedures for collecting fossils, and provisions for the fossils to be curated at an appropriate repository and catalogued for scientific study in perpetuity. With this mitigation, a less than significant impact will result. See Section 2.1.7, above, for more information.

Cultural Resources

One archaeological site is in the project's Area of Potential Effect. However, based on the proposed project activities and the eligibility of the sites, impacts to cultural resources are expected to be less than significant. [The following two sentences have been updated since the draft environmental document was circulated.] Caltrans consulted with the State Historic Preservation Officer for a determination of project effects. The State Historic Preservation Officer concurred with a Finding of No Adverse Effect – Non-Standard Conditions, Environmentally Sensitive Area. See Section 2.1.5, above, for more information.

Cumulative Impacts

A Cumulative Impact Report has been completed for the project. The Cumulative Impact Report follows the 2005 *Caltrans Cumulative Impact Analysis and Growth Related, Indirect Impact Guidance*. The guidance outlines an eight-step process for evaluating cumulative impacts.

Step one is to identify resources that must be evaluated for cumulative impacts. The project was evaluated for potential cumulative impacts to the following biological resources: jurisdictional wetlands, other waters, and riparian habitat; bats (Townsend's big-eared bat, pallid bat, and other roosting bats); southwestern pond turtle; and South-Central California Coast steelhead. In addition, paleontological resources were evaluated for potential cumulative impacts.

Step two is the identification of appropriate Resource Study Areas for each of the resources identified in the Cumulative Impact Report. A Resource Study Area is the geographic area within which impacts on a resource are analyzed. The boundaries of a Resource Study Area are often broader than the boundaries used for project-specific analysis, such as a Biological Study Area. The Resource Study Area for biological resources for the project is the combined San Antonio River, Nacimiento River, Big Sandy Creek, and Indian Valley-Salinas River Hydrologic Unit Code 10 watersheds. The Resource Study Area is approximately 680,290 acres and includes portions of both Monterey County and San Luis Obispo County. The Resource Study Area for paleontological resources for the project includes all areas of outcrop of the Paso Robles Formation that occur within the combined San Antonio River, Nacimiento River, Big Sandy Creek, and Indian Valley-Salinas River Hydrologic Unit Code 10 watersheds. The Resource Study Area was clipped to this area because it represents areas within the Paso Robles Formation that represent similar sedimentary facies that were deposited in roughly the same geologic time period.

Step three is an evaluation of the resource health and the historic context of the resource, as explained below.

Jurisdictional Waters, Wetlands, and Riparian Habitat

The main land uses within the Resource Study Area are agricultural, military installation, reservoir/water storage and recreational, and rural residential. The existing health of the aquatic resources within the Resource Study Area varies depending on location and land use. A large portion of the Resource Study Area is operated by the military and has strict conservation implementation plans that generally provide species and habitat protections and preserve the open space and natural resources of the area. Other portions of the Resource Study Area have potential risks to aquatic resource health due to agricultural runoff, erosion, recreational use in the reservoirs, and/or poor land use practices. The main threats to jurisdictional aquatic

resources within the Resource Study Area stem from land conversion to agriculture, water withdrawal for agriculture and other anthropogenic uses, and water storage.

Historically, the watersheds within the Resource Study Area were expansive and undisturbed, supporting riparian habitat and species health. The San Antonio Dam was constructed in 1967, and the Nacimiento Dam was constructed in 1957. Many of the stream features in the Resource Study Area are highly modified due to upstream dams/reservoirs, agricultural uses, urban use/runoff, water contact recreation, commercial/sport fishing, and introduction of invasive species, which have historically harmed the habitat. Stream features within the Resource Study Area have also undergone a decline in water quality, as identified by the Central Coast Regional Water Board, due to the modifications of the watersheds.

Within the immediate project Biological Study Area, the moderately modified other waters, wetlands, and riparian areas provide low to moderate physical and hydrological functions (flood control, groundwater recharge, and sediment traps). These functions will be improved by the project by replacement of undersized and damaged water conveyance facilities and regrading channels that have been blocked by sediment. The features within the Biological Study Area support low to moderate habitat functions. Some are degraded roadside features with little to no riparian vegetation, while other features resemble a more natural riparian system that could support fish and wildlife habitat. Most of the other waters/streams are highly modified ephemeral drainages. A few streams (including San Antonio River, Nacimiento River, Salinas River, and Hames Creek) support more stable riparian conditions that may provide habitat for aquatic species. All delineated areas within the Biological Study Area display evidence of some combination of a bed, with gravel sorting; bank, with some combination of topographic break; change in particle size distribution; and a transition in vegetation density and hydric tolerance. These features show evidence of flow within the channel.

South-Central California Coast Steelhead

The San Antonio River was one of the three most important spawning and rearing tributaries for Salinas River steelhead. The confluence of the Salinas and San Antonio rivers is approximately 107 miles upstream from the mouth of the Salinas River. Following construction of the San Antonio Dam, the pattern of flow releases from the dam was not predicted to provide perennial flow conditions in the lowermost San Antonio River. Though the availability of steelhead spawning and rearing habitat was limited in the lower San Antonio River even before dam construction, the California Department of Fish and Game (now California Department of Fish and Wildlife) still identified steelhead as inhabitants of the San Antonio River below the reservoir as of 1981. It was assumed that steelhead still entered the lower river from the Salinas River when runoff was sufficient to provide a continuous migration corridor. However, lack of access to historic spawning and rearing habitats in the perennial

headwaters greatly limits steelhead use of the San Antonio River. More recently, hydrologic conditions downstream of San Antonio Dam and other habitat conditions do not favor steelhead. National Marine Fisheries Service staff walked the lower San Antonio River in August 2004 and noted riparian vegetation, gravels, and shading that could likely provide suitable spawning and rearing habitat. Nonetheless, surveys of the lower San Antonio River completed after the placement of San Antonio Dam have shown that steelhead use is low. The species is in poor health within the Resource Study Area.

Southwestern Pond Turtle

The historical range of the western pond turtle extends along the Pacific Coast from British Columbia, Canada to the northern part of Baja California, Mexico, primarily west of the Sierra Nevada and Cascade ranges. Recent genetic information has led to a taxonomic split of the western pond turtle into two distinct species. The Resource Study Area is within the range of the southwestern pond turtle. The current range of the southwestern pond turtle is the central Coast Range south from the middle of Monterey Bay to the species' southern range boundary in Baja California.

The species numbers and habitat range have been in decline for several years. The southwestern pond turtle was listed as Federally Proposed Threatened by the U.S. Fish and Wildlife Service in late 2023. The species is also listed as a Species of Special Concern by the California Department of Fish and Wildlife. Threats to the species across its range also occur within the Resource Study Area, and therefore it can be presumed that the species' health is likely declining within the Resource Study Area; however, there is a lack of data and regionally specific population studies.

Townsend's Big-Eared Bat, Pallid Bat, and Other Roosting Bats

Townsend's big-eared bat occurs from southern British Columbia southward, through most of the western United States to central Mexico. Pallid bats occur across much of western North America from south-central British Columbia to central Mexico. The main threat to bat species within the Resource Study Area is the alteration or removal of roosting habitat. Bat species roost in a variety of human-made and natural substrates, including caves, crevices, mines, buildings, transportation structures, and trees. Also, the conversion of suitable habitat into vineyards and row crops in the Salinas Valley has likely negatively impacted Townsend's big-eared bat and pallid bat by reducing their prey base and altering their feeding and foraging routes. Townsend's big-eared bat, pallid bat, and other roosting bats are in a state of declining health within the Resource Study Area.

Paleontological Resources

Paleontological resources in the Resource Study Area have been determined to be in good to moderate health due to degradation by both natural

processes and human activities, but there is an abundance of undeveloped land where exposures of paleontologically sensitive strata remain intact.

Natural processes that can affect paleontological resources include wildfires, earthquakes, erosion, and weathering. Human activities often have the greatest impact on paleontological resources because such activities involve physical modification of the landscape, including grading and other earthmoving operations. Human activities can also worsen the effects of natural processes. For example, road construction can destabilize slopes and increase erosion of archaeological sites, and agricultural practices may speed up erosion or change the chemistry of soils preserving archaeological resources.

Because paleontological resources are nonrenewable, the good to moderate health of the resources within the Resource Study Area will never fully recover. However, the health of paleontological resources is no longer in decline. Since the environmental movement of the 1960s and 1970s, the passage of federal, state, and local legislation has provided regulatory protection of paleontological resources. Any current or future development that may affect paleontological resources will be required to offset impacts through mitigation that involves paleontological monitoring, fossil salvage, and conservation of salvaged fossils in a scientific repository. On a local level, the 2010 Monterey County General Plan's Conservation and Open Space Element contains goals and policies that aim to protect and preserve paleontological resources. The Conservation and Open Space Element of the 2010 County of San Luis Obispo General Plan also contains similar measures.

Step four is the identification of the direct and indirect impacts of the project on these resources. See Section 2.1.4- Biological Resources and Section 2.1.7 Geology and Soils for a detailed description of project-level impacts.

Step five requires identifying current and reasonably foreseeable actions that could affect each of the four biological resources or paleontological resources included in the analysis. Reasonably foreseeable projects are those that are at least partly through the environmental clearance process. The available environmental documentation was used to make a determination as to whether a given project is likely to affect each resource under consideration in the cumulative analysis. Of the eight reasonably foreseeable projects within the biological Resource Study Area that may affect jurisdictional features, four may affect South-Central California Coast steelhead, six may affect southwestern pond turtle or their habitat, and five may affect bats or their roosting habitat, and may affect paleontological resources. Several financially constrained projects from the 2045 Metropolitan Transportation Plan/Sustainable Communities Strategy and Regional Transportation Plans for Monterey, San Benito and Santa Cruz counties also have potential to affect these resources. However, it is anticipated that avoidance, minimization, and mitigation measures will be implemented to the extent determined necessary and feasible.

Step six is the process of assessing potential cumulative impacts. See Table 2.15 for the determination for each resource.

Table 2.15. Summary of Overall Cumulative Impact

Resource	Would the Proposed Project Contribute to an Existing Adverse Cumulative Impact?	Would the Proposed Project's Contribution Be Considerable?	Considerations for Identifying Adverse Cumulative Impacts and the Proposed Project's Contribution
Jurisdictional Areas	No	No	Jurisdictional areas within the Resource Study Area have undergone a decline in health over the last several decades. However, the Bradley Capital Preventative Maintenance project will not have permanent impacts to the streambed. The project will remove old piers from the streambed at the San Antonio River Bridges location, and new piers will be placed outside of the active channel. Though the project will permanently impact some new jurisdictional streambank, removal of old piers will result in a net increase of jurisdictional streambank. With the incorporation of restoration of temporary impacts and compensatory mitigation for permanent impacts (resulting in no net loss), the project will not contribute to a negative cumulative impact to aquatic resources.
South-Central California Coast Steelhead	No	No	South-Central California Coast steelhead is in a state of poor health within the Resource Study Area. The project proposes to remove all existing bridge piers within the active channel. Pilings for the new replacement structures will be placed outside of the active channel, thereby providing a net increase in stream habitat. The project may have temporary impacts to steelhead, if present, during construction when stream flows are diverted through the work area. However, with the incorporation of avoidance and minimization measures during construction, restoration of temporary impacts, and no net loss of steelhead critical habitat, the project will not contribute to a negative cumulative impact to South-Central California Coast steelhead.

Resource	Would the Proposed Project Contribute to an Existing Adverse Cumulative Impact?	Would the Proposed Project's Contribution Be Considerable?	Considerations for Identifying Adverse Cumulative Impacts and the Proposed Project's Contribution
Southwestern Pond Turtle	No	No	The southwestern pond turtle species health is likely declining within the Resource Study Area. However, the project will have a net increase in suitable pond turtle habitat through the reestablishment of streambank along the San Antonio River. With the incorporation of avoidance, minimization, and mitigation measures outlined in Section 2.1.4 Biological Resources, the project will not contribute to a negative cumulative impact to the southwestern pond turtle.
Townsend's Big-Eared Bat, Pallid Bat, and Other Roosting Bats	Yes	No	Townsend's big-eared bat, pallid bat, and other roosting bats are in a state of declining health within the Resource Study Area. Though the Bradley Capital Preventative Maintenance project will incorporate avoidance and minimization measures as well as proposed mitigation, the project is still anticipated to have a temporary loss of day, maternity, and possibly night roosting habitat (depending on the alternative selected) because construction of the bridges will take up to four seasons. Pallid bats will be without suitable roosting (including maternity) habitat at the San Antonio Bridges locations for three to four seasons. However, suitable alternative night and day roosting habitat is present in the vicinity of the Area of Potential Impact including at the Bradley Road Bridge (San Luis Obispo County Bridge No. 44C-0050) where pallid bats have been documented day roosting in expansion joints. The Bradley Road Bridge is approximately 0.85 mile northwest of the San Antonio River Bridges. Other potential roosting habitat is present on Camp Roberts base, though current status is unknown. Many of the California Natural Diversity Database occurrences near the Area of Potential Impact are reported from buildings or facilities on the military base. This temporary loss could contribute to cumulative impacts to bat species of special concern. However, with the availability of alternative roost sites nearby that may be used during construction and the proposed mitigation to be created on new structures, this project is not anticipated to considerably contribute to an adverse cumulative effect on Townsend's big-eared bat or pallid bat populations within the Resource Study Area.

Resource	Would the Proposed Project Contribute to an Existing Adverse Cumulative Impact?	Would the Proposed Project's Contribution Be Considerable?	Considerations for Identifying Adverse Cumulative Impacts and the Proposed Project's Contribution
Paleontological Resources	No	No	Paleontological resources within the Resource Study Area are not experiencing a cumulative effect from current and reasonably foreseeable future projects. Exposures of paleontologically sensitive strata within the Resource Study Area include large swaths of rural and mountainous terrain that are unlikely to be disturbed by human activities and will only be minimally affected by natural processes. The relatively small percentage of paleontologically sensitive strata in the Resource Study Area that may be disturbed by current or future development will be offset by mitigation strategies required for regulatory compliance. Taken together, paleontological resources within the Resource Study Area are not experiencing a cumulative effect from current and reasonably foreseeable future projects. In addition, mitigation is proposed to reduce impacts of the Bradley Capital Preventative Maintenance project to a less than significant level. Therefore, potential impacts from the project will not contribute to a considerable cumulative effect on paleontological resources.

Step seven is to document the results of the cumulative impact analysis process performed in steps one through seven. The Cumulative Impact Report documents and summarizes these seven steps.

In accordance with *Caltrans Cumulative Impact Analysis and Growth Related, Indirect Impact Guidance*, the final step—step eight—in the cumulative impacts analysis is to recommend actions to sustain these resources. These are actions that the identified agencies could take to influence the sustainability of the resource.

The following general recommendations are made to reduce the overall decline in health of the identified biological resources:

Jurisdictional Waters, Wetlands, and Riparian Habitat

Cumulative-1. Agencies with regulatory authority over wetlands and riparian areas include the California Department of Fish and Wildlife, the U.S. Army Corps of Engineers, and the Central Coast Regional Water Quality Control

Board. These agencies should support efforts to restore and enhance jurisdictional wetlands, other waters, and riparian habitat within the Resource Study Area. This not only would directly benefit those resources but would improve habitat for the aquatic and semi-aquatic species.

South-Central California Coast Steelhead

Cumulative-2: Agencies with regulatory authority over critical habitat include the U.S. Fish and Wildlife Service and National Marine Fisheries Service. These agencies should support efforts to restore and enhance critical habitat within the Resource Study Area. This not only would directly benefit those resources but would improve habitat for other aquatic and semi-aquatic species that depend on the same habitat.

Southwestern Pond Turtle

Cumulative-3. Agencies with regulatory authority over federally listed or proposed listed species include the U.S. Fish and Wildlife Service and National Marine Fisheries Service. These agencies should support efforts to protect these species and restore and enhance their habitat within the Resource Study Area.

Townsend's Big-Eared Bat, Pallid Bat, and Other Roosting Bats

Cumulative-4. The California Department of Fish and Wildlife has regulatory authority over species of special concern including roosting bats. The California Department of Fish and Wildlife should support efforts to restore and enhance the species and their habitat within the Resource Study Area.

Paleontological Resources

The following general recommendation was made to reduce the overall decline in health of paleontological resources:

Cumulative-5. Agencies with regulatory authority over paleontological resources within the Resource Study Area include the U.S. Military, the Bureau of Land Management, the County of Monterey, and the County of San Luis Obispo. To maintain the good health and stability of paleontological resources within the Paso Robles Formation, these agencies should continue to implement and enforce planning policies and guidelines that protect paleontologically sensitive strata in the Resource Study Area that may be disturbed by current or future development within the region and the project area.

Human Environment

Aesthetics

Implementation of the project will result in visual changes in the project vicinity. A visual scale increase and change in the current rural character will occur as a result of the project elements.

Although potential visual changes will occur, the same type of elements proposed with this project are seen elsewhere along the highway and are not by themselves inconsistent with the rural roadway character of the region or throughout the state.

It is expected that, following project construction and revegetation, the project will be generally unnoticed by the casual observer on U.S. 101 and other public roads in the area. If noticed, the project with proposed minimization measures will not appear out-of-place within the setting. With implementation of avoidance and minimization measures, a less than significant impact will occur. See Section 2.1.1 for more information.

Air Quality

Project construction will result in a short-term temporary increase in air emissions and fugitive dust. Use of equipment during project construction can generate fugitive dust that may have temporary impacts on local air quality due to earthwork. Though temporary dust generation is expected, a less than significant impact will result with implementation of avoidance and minimization measures. See Section 2.1.3 for more information.

Geology and Soils

The project will not directly or indirectly cause potential substantial adverse effects due to geologic or soil conditions. A less than significant overall impact will occur. No avoidance, minimization, or mitigation measures are necessary. See Section 2.1.7 for more information and for the discussion of paleontological resources.

Greenhouse Gas Emissions

This type of project is not expected to alter operational greenhouse gas emissions. Because the project will not increase the number of travel lanes on U.S. 101, no increase in vehicle miles traveled will occur as result of project implementation. However, some greenhouse gas emissions will be generated during the construction period. With implementation of Caltrans Standard Specifications and avoidance and minimization measures, a less than significant impact will result. See Section 2.1.8 for more information.

Hazardous Waste

The completed project will improve highway reliability and will not interfere with emergency response or emergency evacuation plans. In addition, the project will not increase the risk of loss, injury, or death due to wildland fires. A traffic control plan will be implemented during construction and emergency responders will be made aware of any traffic disruptions, delays, or detours in advance.

Furthermore, all hazardous waste will be handled according to appropriate standard specifications. The release of hazardous materials is not anticipated.

Routine hazardous waste issues may be encountered during construction, but will be appropriately handled, treated, and disposed of (if required) with implementation of Caltrans Standard Specifications. During the project design phase, an aerially deposited lead study may be completed, and the hazardous waste specialist will work with the project design team to determine the appropriate Standard Special Provisions to include in the construction contract. With implementation of appropriate Standard Special Provisions, adverse effects to human health or the environment are not anticipated. See Section 2.1.9 for more information.

Water Quality

The total proposed Disturbed Soil Area across the project area is 16.86 acres. A Construction General Permit, including the preparation of a Stormwater Pollution Prevention Plan, will be completed for the project. The project is anticipated to minimally increase impervious surface area, by about 0.1 acre. The temporary effects that disturbing 16.86 acres of soil will have on the receiving waters can be minimized by implementing temporary best management practices proposed in the Water Quality Assessment Report and by implementing avoidance and minimization measures. A preliminary project risk level assessment has determined this project to be a risk level 2 out of 3, in regard to temporary impacts to storm water.

Temporary impacts to aquatic resources will take place as a result of construction. Construction of new bridges will also require clear water diversion from the creek.

Based on preliminary studies performed for this project and on prior studies completed for the earlier San Antonio River Bridge Retrofit Project, temporary impacts to groundwater are not anticipated. This will be further evaluated during the design phase, once the geotechnical drilling required for further studies is environmentally cleared and permitted.

The project will produce 4,356 square feet of net impervious surface. The increase in impervious surface will increase the amount of storm water runoff, which in turn has the potential to affect receiving water quality. The nature of these impacts depends on the uses and flow rate or volume of the receiving water, rainfall characteristics, and highway characteristics. Heavy metals associated with vehicle tire and brake wear, oil and grease, and exhaust emissions are the main pollutants associated with transportation corridors. There are no existing treatment best management practices along U.S. 101 within the project limits to treat roadway runoff. Therefore, the water quality of the receiving water bodies will still be affected by highway runoff as a result of this project. However, with effective combinations of temporary and permanent erosion and sediment controls, these water quality effects are anticipated to be minimal.

The project will occur within Federal Emergency Management Agency (FEMA) regulated floodplains. However, no significant floodplain encroachments have been identified with the project. The project will not significantly impact the 100-year floodplains.

See Section 2.1.4 and Section 2.1.10 for more information and for a list of avoidance and minimization measures.

Noise

No long-term noise increase will occur as a result of the project. However, noise levels in the vicinity of construction will experience a short-term increase due to construction activities. Caltrans policy states that normal construction equipment will not emit noise levels greater than 86 decibels at 50 feet from the source.

It is anticipated that some construction activities will occur at night, including cold planing and overlay, K-rail placement, placing girders and falsework, and placing rumble strips. However, the project is not directly adjacent to any homes or other sensitive receptors.

Work will be done during the day when possible, and Caltrans Standard Specifications and avoidance and minimization measures will be implemented. See Section 2.1.3 for more information.

Transportation

The completed project will improve highway reliability by maintaining the road and bridges in good condition. There will be traffic delays during construction due to temporary closures, ramp closure, and/or one-way traffic control. However, traffic stops and detours will be executed in accordance with the traffic control plan. Emergency services will be notified of potential disruptions, delays, or detours in advance to minimize impacts to emergency access.

Avoidance, Minimization, and/or Mitigation Measures

The complete list of avoidance, minimization, and mitigation measures associated with this project can be found in Appendix B. Section 1.5 Standard Measures Included in All Alternatives lists the standard specifications that will be implemented.

Appendix A Section 4(f) De Minimis Determination

SECTION 4(F) DE MINIMIS DETERMINATION(S)

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

Section 4(f) properties are any publicly owned land of a public park, recreation area, or wildlife or waterfowl refuge of national, state, or local significance and land of any historic site of national, state, or local significance. The definition of a *de minimis* impact, as set forth in 23 Code of Federal Regulation Section 774.17, specifies that ... "For parks, recreation areas, and wildlife and waterfowl refuges, a *de minimis* impact is one that will not adversely affect the features, attributes, or activities qualifying the property for protection under Section 4(f)."

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

Section 4(f) Property Description

The Big Sandy Wildlife Area contains 857 acres of open grasslands and some open stream habitat that is owned and managed by the California Department of Fish and Wildlife. The area is divided into two parcels: the Big Sandy Unit located on the south side of Camp Roberts, and the San Antonio Unit located to the north. The San Antonio Unit is about 120 acres in size and is located at the confluence of the San Antonio and Salinas rivers. The parcel is bisected by U.S. 101 and surrounded on the south side by the Camp Roberts Military installation. Recreational opportunities within the Big Sandy Wildlife Area include wildlife viewing and hunting (quail, wild pigs, deer). However, the San Antonio Unit does not experience much foot traffic by the public because the only legal way to access it is by walking up the Salinas River from the Bradley Undercrossing.

Use of the Section 4(f) Property

The replacement of the San Antonio River Bridges will occur within the San Antonio Unit of the Big Sandy Wildlife Area (see Figure 2-1 below). Caltrans Environmental and Design groups have worked together to minimize the use of support structures for the new San Antonio River Bridges. Due to the reduced number of support structures for the proposed new San Antonio River Bridges, the project will result in a net reduction of permanent structures within the streambed and riparian/streambank corridor. Removal of existing hardscape and structural elements will reestablish jurisdictional areas and will fully offset permanent impacts. Access to the wildlife area and hunting activities will not be prohibited during construction or upon completion of the project. Therefore, no permanent impacts will occur to the recreational use or riparian habitat in the San Antonio Unit.

However, the project will have temporary impacts spanning three to four seasons at the San Antonio River. Demolition of the old bridge and construction of the new bridge will occur over multiple seasons as work in the channel is prohibited in the rainy season. A temporary construction easement will be obtained from the California Department of Fish and Wildlife to allow access for construction workers and construction equipment. The project will temporarily impact a small portion of the San Antonio Unit and the Big Sandy Wildlife Area as a whole.

In acreage, 9.06 acres of the project's Area of Potential Impact overlaps with the 120-acre San Antonio Unit (see Figure 2-2, below). Temporary construction easements will be obtained, and no portion of the wildlife area would need to be permanently acquired. The vast majority of the wildlife refuge will still be accessible by the public during construction. The area under and immediately adjacent to the San Antonio River Bridges will have access intermittently restricted during the bridge construction period. Bridge construction would be three seasons for Alternative 1 and four seasons for Alternative 2. During the three to four seasons of construction, construction staff will occasionally need to limit access to this small portion of the wildlife preserve when necessary for safety of the public and to accommodate bridge demolition and construction. Limitations on use of this small area will be minimized as much as feasible. The public access points to the Big Sandy Wildlife Refuge and public activity on the rest of the refuge will not be affected during these times. The activities, features, and attributes of the refuge that qualify it for protection under 4(f) will not be adversely affected.

In addition, the project will preserve vegetation to the maximum extent feasible, replant disturbed areas, and comply with all conditions outlined in the Section 1602 Streambed Alteration Agreement, Section 401 Water Quality Certification, Section 404 Nationwide Permit, National Marine Fisheries Service Biological Opinion, and U.S. Fish and Wildlife Service Biological Opinion.

Figure 2-1. Section 4(f) Map

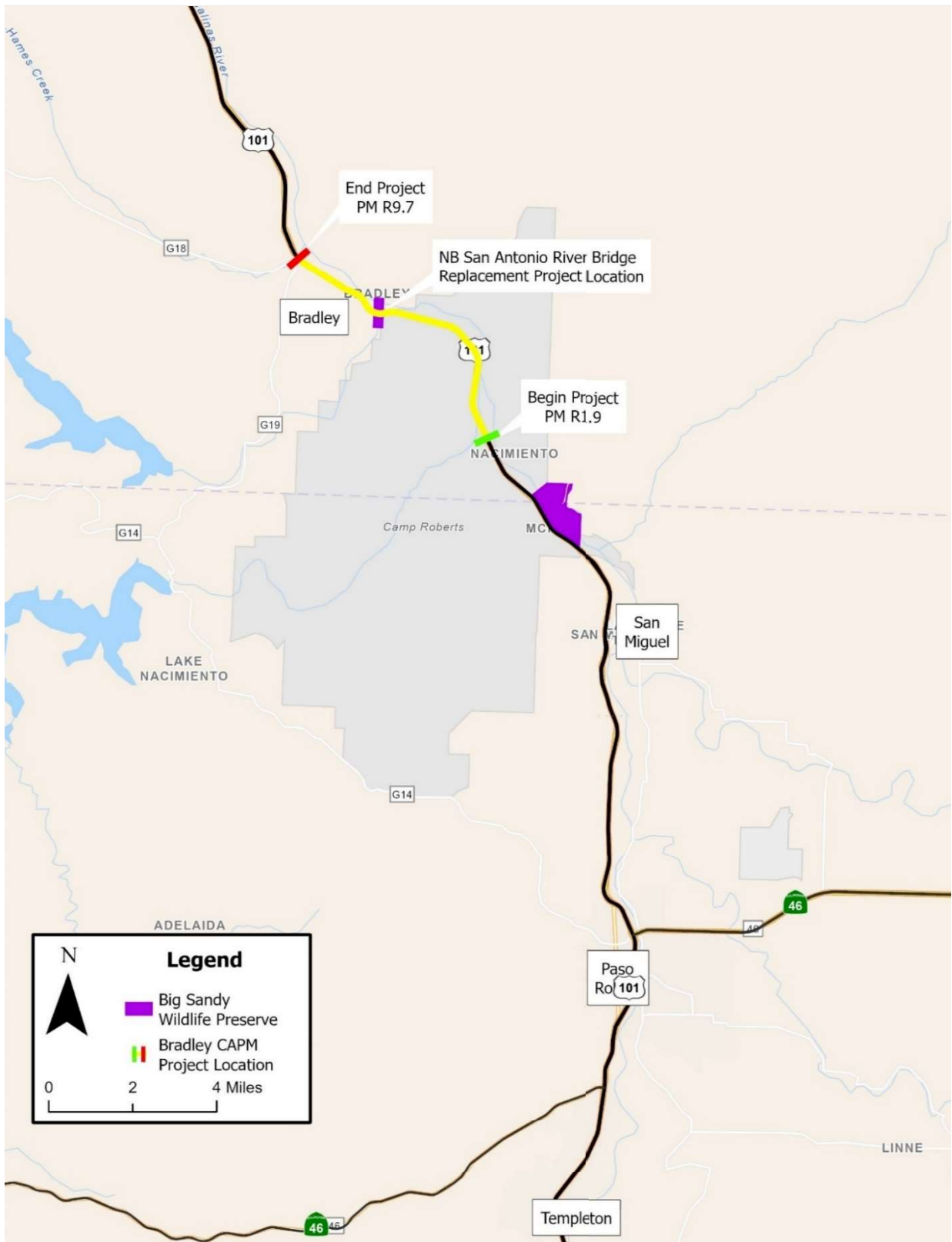
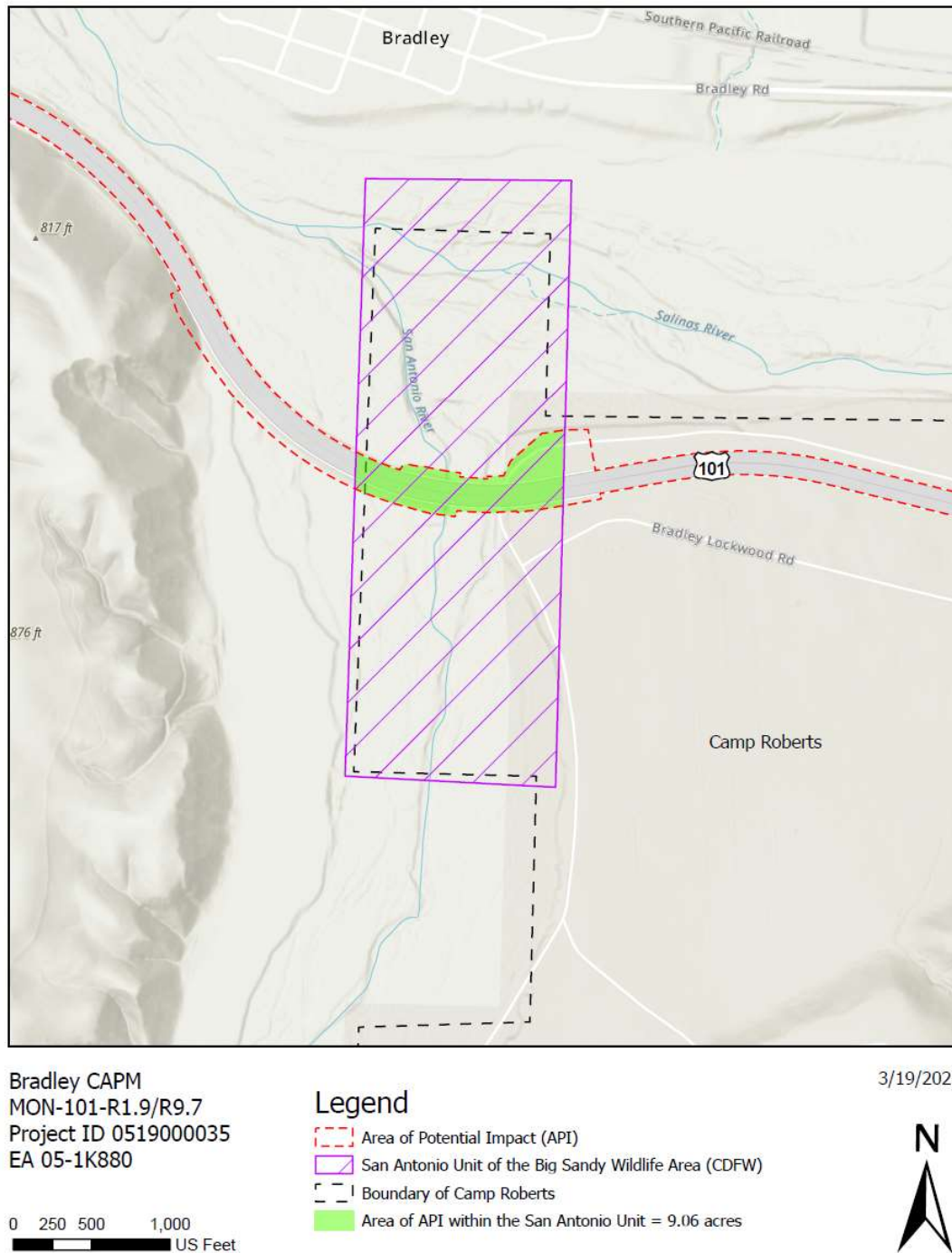


Figure 2-2: Project Area of Potential Impact Within San Antonio Unit Map



Proposed *De Minimis* Use Determination

Caltrans believes the proposed project will have a minimal impact to the San Antonio Unit of the Big Sandy Wildlife Area and that this impact will not be considered adverse. The Section 4(f) determination is based on the following:

- There is no prudent and feasible alternative to replacement of the San Antonio River Bridges that will avoid use of the Section 4(f) property.
- The project has been designed to avoid and minimize environmental impacts as much as feasible and will not permanently affect habitat or habitat connectivity.
- The San Antonio Unit is not easily accessible to the public due to a lack of parking lots, access trails, and the presence of the Camp Roberts Military installation. The only legal way to access it is by walking up the Salinas River from the Bradley Undercrossing.
- The use of the property is temporary, and no portion of the property will be permanently acquired by Caltrans.
- The project will temporarily affect a small portion of the San Antonio Unit (9.06 acres of the 120-acre San Antonio Unit overlap with the project's Area of Potential Impact).
- The activities, features, and attributes of the refuge that qualify it for protection under Section 4(f) will not be adversely affected.

Avoidance, Minimization, and Mitigation Measures

See Section 2.1.4 Biological Resources for a list of avoidance, minimization, and mitigation measures that will be implemented to ensure all possible biological impacts to the Big Sandy Wildlife Area are reduced to a less than significant level. No additional measures are included specifically to minimize the Section 4(f) resource use.

Public Notice Process

A combined notice will be posted in a local newspaper to alert the public of the proposed Section 4(f) determination and the availability of the draft environmental document. A letter explaining the proposed finding will be sent to the California Department of Fish and Wildlife, the entity who owns and manages the Big Sandy Wildlife Area. [The following sentence has been revised since the draft environmental document was circulated.] Written concurrence from the California Department of Fish and Wildlife on the proposed *de minimis* determination is included below.

[The following section has been added since the draft environmental document was circulated.]

Concurrence with Proposed Section 4(f) De Minimis Determination

The California Department of Fish and wildlife signed the letter depicted below on July 16, 2025. This serves as concurrence with the Section 4(f) *De Minimis* Determination.

STATE OF CALIFORNIA—CALIFORNIA STATE TRANSPORTATION AGENCY

Gravin Newsom, Governor

DEPARTMENT OF TRANSPORTATION

CALTRANS DISTRICT 5
50 HIGUERA STREET
SAN LUIS OBISPO, CA 93401-5415
PHONE (805) 549-3101
FAX (805) 549-3329
TTY 711

<https://dot.ca.gov/caltrans-bear-me/district-5>



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a California Way of Life.*

May 1, 2025

Julie Vance
Regional Manager, Region 4-Central Region
California Department of Fish and Wildlife
1234 E. Shaw Avenue
Fresno, CA 93710

RE: Bradley CAPM Project, Section 4(f) Determination

Dear Ms. Vance,

The California Department of Transportation (Caltrans) proposes the Bradley Capital Preventative Maintenance (CAPM) Project. The proposed project is located along U.S. Route 101 in Monterey County, near Bradley, from the East Garrison Off-ramp at Post Mile R1.9 to the Jolon Road Undercrossing at post mile R9.7. The primary scope of the project is to rehabilitate and extend the service life of the pavement on the roadway and shoulders within the project limits, replace the southbound and northbound San Antonio River Bridges (44-0141L/R) at post mile R6.66, and replace the southbound North Bradley Undercrossing Bridge (44-0142L) at post mile 7.94. The scope of the project also includes four culvert replacements, one culvert repair, sign upgrades, and other asset improvements within the project limits. Please see the currently circulating draft environmental document for a more detailed project description.

The San Antonio River Bridges that are to be replaced as part of the project are located in the San Antonio Unit of the Big Sandy Wildlife Area, which has been identified as a Section 4(f) Resource. Caltrans seeks concurrence on a *de minimis* impact finding from the California Department of Fish and Wildlife, the agency of jurisdiction over the 4(f) property. This letter outlines the anticipated temporary impacts of the project to the 4(f) resource and summarizes Caltrans' findings that the project would have a minimal impact on the resource.

Background information on Section 4(f) of the Department of Transportation Act of 1966

Section 4(f) of the Department of Transportation Act of 1966, codified in federal law at 49 U.S. Code 303, declares that "it is the policy of the United States Government that special effort should be made to preserve the natural beauty of the countryside and public park and recreation lands, wildlife and waterfowl refuges, and historic sites."

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Section 4(f) specifies that the Secretary [of Transportation] may approve a transportation program or project . . . requiring the use of publicly owned land of a public park, recreation area, or wildlife and waterfowl refuge of national, State, or local significance, or land of an historic site of national, State, or local significance (as determined by the federal, state, or local officials having jurisdiction over the park, area, refuge, or site) only if:

- (1) there is no prudent and feasible alternative to using that land; and
- (2) the program or project includes all possible planning to minimize harm to the park, recreation area, wildlife and waterfowl refuge, or historic site resulting from the use.

The Safe, Accountable, Flexible, Efficient Transportation Equity Act, a federal transportation reauthorization bill signed into law in 2005, simplified the procedures for projects that would have *de minimis* impacts on Section 4(f) properties. An analysis is not required, and the Section 4(f) evaluation is complete once it is determined that the use of a Section 4(f) property would result in *de minimis* impacts.

The definition of a *de minimis* impact, as set forth in 23 Code of Federal Regulation Section 774.17, specifies that . . . "For parks, recreation areas, and wildlife and waterfowl refuges, a *de minimis* impact is one that will not adversely affect the features, attributes, or activities qualifying the property for protection under Section 4(f)."

Responsibility for compliance with Section 4(f) has been assigned to Caltrans pursuant to 23 U.S. Code 326 and 327, including determinations and approval of Section 4(f) evaluations, as well as coordination with those agencies that have jurisdiction over a Section 4(f) resource that may be affected by a project action.

Section 4(f) Property Description

The Big Sandy Wildlife Area contains 857 acres of open grasslands and some open stream habitat. The area is divided into two parcels: the Big Sandy Unit located on the south side of Camp Roberts, and the San Antonio Unit located to the north. The San Antonio Unit is about 120-acres in size and is located at the confluence of the San Antonio and Salinas rivers. The parcel is bisected by U.S. 101 and surrounded on the south side by the Camp Roberts Military Reservation. Recreational opportunities within the Big Sandy Wildlife Area include wildlife viewing and hunting (quail, wild pigs, deer). However, the San Antonio Unit does not experience much foot traffic by the public, as the only legal way for the public to access it is by walking up the Salinas River from the Bradley Undercrossing.

Use of the Section 4(f) Property

The replacement of the San Antonio River Bridges will occur within the San Antonio Unit of the Big Sandy Wildlife Area (see Figure 1 below). Caltrans Environmental and Design groups have worked together to minimize the use of support structures for the new San Antonio River Bridges. Due to the reduced number of support structures for the proposed new San Antonio

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River Bridges, the project will result in a net reduction of permanent structures within the streambed and riparian/streambank corridor. Removal of existing hardscape and structural elements, in addition to plant re-establishment, will re-establish jurisdictional areas and will fully offset permanent impacts. Access to the wildlife area and hunting activities would not be prohibited during construction or upon completion of the project. Thus, no permanent impacts would occur to the recreational use or riparian habitat in the San Antonio Unit.

However, the project will have temporary impacts spanning three to four seasons at the San Antonio River. Demolition of the old bridge and construction of the new bridge would occur over multiple seasons as work in the channel is prohibited in the rainy season. A temporary construction easement would be obtained from the California Department of Fish and Wildlife to allow access for construction workers and construction equipment. The project would temporarily impact a small portion of the San Antonio Unit and the Big Sandy Wildlife Area as a whole. 9.06 acres of the projects Area of Potential Impact overlaps with the 120- acre San Antonio Unit (see Figure 2, below). Temporary construction easements would be obtained, and no portion of the wildlife area would need to be permanently acquired. The vast majority of the wildlife refuge would still be accessible by the public during construction. The area under and immediately adjacent to the San Antonio River Bridges would have access intermittently restricted during the bridge construction period. Bridge construction would be three seasons for Alternative 1 and four seasons for Alternative 2. During the three to four seasons of construction, construction staff would occasionally need to limit access to this small portion of the wildlife preserve when necessary for safety of the public and to accommodate bridge demolition and construction. Limitations on use of this small area would be minimized as much as feasible. The public access points to the Big Sandy Wildlife Refuge and public activity on the rest of the refuge would not be affected during these times. The activities, features, and attributes of the refuge that qualify it for protection under 4(f) would not be adversely affected.

In addition, the project would preserve vegetation to the maximum extent feasible, replant disturbed areas, and comply with all conditions outlined in the Section 1602 Streambed Alteration Agreement, Section 401 Water Quality Certification, Section 404 Nationwide Permit, National Marine Fisheries Service Biological Opinion, and U.S. Fish and Wildlife Service Biological Opinion.

Summary of Caltrans De Minimis Findings

Caltrans believes the proposed project would have a minimal impact to the San Antonio Unit of the Big Sandy Wildlife Area and that this impact would not be considered adverse. The Section 4(f) determination is based on the following:

- There is no prudent and feasible alternative to replacement of the San Antonio River Bridges that would avoid use of the Section 4(f) property.
- The project has been designed to avoid and minimize environmental impacts as much as feasible and would not permanently affect habitat or habitat connectivity.

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- The San Antonio Unit is not easily accessible to the public due to a lack of parking lots, access trails, and the presence of the Camp Roberts Military Reservation. The only legal way to access it is by walking up the Salinas River from the Bradley Undercrossing.
- The use of the property is temporary, and no portion of the property would be permanently acquired by Caltrans.
- The project would temporarily affect a small portion of the San Antonio Unit (9.06 acres of the 120-acre San Antonio Unit overlap with the project's Area of Potential Impact).
- The activities, features, and attributes of the refuge that qualify it for protection under 4(f) would not be adversely affected.

Caltrans *de minimis* impact finding requires a letter of concurrence from the agency with jurisdiction over the 4(f) property. Caltrans kindly requests CDFW to provide a written response at your earliest convenience.

Sincerely,

CLAIRE TAGGESELL
Associate Environmental Planner
Caltrans, District 5

Enclosures: Figure 1. Location of the Project Relative to the Big Sandy Wildlife Area
Figure 2. Project Area of Potential Impact Within San Antonio Unit Map

**CONCURRENCE WITH SECTION 4(F) DE MINIMIS FINDING BY CDFW
REPRESENTATIVE:**

DocuSigned by
 on behalf of
E:9904E60293D48A

Julie Vance
Regional Manager, Region 4-Central Region
California Department of Fish and Wildlife

7/16/2025

Date

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Figure 1. Location of the Project Relative to the Big Sandy Wildlife Area

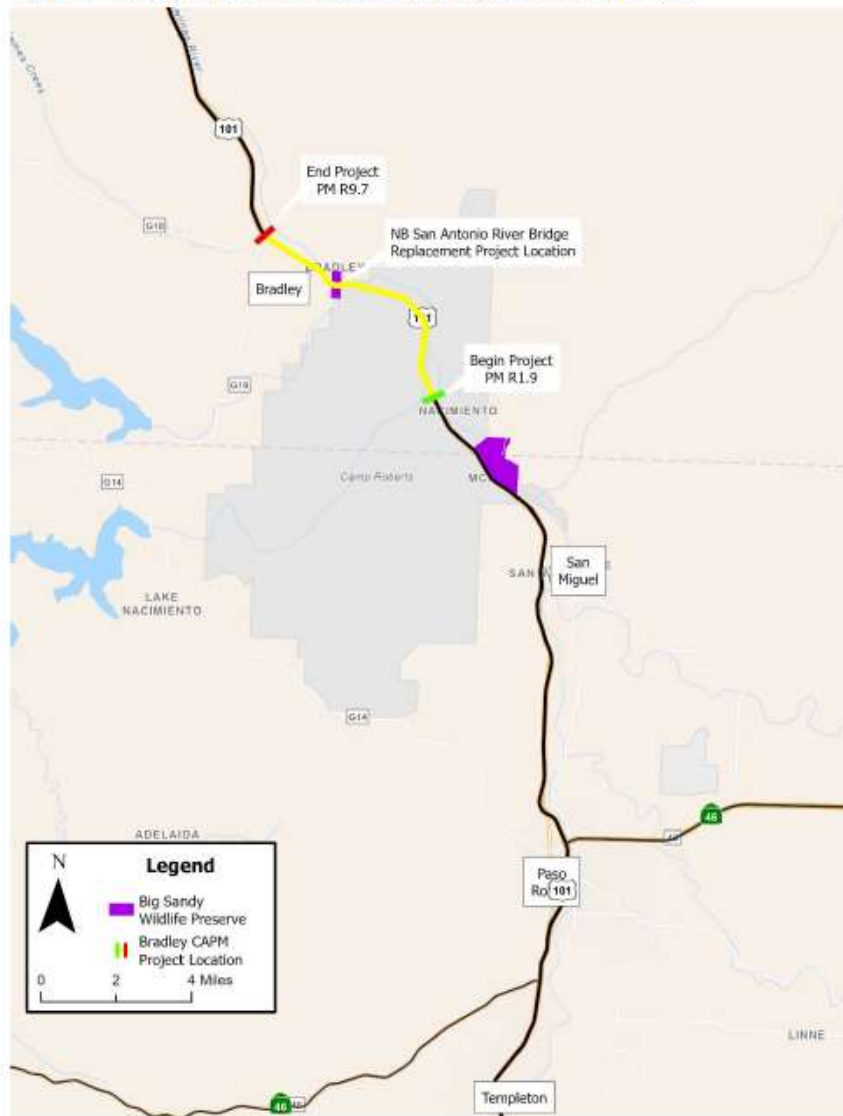
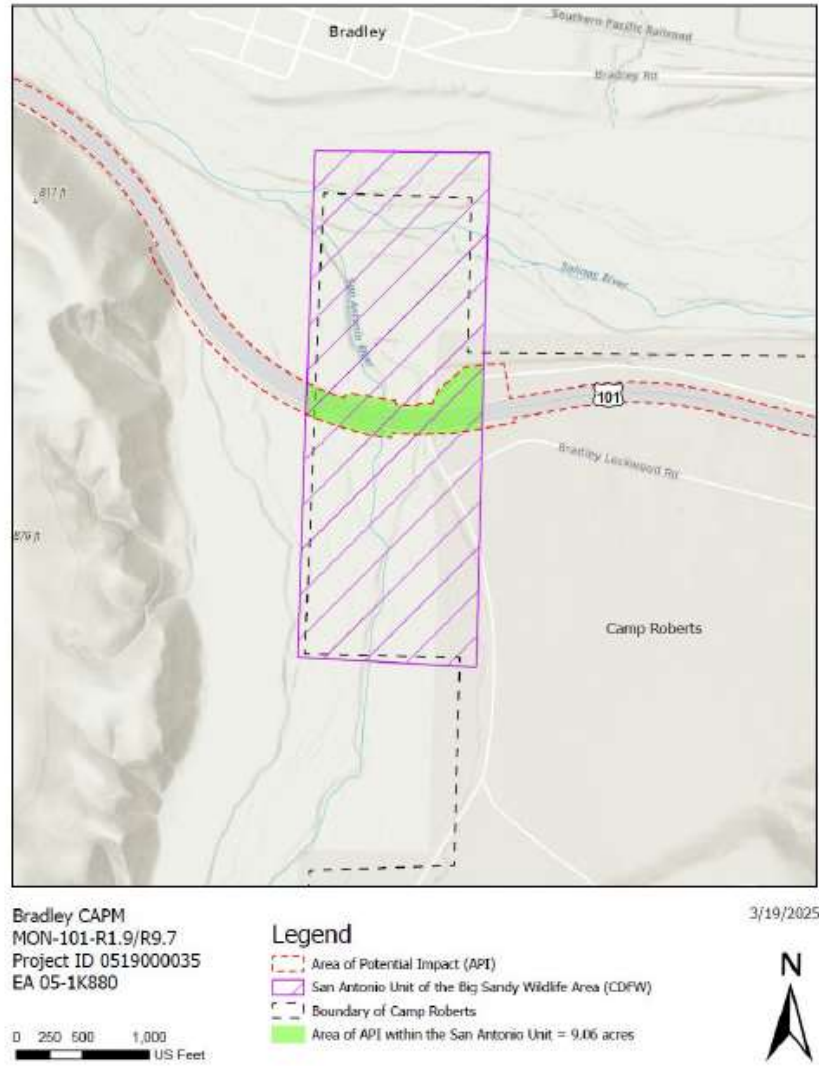


Figure 2: Project Area of Potential Impact Within San Antonio Unit Map



Appendix B Avoidance, Minimization and Mitigation Measures Summary

To ensure that all of the environmental measures identified in this document are executed at the appropriate times, the following mitigation program (as shown in the proposed Environmental Commitments Record that follows) will be implemented. During project design, avoidance, minimization, and/or mitigation measures will be incorporated into the project's final plans, specifications, and cost estimates, as appropriate. All permits will be obtained prior to implementation of the project. During construction, environmental and construction/engineering staff will ensure that the commitments contained in the Environmental Commitments Record are fulfilled. Following construction and appropriate phases of project delivery, long-term mitigation maintenance and monitoring will take place, as applicable. Because the following Environmental Commitments Record is a draft, some fields have not been completed; they will be filled out as each of the measures is implemented.

Note: Some measures may apply to more than one resource area. Duplicated or redundant measures have not been included in this Environmental Commitments Record.

Aesthetics

Avoidance and Minimization Measures

VIS-1. Preserve as much existing vegetation as possible. Prescriptive clearing and grubbing and grading techniques that save the most existing vegetation possible should be employed.

VIS-2. Revegetate all disturbed soil areas with native plant species and other erosion control treatments appropriate to each specific work location as directed by Caltrans District 5 Landscape Architecture.

VIS-3. Replacement planting shall include aesthetic considerations as well as the inherent biological goals. Revegetation shall include native trees and plants as determined by the Caltrans Biologist and Caltrans District 5 Landscape Architecture and shall be maintained through plant establishment.

VIS-4. All visible concrete drainage elements (including but not limited to headwalls, drain inlet aprons, etc.) should be colored to blend with the surroundings and reduce reflectivity. The specific colors of these concrete elements shall be determined by Caltrans District 5 Landscape Architecture.

VIS-5. If vegetation control under guardrails is required, shale or colored concrete will be selected to blend in with the natural surrounding and reduce

reflectivity. The selection of the vegetation control material and/or color shall be determined and approved by District 5 Landscape Architecture in coordination with District 5 field maintenance.

VIS-6. Structural elements such as bridges and the retaining walls will include aesthetic treatment, such as texture, to reduce glare and graffiti. Aesthetic treatments are to be determined by District 5 Landscape Architecture.

VIS-7. Bridge railing selection shall be in “open-style” type 85, 86H or similar. Bridge railing and bridge aesthetics will be developed as a collaboration between Caltrans District 5 Landscape Architecture and Structures Design.

VIS-8. Following construction, re-grade and re-contour all new construction staging areas and other temporary uses as necessary to match the surrounding pre-project topography.

Biology

Jurisdictional Features

Avoidance and Minimization Measures

The project will impact U.S. Army Corps of Engineers, Regional Water Quality Control Board, and California Department of Fish and Wildlife jurisdictional areas within the Area of Potential Impact. The following avoidance and minimization measures will be implemented to reduce the potential impacts to these jurisdictional areas resulting from the project:

BIO-1. Prior to construction, Caltrans shall obtain a Section 404 Nationwide Permit from the U.S. Army Corps of Engineers, a Section 401 Water Quality Certification from the Regional Water Quality Control Board, and a Section 1602 Streambed Alteration Agreement from the California Department of Fish and Wildlife. All permit terms and conditions will be incorporated into construction plans and implemented.

BIO-2. Prior to any ground-disturbing activities, Environmentally Sensitive Area fencing shall be installed around jurisdictional features and the dripline of trees to be protected within the project limits. Caltrans-defined Environmentally Sensitive Areas shall be noted on design plans and delineated in the field prior to the start of construction activities.

BIO-3. Construction activities in jurisdictional waters and temporary stream diversion, if needed, shall be timed to occur between June 1 and October 31 in any given year, or as otherwise directed by the regulatory agencies, when the surface water is likely to be dry or at a seasonal minimum. Deviations from this work window will be made only with permission from the relevant regulatory agencies.

BIO-4. During construction, all project-related hazardous materials spills within the project site shall be cleaned up immediately. Readily accessible spill prevention and cleanup materials shall be kept by the contractor onsite at all times during construction.

BIO-5. During construction, erosion control measures shall be implemented. Temporary large sediment barrier, fiber rolls, and barriers shall be installed as needed between the project site and jurisdictional other waters and riparian habitat. At a minimum, erosion controls shall be maintained by the contractor on a daily basis throughout the construction period.

BIO-6. During construction, the staging areas shall conform to Best Management Practices. At a minimum, all equipment and vehicles shall be checked and maintained by the contractor on a daily basis to ensure proper operation and avoid potential leaks or spills.

BIO-7. Stream contours shall be restored as close as possible to their original condition.

[The following measure was added since the draft environmental document was circulated.] BIO-8. Storage, maintenance, and fueling of equipment, vehicles, and materials, will be conducted in designated areas at least 100 feet from the jurisdictional features. If storage, maintenance, or fueling is required to occur within 100 feet, evidence and a request will need to be provided to the Regional Water Quality Control Board for review and approval. Additionally, a secondary containment measure will be in place for equipment and maintenance of equipment to occur within 100 feet of a jurisdictional feature, pending Water Board approval.

Compensatory Mitigation Measures

BIO-9. Temporary impacts to jurisdictional areas will be restored at a 1-to-1 ratio. All native trees removed within jurisdictional areas will be replaced at a 3-to-1 ratio for trees less than 12 inches in diameter at breast height and at a 10-to-1 ratio for trees equal to or greater than 12 inches in diameter at breast height. Replacement plantings will include appropriate native tree and understory species. To ensure success, monitoring and an appropriate plant establishment period will be required, which will include regular inspections, weeding, and replacement.

BIO-10. Replacement plantings will be detailed in Caltrans' Landscape Architecture Landscape Planting Plan and the final Mitigation Monitoring Plan. The Mitigation Monitoring Plan will be developed in coordination with the project biologist and will include planting specifications and grading plans to ensure survival of planted vegetation and reestablishment of functions and values. The final Mitigation Monitoring Plan will detail mitigation commitments and will be consistent with standards and mitigation commitments from the

U.S. Army Corps of Engineers, Regional Water Quality Control Board, and California Department of Fish and Wildlife. The Mitigation Monitoring Plan will be prepared when more detailed construction plans are developed and will be finalized through the permit review process with regulatory agencies. Restoration plantings will consist of native riparian species and associated riparian understory and bank species.

Invasive Species

Avoidance and Minimization Measures

BIO-11. During construction, Caltrans will ensure that the spread or introduction of invasive exotic plant species will be avoided to the maximum extent possible.

BIO-12. Only clean fill shall be imported. When practicable, invasive exotic plants in the project site shall be removed and properly disposed of. Any plant species rated as “High” on the California Invasive Plant Council Invasive Plant Inventory that are removed from the construction site shall be taken to a landfill to prevent the spread of invasive species.

BIO-13. Plant species that the California Invasive Plant Council, California Department of Agriculture, California Department of Fish and Wildlife, or other resource organizations consider to be invasive or potentially invasive will not be used in erosion control seed mix or to revegetate areas of disturbance. Caltrans erosion control mix will contain only native species to the Central Coast of California.

BIO-14. Construction equipment shall be inspected as “weed-free” by Caltrans before entering the construction site. If necessary, wash stations onsite shall be established for construction equipment under the guidance of Caltrans to avoid/minimize the spread of invasive plants and/or seed within the construction area.

Hardham’s Evening-Primrose and Elegant Buckwheat

Avoidance and Minimization Measures

BIO-15. Prior to start of construction, a Caltrans-approved Biologist shall conduct an appropriately timed botanical survey on Camp Roberts property, within the Area of Potential Impact. If Hardham’s evening-primrose or elegant buckwheat is detected, the number of individuals shall be estimated and boundaries of the occurrences shall be mapped. The mapped areas shall be noted as “sensitive plant areas” and avoided with Environmentally Sensitive Area fencing, where feasible.

BIO-16. If any of the mapped “sensitive plant areas” cannot be avoided, soil salvage shall be implemented. Salvaged soil will be stockpiled onsite and spread back over the disturbed area after construction completion.

BIO-17. Prior to start of construction, a Caltrans-approved Biologist shall conduct a worker environmental training program, including a description of Hardham's evening-primrose or elegant buckwheat and its habitat, the species' legal/protected status, location within the project site, avoidance/minimization measures to be implemented during the project, and the implications of violating relevant environmental commitments.

BIO-18. New observations of Species of Special Concern or other special-status plant species shall be documented on California Natural Diversity Database forms and submitted to the California Department of Fish and Wildlife upon project completion.

South-Central California Coast Steelhead

Avoidance and Minimization Measures

BIO-19. In-stream work will take place between June 15 and October 31 in any given year, when the surface water within San Antonio River is likely to be at a seasonal minimum. Deviations from this work window will be made only with permission from the relevant regulatory agencies. During in-stream work, a qualified biologist will be retained with experience in steelhead biology and ecology, aquatic habitats, biological monitoring (including diversion/dewatering), and capturing, handling, and relocating fish species. During in-stream work, the biological monitor(s) will continuously monitor placement and removal of any required stream diversions and will capture stranded steelhead and other native fish species and relocate them to suitable habitat, as appropriate. The biologist(s) will capture steelhead stranded as a result of diversion/dewatering and relocate steelhead to the nearest suitable in-stream habitat. The biologist(s) will note the number of steelhead observed in the affected area, the number of steelhead relocated, and the date and time of the collection and relocation.

BIO-20. During in-stream work, if pumps are incorporated to assist in temporarily dewatering the site, intakes will be completely screened with no larger than 0.2-inch (5-millimeter) wire mesh to prevent steelhead and other sensitive aquatic species from entering the pump system. Pumps will release the diverted water so that suspended sediment will not re-enter the stream. The form and function of pumps used during the dewatering activities will be checked daily, at a minimum, to ensure a dry work environment and minimize adverse effects to aquatic species and habitats.

BIO-21. Design replacement bridge structures without scuppers, deck drains, or other facilities that drain storm water directly into the stream to prevent pollutants such as 6PPD-quinone (an oxidation product of 6PPD, an additive intended to prevent damage to tire rubber from ozone that is short for N-(1,3-dimethylbutyl)-N'-phenyl-p-phenylenediamine) from directly entering waterways.

Southwestern Pond Turtle

Avoidance and Minimization Measures

[The following sentence was added since the draft environmental document was circulated.] Caltrans completed Technical Assistance with U.S. Fish and Wildlife Service on August 21, 2025. If southwestern pond turtle is listed prior to construction, Caltrans will implement additional measures as recommended by U.S. Fish and Wildlife Service.

BIO-22. The project includes Environmentally Sensitive Areas to minimize impacts to sensitive areas and species. The project plans will delineate Environmentally Sensitive Areas that restrict access to the minimum required for construction, minimizing impacts to southwestern pond turtles and their habitat. No vehicle access within these Environmentally Sensitive Areas will be permitted. During construction, the Resident Engineer and biological monitor will determine and agree upon the exact placement of Environmentally Sensitive Area markers, based on the project plans, and will determine and agree upon the appropriate material for marking Environmentally Sensitive Areas.

BIO-23. Prior to construction, a qualified biologist will provide an environmental awareness training to all personnel on the potential for southwestern pond turtles to occur in the Area of Direct Impact. The contractor shall submit a written request to the Resident Engineer 14 calendar days prior to the performance of any work to schedule training.

BIO-24. Prior to the start of excavation or construction activities, a qualified biologist will conduct a preconstruction survey for the southwestern pond turtle. If any are found within the Area of Potential Impact, they will be relocated to a suitable location outside of the Area of Potential Impact. The qualified biologist will use the most current survey protocols available for the species to ensure highest level of species detection, including visual encounter surveys and nesting survey techniques.

BIO-25. A qualified biologist shall be present onsite during all initial vegetation removal and ground-disturbing activities. If pond turtles are encountered, only a Service-approved biologist shall handle and relocate the animals.

BIO-26. The project shall avoid altering hydrology of and causing increased sedimentation rates into San Antonio River by minimizing soil compaction and treating all storm water before it is discharged into turtle habitat.

Western Spadefoot

Avoidance and Minimization Measures

BIO-27. During the winter season prior to start of construction, a qualified biologist shall survey areas of the project with suitable habitat during the wet season when pools/puddles could be present. If spadefoots are present, Caltrans shall coordinate with the U.S. Fish and Wildlife Service and California Department of Fish and Wildlife.

BIO-28. Seasonal Avoidance: Caltrans will schedule project activities to minimize adverse effects to the western spadefoot and its habitat. Disturbance to habitat will be confined to the dry season, generally May 1 through October 31 (or the first measurable fall rain of 1 inch or greater) because that is the time period when western spadefoots are less likely to be moving through upland areas. However, if seasonal avoidance is not possible, grading, and other disturbance in pools and ponds will occur only when they are dry, typically between July 15 and October 31. Work within a pool or wetland may begin prior to July 15 if the pool or wetland has been dry for a minimum of 30 days prior to initiating work.

BIO-29. Rain Event Limitations: No construction activities will occur during rain events or within 24 hours following a rain event. Prior to construction activities resuming, a qualified biologist will inspect the project area and all equipment/materials for the presence of the western spadefoot. Construction may continue 24 hours after the rain ceases if no precipitation is forecasted within 24 hours. If rain exceeds 0.5 inch during a 24-hour period, work will cease until no further rain is forecasted.

BIO-30. Preconstruction Survey: No more than 24 hours prior to the date of initial ground disturbance and vegetation clearing, a qualified biologist with experience in the identification of all life stages of the western spadefoot will conduct a preconstruction survey within suitable habitat at the project site. The survey will consist of walking the subject area to determine possible presence of the species. The qualified biologist will investigate all areas that could be used by the western spadefoot for feeding, breeding, sheltering, movement, and other essential behaviors, such as small woody debris, refuse, burrows, etc.

BIO-31. Biological monitoring by a qualified biologist(s) will be carried out during initial ground-disturbing activities and are limited once the area of interest is cleared of species. If western spadefoots are detected during initial ground disturbance monitoring, the qualified biologist(s) will periodically visit the site throughout the construction period. No construction work will be initiated until the biologist(s) determines that the work area is clear of the western spadefoot.

San Joaquin Kit Fox

Avoidance and Minimization Measures

BIO-32. Project employees will be directed to exercise caution when commuting within listed species habitats. A 20-mile-per-hour speed limit will be observed in all project areas, except on county roads and state and federal highways. Cross-country travel by vehicles will be prohibited outside of the project area unless authorized by the U.S. Fish and Wildlife Service. Project employees will be provided with written guidance governing vehicle use, speed limits on unpaved roads, fire prevention, and other hazards.

BIO-33. Prior to any ground disturbance, the contractor, all employees of the contractor, subcontractors, and subcontractors' employees will attend an employee education program conducted by a Caltrans or U.S. Fish and Wildlife Service-approved biologist. The program will consist of a brief presentation by persons knowledgeable in San Joaquin kit fox biology, legislative protection, and measures to avoid impacts to the species during project implementation.

BIO-34. A litter control program will be initiated at each project site. No pets or firearms (except for law enforcement officers and security personnel) will be allowed onsite.

BIO-35. Excavations deeper than 2 feet will be covered with plywood or similar material at the end of each workday, or escape ramps put in place to prevent any entrapment. Each excavation will be inspected thoroughly before being filled.

BIO-36. All construction pipes, culverts, or similar structures with a diameter of 4 inches or greater stored on the construction site overnight will be thoroughly inspected for San Joaquin kit foxes prior to being buried, capped, or otherwise used or moved. If a San Joaquin kit fox is discovered inside a pipe, the pipe shall not be moved until the U.S. Fish and Wildlife Service has been consulted. If the San Joaquin kit fox is in direct harm's way, the pipe may be moved to a safe location one time under the direct supervision of a qualified biologist.

BIO-37. The Resident Engineer or their designee will be responsible for implementing these conservation measures, and the Caltrans biologist will represent the point of contact for the project.

BIO-38. Restoration and vegetation work will use California endemic plant materials from onsite or local sources. Loss of soil from runoff or erosion will be prevented using fiber rolls or similar material and by implementing the best management practices from the Caltrans National Pollutant Discharge Elimination System statewide stormwater permit.

BIO-39. Prior to any ground disturbance in suitable habitat, a preconstruction survey will be conducted for San Joaquin kit fox. The preconstruction survey will be conducted no less than 14 days and no more than 30 days prior to the beginning of ground disturbance or construction activities. The survey will identify any potential kit fox dens. The status of all potential dens will be determined and mapped. Potential dens will be monitored with tracking medium or infrared camera for three consecutive days to determine the current use. If no kit fox activity is observed during this period and no other kit fox sign is observed in the vicinity, then the den is assumed unoccupied. If kit fox activity is observed at a den, Caltrans will contact the U.S. Fish and Wildlife Service and California Department of Fish and Wildlife for further coordination.

BIO-40. [As a result of technical assistance, the following sentence has been edited since the draft environmental document was circulated.] Written results of the preconstruction survey will be submitted to the U.S. Fish and Wildlife Service within five days after survey completion and prior to the start of ground disturbance if kit fox are observed. If a natal or pupping den is discovered within the project area or within 200 feet of the project boundary, the U.S. Fish and Wildlife Service will be notified immediately. If the preconstruction survey reveals an active natal den or new information, Caltrans will notify the U.S. Fish and Wildlife Service immediately for further consultation.

Least Bell's Vireo and Southwestern Willow Flycatcher

Avoidance and Minimization Measures

BIO-41. Prior to construction, vegetation removal shall be scheduled to occur from September 2 to January 31, outside of the typical nesting bird season if possible, to avoid potential impacts to nesting birds. If tree removal or other construction activities are proposed to occur within 100 feet of potential habitat during the nesting season (February 1 to September 1), a nesting bird survey shall be conducted by a qualified biologist no more than five calendar days prior to construction.

BIO-42. [As a result of technical assistance, the following sentence has been edited since the draft environmental document was circulated.] If least Bell's vireo or southwestern willow flycatcher are observed within 300 feet of the project area during the course of construction or during the preconstruction surveys, all project activities shall cease immediately and the relevant resource agencies shall be consulted. Development of additional avoidance and minimization measures will occur as necessary in coordination with the pertinent agencies.

Bald Eagle

Avoidance and Minimization Measures

BIO-43. Work activities between February 1 and September 1 (bald eagle nesting season), including staging, within a line-of-sight of the known bald eagle nest (primarily only Jolon Road northbound off-ramp), will not occur until a qualified biologist conducts a survey to determine nest activity.

BIO-44. If the nest is inactive, work may commence. If it is active and there is no line-of-sight, work may occur if the biologist determines work activities will not disturb the nest. If it is active and there is line-of-sight, work will not commence until the qualified biologist has determined that nesting is complete, and eagles have fledged.

BIO-45. Caltrans will submit the project description, mapping, and proposed avoidance measures for review by the U.S. Fish and Wildlife Service for

Technical Assistance. The U.S. Fish and Wildlife Service will provide feedback and any additional measures that can be incorporated into the project to ensure no impacts to nesting eagles.

BIO-46. If any additional bald eagle nests are identified prior to or during construction, Caltrans will conduct technical assistance with the U.S. Fish and Wildlife Service and/or California Department of Fish and Wildlife, as needed, to avoid potential adverse effects.

Crotch Bumblebee

Avoidance and Minimization Measures

BIO-47. During the design phase, a Crotch bumblebee habitat assessment will be conducted following the California Department of Fish and Wildlife's "Survey Considerations for California Endangered Species Act Candidate Bumblebee Species" dated June 6, 2023. If Crotch bumblebee habitat is determined to be present within the project site, then the following applies:

- A focused non-invasive survey will be conducted within suitable habitat prior to ground disturbance for Crotch bumblebee and its nests, following California Department of Fish and Wildlife guidance (2023).
- A Worker Environmental Awareness Training will be provided for all construction personnel prior to the start of any ground disturbance or vegetation removal to discuss Crotch bumblebee identification, ecology, habitat, and avoidance and minimization measures.
- Prior to any ground-disturbing activities, Environmentally Sensitive Area fencing shall be installed, as appropriate, around Crotch bumblebee feeding and nesting habitat to be avoided. Environmentally Sensitive Areas shall be noted on design plans and delineated in the field prior to the start of construction activities.

BIO-48. If Crotch bumblebee is identified in the project area, Caltrans will coordinate with the California Department of Fish and Wildlife and, if necessary, a 2081 Incidental Take Permit will be acquired, and the following will be implemented:

- Any blooming flowering plants that are scoped for removal will be inspected immediately prior to work to ensure that no bumblebees are on or near the plant. If a bumblebee is identified on or adjacent to vegetation that is to be removed, work in that area will not proceed until the bumblebee leaves the area of its own accord.
- No work will occur within 50 feet of an active Crotch bumblebee nest unless approved by the California Department of Fish and Wildlife.

Monterey Dusky-Footed Woodrat

Avoidance and Minimization Measures

BIO-49. Prior to implementation of proposed project activities, a preconstruction visual survey will be conducted within suitable woodrat habitat in the Area of Potential Impact to determine the presence or absence of woodrat nests.

BIO-50. If woodrat nests are located during this survey, avoid them and establish an Environmentally Sensitive Area with a 25-foot buffer around each.

BIO-51. To the extent feasible, project activities requiring grading or vegetation removal within the 25-foot protective buffer should occur only during the non-breeding season (October 1 to December 31) to avoid noise impacts to any breeding woodrats that may occupy the nest from January through September.

BIO-52. If project activities cannot avoid impacting or removing the nest, then it should be dismantled by hand prior to grading or vegetation removal activities. The dismantling shall occur during the non-breeding season (October 1 to December 31) and shall be conducted so that the nest material is removed starting on the side where most impacts will occur and ending on the side where the most habitat will be undisturbed, which will allow for any woodrats in the nest to escape into adjacent undisturbed habitat. The dismantled nest materials shall be placed onto a tarp (or equivalent) and relocated to a location determined by a qualified biologist to be suitable alternative habitat.

BIO-53. If young are encountered during nest dismantling, the dismantling activity should be stopped and the material replaced back on the nest and the nest should be left alone and rechecked in two to three weeks to see if the young are out of the nest or capable of being out on their own (as determined by a qualified biologist); once the young can fend for themselves, the nest dismantling can continue.

BIO-54. Prior to construction in jurisdictional areas, Caltrans shall acquire a Streambed Alteration Agreement from the California Department of Fish and Wildlife pursuant to Fish and Game Code Section 1600 et seq. and shall incorporate any additional measures relating to this species not otherwise addressed in the Natural Environment Study.

American Badger and Salinas Pocket Mouse

Avoidance and Minimization Measures

The following additional avoidance and minimization measures will be implemented for American badger:

BIO-55. Prior to any ground disturbance, the contractor, all employees of the contractor, subcontractors, and subcontractors' employees will attend an employee education program conducted by a qualified biologist. The program will consist of a brief presentation by persons knowledgeable in American badger biology, legislative protection, and measures to avoid impacts to the species during project implementation.

BIO-56. The project plans shall delineate Environmentally Sensitive Areas to minimize impacts to sensitive areas and species by limiting access to the minimum required for construction within the Area of Potential Impact. No vehicle access within the Environmentally Sensitive Areas will occur.

BIO-57. Prior to any ground disturbance in suitable habitat, a preconstruction survey will be conducted for American badger. The survey will identify any potential badger dens. The status of all potential dens will be determined and mapped. Potentially active dens will be monitored with tracking medium or infrared camera for three consecutive days to determine the current use. If no badger activity is observed during this period, then the den will be excavated by hand or carefully with equipment provided by the contractor, under the direction of the biologist to preclude subsequent use. If American badger activity is observed at a den, Caltrans will coordinate with the California Department of Fish and Wildlife for suitable buffer implementation or exclusion methods. Observations of Species of Special Concern, or other special-status species shall be documented on California Department of Fish and Wildlife forms and submitted to the California Department of Fish and Wildlife upon project completion.

The following additional avoidance and minimization measures will be implemented for Salinas pocket mouse:

BIO-58. Prior to any ground disturbance, the contractor, all employees of the contractor, subcontractors, and subcontractors' employees will attend an employee education program conducted by a qualified biologist. The program will consist of a brief presentation by persons knowledgeable in Salinas pocket mouse biology, legislative protection, and measures to avoid impacts to the species during project implementation.

BIO-59. The project plans shall delineate Environmentally Sensitive Areas to minimize impacts to sensitive areas and species by limiting access to the minimum required for construction within the Area of Potential Impact. No vehicle access within the Environmentally Sensitive Areas will occur.

BIO-60. A qualified biologist shall be present during initial ground disturbance activities to capture and relocate any Salinas pocket mice that may be encountered during construction operations. Observations of Species of Special Concern or other special-status species shall be documented on

California Natural Diversity Database forms and submitted to the California Department of Fish and Wildlife upon project completion.

Reptile Species of Special Concern

Avoidance and Minimization Measures

The following additional avoidance and minimization measures specific to Northern California legless lizard shall be implemented:

BIO-61. A qualified biologist shall conduct preconstruction surveys for legless lizards within five calendar days before initial ground disturbance proposed within coast live oak woodlands and/or prior to tree removal. Where feasible, this survey shall include systematic subsurface searching (raking suitable habitat) because legless lizards are fossorial.

BIO-62. If any legless lizards are discovered during preconstruction surveys, they will be relocated to a nearby area with suitable habitat similar to where they were discovered (as stated above for other Species of Special Concern reptiles and amphibians). Also, if discovered during preconstruction surveys, a qualified biologist will be present during oak tree removal to safely relocate any legless lizards that could be uncovered during tree removal.

The following avoidance and minimization measures will be implemented for coast horned lizard and San Joaquin coachwhip:

BIO-63. Prior to construction, a qualified biologist shall survey the Area of Potential Impact and, if present, capture and relocate any coast horned lizards and San Joaquin coachwhips to the nearest suitable habitat outside of the Area of Potential Impact. Observations of Species of Special Concern or other special-status species shall be documented on California Natural Diversity Database forms and submitted to the California Department of Fish and Wildlife upon project completion.

BIO-64. The project plans shall delineate Environmentally Sensitive Areas to minimize impacts to sensitive areas and species by limiting access to the minimum required for construction within the Area of Potential Impact. No vehicle access within the Environmentally Sensitive Areas will occur.

BIO-65. A qualified biologist shall be present during initial ground disturbance activities to capture and relocate any coast horned lizards and/or San Joaquin coachwhips that may be encountered during construction operations.

Townsend's Big-Eared Bat, Pallid Bat, and Other Roosting Bats

Avoidance and Minimization Measures

The following measures are recommended to avoid and minimize potential impacts to roosting bat species:

BIO-66. Tree removal shall be scheduled to occur from September 1 to February 14, outside of the typical bat maternity roosting season, if possible, to avoid potential impacts to tree roosting bats. If tree removal or other construction activities are proposed to occur within 100 feet of potential habitat during the bat maternity roosting season (February 15 to August 31), a bat roost survey shall be conducted by a biologist determined qualified by Caltrans within 14 calendar days prior to construction. If roosting bats are found, a qualified Caltrans biologist shall determine an appropriate buffer based on the habits and needs of the species. The buffer area shall be avoided until a qualified biologist has determined that roosting activity has ceased, or exclusionary methods have successfully evicted roosting bats.

BIO-67. Since bats are known to roost on the subject bridges and culvert, a Bat Exclusion Plan will be prepared by a qualified biologist for approval at least 30 days prior to exclusion installation. If it is determined that bat exclusion is necessary and the plan feasible, a qualified biologist will be contracted to oversee implementation of passive exclusion in roosting areas. Suitable exclusionary materials may include Visqueen poly sheeting (plastic sheeting), foam filling (for crevices), or other mechanical devices. Netting is not a suitable exclusionary material. Installation of bat exclusion shall occur only during the non-maternity season (September 1 to February 14), the year prior to construction. Permanent exclusion can be installed after a qualified biologist has performed emergence surveys to confirm that all bats have been successfully evicted from the structure.

BIO-68. Preconstruction surveys will be conducted by a qualified biologist to identify potential roosting bat activity. The biologist(s) conducting the preconstruction surveys will also identify the nature of the bat use of the area (i.e., no roosting, night roost, day roost, maternity roost). If roosting bat activity is observed during the preconstruction survey process, the following measures will be implemented:

- A focused survey to determine if bats are roosting at the bridges, within suitable culverts, or in suitable trees will be conducted by a qualified biologist before the start of construction activities and before installation of exclusionary devices. Focused surveys at the bridges site will consist of at least two daytime and two dusk surveys.
- If bridge, culvert, and/or tree removal activities are proposed during the typical maternal bat roosting season (February 15 to August 31) and exclusion has not yet been installed, an additional bat roost survey will be conducted by a qualified biologist one week prior to these activities to determine the presence/absence of roosting bats. If maternal bat roosts are observed, the roost(s) will not be disturbed or obstructed until a qualified biologist determines that the roost(s) is no longer being used.

- The roost(s) will be designated as an Environmentally Sensitive Area, and all construction activities shall be avoided within 100 feet until the end of the maternity roosting season (beginning of September) and the qualified biologist confirms that the roost(s) are no longer occupied. No roost exclusion will be conducted if maternity roosts are detected.

Compensatory Mitigation Measure

BIO-69. Impacts to roosting bats will be compensated through the development and implementation of a Bat Protection and Mitigation Plan in coordination with the California Department of Fish and Wildlife. Roosting habitat will be created on the new structures. Design components of bat mitigation to be incorporated into structures will be completed between 60 percent and 95 percent designs. The plan will include post-construction monitoring of roosts for five years.

Tricolored Blackbird, Great Blue Heron, Yellow Warbler, Burrowing Owl, and Other Nesting Birds

Avoidance and Minimization Measures

BIO-70. Prior to construction, vegetation removal shall be scheduled to occur from October 1 to January 31, outside of the typical nesting bird season if possible, to avoid potential impacts to nesting birds. If tree removal or other construction activities are proposed to occur within 100 feet of potential habitat during the nesting season (February 1 to September 30), a nesting bird survey shall be conducted by a biologist determined qualified by Caltrans no more than 10 calendar days prior to construction. If an active nest is found, Caltrans shall implement an appropriate buffer or monitoring strategy based on the habits and needs of the species. The buffer area or monitoring strategy shall be implemented until a qualified biologist has determined that juveniles have fledged and are no longer reliant on the nest or nesting activity has otherwise ceased.

BIO-71. During construction, active bird nests shall not be disturbed and eggs or young of birds covered by the Migratory Bird Treaty Act and California Fish and Game Code shall not be killed, destroyed, injured, or harassed at any time.

BIO-72. Trees to be removed shall be noted on design plans. Prior to any ground-disturbing activities, Environmentally Sensitive Area fencing shall be installed around the dripline of trees to be protected within project limits.

BIO-73. All initial clearing/grubbing and vegetation removal shall be monitored and documented by a qualified biologist regardless of time of year.

The following additional avoidance measures shall be implemented for tricolored blackbird:

BIO-74. A qualified biologist will conduct preconstruction surveys for tricolored blackbird in suitable habitats within the project area, within 14 days prior to project commencement. Observations of Species of Special Concern or other special-status species shall be documented on California Natural Diversity Database forms and submitted to the California Department of Fish and Wildlife upon project completion.

BIO-75. If a tricolored blackbird is detected within the project limits or within 250 feet of the construction activities, the qualified biologist will determine whether a nesting colony is present in the area. If nesting tricolored blackbirds are confirmed, the California Department of Fish and Wildlife will be notified, and a buffer zone for the colony will be defined. No take of tricolored blackbird shall occur.

The following additional measures shall be implemented for burrowing owl:

BIO-76. A qualified biologist will conduct preconstruction surveys for burrowing owl in grassland habitats of the project area, within 30 days prior to project commencement. The biologist will survey for burrows with molted feathers, cast pellets, prey remains, eggshell fragments, or excrement at or near the burrow entrance and listen for burrowing owl calls. If burrowing owls are confirmed, the California Department of Fish and Wildlife will be notified, and an avoidance buffer zone will be defined. No take of burrowing owls shall occur. Observations of Species of Special Concern or other special-status species shall be documented on California Natural Diversity Database forms and submitted to the California Department of Fish and Wildlife upon project completion.

[The following measures specific to the planned geotechnical drilling operation have been added since the draft environmental document was circulated.] The following additional measures shall be implemented for the geotechnical drilling operation:

BIO-77. Work within jurisdictional areas will be limited to between June 1 – October 31 when seasonal flow is at a minimum.

BIO-78. Pre-construction surveys for sensitive species in the project area will be carried out by a qualified biologist prior to mobilization and ground disturbance activities.

BIO-79. A qualified biologist will be present to monitor initial ground disturbance.

BIO-80. A pre-construction Worker Environmental Awareness Training will be conducted prior to commencement of Geotech investigation activities and subsequent Worker Environmental Awareness Trainings are required for all new workers before performing work. On completing the training, workers must sign a form stating they attended the training.

BIO-81. Drilling activities will not release water, remove soil, trench, or place fill materials in waters, wetlands, riparian areas or on streambanks.

BIO-82. Ensure that project related vehicles do not leak anti-freeze or other hazardous materials.

BIO-83. All boring holes must be backfilled immediately after the completion of each test. The last three feet of backfill will consist of native soil materials and be placed using hand tools.

BIO-84. Any boring holes that are left open must be covered while unattended and thoroughly inspected for trapped animals before backfilling.

BIO-85. If any sensitive species are found in the project area they will not be disturbed and will be allowed to leave of their own accord

BIO-86. Any contractor, employee, or other personnel who inadvertently kills or injures a special-status species will immediately report the incident to Caltrans who will notify the appropriate regulatory agencies.

BIO-87. No geotechnical work shall occur during or 24 hours following a significant rain event defined as 0.25 inch or more of precipitation in a 24-hour period for Bradley, CA.

BIO-88. If work is required within the typical nesting bird and bat maternity roosting season (February 1-September 30), a Caltrans biologist will perform a nesting bird and roosting bat survey prior to the start of drilling activities. Work will not occur within 50 feet of an active bird nest. Work will not occur within 50 feet of active bat maternity roost.

BIO-89. Construction pipes or similar structures with a diameter of 4-inches or greater that are stored at the project site overnight will be thoroughly inspected before the pipe is moved, buried, capped, or otherwise moved in any way.

BIO-90. Workers shall inspect under vehicles and equipment for wildlife before they are moved. A maximum speed limit of 20 miles-per-hour on unpaved roads shall be enforced.

BIO-91. All food-related trash items will be disposed of in securely closed containers and removed from the project site at least once per week.

BIO-92. Pets and firearms are prohibited within the project area.

BIO-93. Upon completion of project, all construction refuse shall be removed from the project site and disposed of properly.

Cultural Resources

Avoidance and Minimization Measures

ARCH-1. An Environmentally Sensitive Area Action Plan will be prepared prior to project construction. All measures and guidance included in the plan will be complied with.

[The following measure has been updated since the draft environmental document was circulated.] ARCH-2. All ground disturbance during construction will be monitored by tribal monitors. Ground disturbance at San Antonio River Bridges will be monitored by a qualified archaeologist during construction.

Geology and Soils

Compensatory Mitigation Measure

PALEO-1. Caltrans shall retain a Principal Paleontologist that meets Caltrans qualifications to prepare or oversee preparation of a Paleontological Mitigation Plan during the project Plans, Specifications, and Estimates phase once more detailed project plans are available. Elements of the Paleontological Mitigation Plan shall conform to Caltrans guidelines (Standard Environmental Reference, Volume 1, Chapter 8). Paleontological Monitoring during construction may be required as a component of the Paleontological Mitigation Plan.

Greenhouse Gas Emissions

Avoidance and Minimization Measures

GHG-1: Where feasible, schedule truck trips outside of peak morning and evening commute hours. Traffic operations shall specify this in the lane closure charts.

GHG-2: Where feasible, use alternative fuels such as renewable diesel for construction equipment. If use of alternative fuels is not possible, substitute gasoline-powered equipment for diesel-powered equipment. Comply with Section 3-517- Equipment, of the Construction Manual.

GHG-3: Where feasible, use solar-powered construction equipment.

GHG-4: Supplement existing construction environmental training with information on methods to reduce greenhouse gas emissions related to construction. This information will be shared using a handout. The information in the handout should include, but is not limited to, the following:

- For improved fuel efficiency from construction equipment, maintain equipment in proper tune and working condition, use right sized equipment for the job, and use equipment with new technologies when feasible.

- Limit idling to 5 minutes for delivery and dump trucks and other diesel-powered equipment when not used in active operations.
- Reduce construction waste. For example, reuse or recycle construction and demolition waste. Maximize use of recycled materials in the project construction to the extent feasible, including but not limited to stockpiling pavement grindings for future use, salvaging rebar from demolished concrete, and processing waste to create usable fill (i.e., crushing concrete for aggregate bases). Also see Standard Specifications Section 14-10-Solid Waste Disposal and Recycling.
- Use on-road heavy-duty trucks that meet the California Air Resources Board's 2007 or cleaner certification standard for on-road heavy-duty diesel engines, and comply with the State On-Road Regulation. See Standard Specifications Section 7-1.02C-Emissions Reduction and comply with Construction Manual Section 7-1.04A (1)- Air Quality.

GHG-5: Reduce the need for transport of earthen materials by balancing cut and fill quantities. See Standard Specifications Section 19-2.03B-Surplus Material.

GHG-6: If feasible, use the accelerated bridge construction method. (Reduces construction windows, uses more precast elements that in turn reduce need for additional falsework, forms, bracing, etc.)

GHG-7: Salvage rebar from demolished concrete, and process waste to create usable fill.

GHG-8: Maximize use of recycled materials in the project construction to the extent feasible.

GHG-9: Recycle existing project features onsite, where feasible.

GHG-10: Reduce construction waste. For example, reuse or recycle construction and demolition waste.

GHG-11: Conserve water during construction, and prioritize the use of recycled water for construction needs. See Standard Specifications Section 10-4-Water Usage.

Hazards and Hazardous Materials

Avoidance and Minimization Measures

HAZ-1. Caltrans Standard Special Provision 14-11.02, which addresses discovery of unanticipated discoveries of contaminated soils and groundwater, should be included in the project bid package so that the District

5 emergency on-call contract can be used in the unlikely event that residual contamination is encountered.

HAZ-2. The appropriate Caltrans Standard Special Provisions for aerially deposited lead soil management will be determined during the project design phase.

HAZ-3. A Lead Compliance Plan will need to be developed for the San Antonio River Bridges and the North Bradley Undercrossing Structure and implemented by the construction contractor and should be included as a bid item.

HAZ-4. A site-specific lead-containing paint/asbestos-containing materials survey and assessment will be completed during the Plans, Specifications, and Estimates phase.

HAZ-5. Standard Special Provision 14-11.14 will be included in the construction contract for proper management and disposal of treated wood waste.

[The following measure has been added since the draft environmental document was circulated.] HAZ-6. During project construction, notify California Geologic Energy Management Division and other appropriate agencies if soils containing significant amounts of hydrocarbons are discovered during soil-disturbing activities. Caltrans will also notify California Geologic Energy Management Division if any wells that were not part of this review are encountered during surveys or construction activities.

Hydrology and Water Quality

Avoidance and Minimization Measures

See Section 2.1.4 Biological Resources for avoidance, minimization, and mitigation measures for jurisdictional areas.

During construction, effective combinations of temporary and permanent erosion and sediment controls will be used. Storm water management for the site will be coordinated through the contractor with Caltrans construction personnel to effectively manage erosion from the Disturbed Soil Areas by implementing a Storm Water Pollution Prevention Plan. Selected Best Management Practices that will be implemented are listed below. These Best Management Practices are subject to further refinement in the Plans, Specifications, and Estimates phase. Most of these Best Management Practices will be included in the Storm Water Pollution Prevention Plan for the project.

Temporary Soil Stabilization

HYDRO-1. Minimize active disturbed soil areas during the rainy season by using scheduling techniques.

HYDRO-2. Preserve existing vegetation to the maximum extent feasible.

HYDRO-3. Implement temporary protective cover/erosion control on all non-active disturbed soil areas and soil stockpiles.

HYDRO-4. Control erosive forces of storm water runoff with effective storm flow management, such as temporary concentrated flow conveyance devices, earthen dikes, drainage swales, lined ditches, outlet protection/velocity dissipation devices, and slope drains, as determined feasible.

Temporary Sediment Controls

[The following measure has been modified since the draft environmental document was circulated.] HYDRO-5. Implement linear sediment controls such as fiber rolls, check dams, temporary large sediment barriers, or gravel bag berms on all active and non-active disturbed soil areas during the rainy season.

HYDRO-6. To further help prevent sediment discharge, stabilize construction site entrances, implement temporary drainage inlet protection, and implement street sweeping and vacuuming.

HYDRO-7. Implement appropriate wind erosion controls year-round.

Non-Storm Water Management

The appropriate non-storm water Best Management Practices will be implemented year-round as follows:

HYDRO-8. Water conservation practices shall be implemented on all construction sites and wherever water is used.

HYDRO-9. Paving and grinding procedures shall be implemented where paving, surfacing, resurfacing, grinding, or saw cutting may pollute storm water runoff or discharge to the storm drain system or watercourses.

HYDRO-10. Follow appropriate procedures and practices designed for construction contractors to recognize illicit connections or illegally dumped or discharged materials on a construction site and report incidents to the Resident Engineer.

HYDRO-11. Stockpiling materials, storing equipment and liquid waste containers, washing vehicles or equipment, and fueling and maintaining vehicles and equipment must be performed at least 100 feet from concentrated flows of storm water, drainage courses, and inlets if within the floodplain. The activities must be performed at least 50 feet from the aforementioned areas if outside of the floodplain.

HYDRO-12. Pile driving operations will be considered part of the construction activities.

HYDRO-13. Concrete curing will be used in the construction of structures such as bridges and abutments. Concrete curing includes the use of both chemical and water methods. Proper procedures will minimize pollution of runoff during concrete curing.

HYDRO-14. Since the project involves structure demolition/removal over the San Antonio River, proper procedures will be implemented to minimize pollution during these activities.

HYDRO-15. The following construction site best management practices shall be bid items for this project to ensure they are implemented during construction:

- Job Site Management
- Stormwater Pollution Prevention Program
- Storm Water Sampling and Analysis Day
- Stormwater Annual Report
- Move In/Move Out (Temporary Erosion Control)
- Temporary Hydraulic Mulch (Bonded Fiber Matrix)
- Temporary Check Dam
- Temporary Drainage Inlet Protection
- [The following item has been added since the draft environmental document was circulated.] Temporary Creek Diversion
- Temporary Fiber Roll
- Temporary Large Sediment Barrier
- Temporary Construction Entrance
- Street Sweeping
- Temporary Concrete Washout
- Temporary Fence (Environmentally Sensitive Area type fence)

Supplemental Items

HYDRO-16. Concurrence from Construction regarding the temporary Construction Site best management practices implementation strategy and associated quantities will be obtained during the Plans, Specifications, and Estimates phase.

Maintenance Best Management Practices

HYDRO-17. Continue coordination with Maintenance regarding the incorporation of best management practices. Finalize plan for best management practices prior to construction. Maintenance best management practices may include maintenance vehicle pullouts, access gates and roads, and maintenance worker safety features.

Noise

Avoidance and Minimization Measures

Include the following general measures in the Resident Engineer's binder and implement as appropriate to further minimize temporary construction noise impacts.

NOI-1. Each internal combustion engine, used for any purpose on the job, or related to the job, shall be equipped with a muffler of a type recommended by the manufacturer. No internal combustion engine shall be operated on the job site without an appropriate muffler.

NOI-2. Notify the public in advance of the construction schedule when construction noise and upcoming construction activities likely to produce an adverse noise environment are expected. This notice shall be given two weeks in advance. Notice should be published in local news media of the dates and duration of proposed construction activity. The District 5 Public Information Office posts notice of the proposed construction and potential community impacts after receiving notice from the Resident Engineer.

NOI-3. Shield especially loud pieces of stationary construction equipment.

NOI-4. Locate portable generators, air compressors, etc. away from sensitive noise receptors.

NOI-5. Limit grouping major pieces of equipment operating in one area to the greatest extent feasible.

NOI-6. Place heavily trafficked areas such as the maintenance yard, equipment, tool, and other construction-oriented operations in locations that will be the least disruptive to surrounding sensitive noise receptors.

NOI-7. Use newer equipment that is quieter and ensure that all equipment items have the manufacturers' recommended noise abatement measures, such as mufflers, engine covers, and engine vibration isolators intact and operational. Internal combustion engines used for any purpose on or related to the job shall be equipped with a muffler or baffle of a type recommended by the manufacturer.

NOI-8. Consult District noise staff if complaints are received during the construction process.

Appendix C 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 2024

TITLE VI/NON-DISCRIMINATION POLICY STATEMENT

It is the policy of the California Department of Transportation (Caltrans), in accordance with Title VI of the Civil Rights Act of 1964 and the assurances set forth in the Caltrans' Title VI Program Plan, to ensure that no person in the United States shall on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance. Related non-discrimination authorities, remedies, and state law further those protections, including sex, disability, religion, sexual orientation, age, low income, and Limited English Proficiency (LEP).

Caltrans is committed to complying with 23 C.F.R. Part 200, 49 C.F.R. Part 21, 49 C.F.R. Part 303, and the Federal Transit Administration Circular 4702.1B. 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 (including LEP). In addition, Caltrans will facilitate meaningful participation in the transportation planning process in a non-discriminatory manner.

The overall responsibility for this policy is assigned to the Caltrans Director. The Caltrans Title VI Coordinator is assigned to the Caltrans Office of Civil Rights Deputy Director, who then delegates sufficient responsibility and authority to the Office of Civil Rights' managers, including the Title VI Branch Manager, to effectively implement the Caltrans Title VI Program. Individuals with questions or requiring additional information relating to the policy or the implementation of the Caltrans Title VI Program should contact the Title VI Branch Manager at title.vi@dot.ca.gov or at (916) 639-6392, or visit the following web page: <https://dot.ca.gov/programs/civil-rights/title-vi>.

A handwritten signature in black ink, appearing to read 'Tony Tavares'.

TONY TAVARES
Director

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

Appendix D **Comment Letters and Responses**

[This appendix has been added since the draft environmental document was circulated.]

This appendix contains the one comment letter received during the public circulation and comment period from May 1, 2025 to June 2, 2025, retyped for readability. The comment letters are stated verbatim as submitted, with acronyms, abbreviations, and any original grammatical or typographical errors included. A Caltrans response follows each comment presented. Copies of the original comment letters and documents can be found in Volume 2 of this document.

Comment from California Department of Conservation, Geologic Energy Management Division

May 30, 2025

VIA EMAIL

California Department of Transportation, District 5
Ms. Dianna Beck
50 Higuera Street
San Luis Obispo, Ca 93401
Dianna.Beck@dot.ca.gov

Assessor Parcel Number(s): 424101019000
Property Owner(s): N/A
Project Location Address: Highway 101, near Bradley, Ca 93426
(35°51'18.5"N 120°47'59.8"W. From the East Garrison off-ramp at Post Mile R1.9 to the Jolon Road Undercrossing at post mile R9.7.)

PROJECT TITLE: SCH NO. 2025050140 - BRADLEY CAPITAL
PREVENTATIVE MAINTENANCE PROJECT

Public Resources Code (PRC) section 3208.1 establishes re-abandonment responsibility when previously plugged and abandoned oil, gas or geothermal wells will be impacted by planned property development or construction activities. Local permitting agencies, property owners, and/or developers should be aware of, and fully understand, that significant and potentially dangerous issues may be associated with development near previously abandoned oil, gas, and geothermal wells.

The California Geologic Energy Management Division (CalGEM) has received the above-referenced project dated May 19, 2025. To assist local permitting

agencies, property owners, and developers in making safe and practical land use decisions regarding potential development near oil, gas, or geothermal wells, CalGEM provides a table of the wells within the parcel boundary or in its vicinity, based on CalGEM's Well Finder database (link found at the bottom of this letter).

CalGEM categorically advises against building over, or in any way impeding access to, oil, gas, or geothermal wells. Impeding access to a well could result in the need to remove any structure or obstacle that prevents or impedes access including, but not limited to, buildings, housing, fencing, landscaping, trees, pools, patios, sidewalks, roadways, and decking at the landowner's expense if there is a need to access a well. Maintaining sufficient access is considered the ability for a well servicing unit and associated necessary equipment (consisting of well servicing rig, pumping equipment, pipe trailer) to reach a well from a public street or access way, solely over the parcel on which the well is located. A well servicing unit, and any necessary equipment, should be able to pass unimpeded along and over the route, and should be able to access the well without disturbing the integrity of surrounding infrastructure. Impermeable barriers such as asphalt, concrete, and plastic may trap hazardous gases and liquids underneath and could create a safety hazard if built over a well that later develops a leak.

CalGEM recommends that any well for which access is impeded or built over, against CalGEM's advice, should be evaluated by a qualified petroleum professional for compliance with the statutory objectives of isolating all hydrocarbon-bearing strata; protecting underground and surface waters; prevention of subsequent damage to life, health, property, and other resources; and prevention of loss of oil, gas, or reservoir energy. CalGEM recommends that wells that do not meet these standards are abandoned or re-abandoned prior to construction. The well information can be accessed through <https://maps.conservation.ca.gov/doggr/wellfinder/>.

PRC section 3208, subdivision (a), provides the primary statutory authority for CalGEM to oversee adequate abandonment of wells. Additionally, CalGEM has developed the regulatory guidance for operators to be followed during well abandonment, which are listed within California Code of Regulation, title 14 (CCR) section 1723 and associated sub-sections (for onshore wells), and section 1745 and associated sub-sections (for offshore wells).

There is no guarantee that a well abandoned in compliance with current CalGEM requirements as prescribed by law will not start leaking in the future. Due to the inability to predict all subsurface conditions or changes, it always remains a possibility that any well may start to leak oil, gas, and/or water after abandonment, no matter how thoroughly the well was plugged and abandoned. CalGEM acknowledges wells plugged and abandoned to the most current CalGEM requirements as prescribed by law have a lower

probability of leaking in the future, however there is no guarantee that such abandoned wells will not leak.

CalGEM advises that all wells identified on the development parcel prior to, or during, development activities be tested for liquid and gas leakage. Surveyed locations in Latitude and Longitude, NAD 83 decimal format, and leak testing results should be provided to CalGEM. CalGEM expects any wells found leaking to be reported to CalGEM immediately.

PRC section 3208.1 gives CalGEM the authority to order or permit the re-abandonment of any well where it has reason to question the integrity of the previous abandonment. Responsibility for re-abandonment costs may be affected by the choices made by the local permitting agency, property owner, and/or developer in considering the general advice set forth in this letter. The PRC continues to define the person or entity responsible for re-abandonment as:

1. The property owner - If the well was plugged and abandoned in conformance with CalGEM requirements at the time of abandonment, and in its current condition does not pose an immediate danger to life, health, and property, but requires additional work solely because the owner of the property on which the well is located proposes construction on the property that would prevent or impede access to the well for purposes of remedying a currently perceived future problem, then the owner of the property on which the well is located shall obtain all rights necessary to re-abandon the well and be responsible for the re-abandonment.
2. The person or entity causing construction over or near the well - If the well was plugged and abandoned in conformance with CalGEM requirements at the time of plugging and abandonment, and the property owner, developer, or local agency permitting the construction failed either to obtain an opinion from the supervisor or district deputy as to whether the previously abandoned well is required to be re-abandoned, or to follow the advice of the supervisor or district deputy not to undertake construction that impedes access, then the person or entity causing the construction over or near the well shall obtain all rights necessary to re-abandon the well and be responsible for the re-abandonment.
3. The party or parties responsible for disturbing the integrity of the abandonment - If the well was plugged and abandoned in conformance with CalGEM requirements at the time of plugging and abandonment, and after that time someone other than the operator or an affiliate of the operator disturbed the integrity of the abandonment in the course of developing the property, then the party or parties responsible for

disturbing the integrity of the abandonment shall be responsible for the re-abandonment.

Should any wells require abandonment or re-abandonment, the responsible party must submit a Notice of Intention (NOI) to CalGEM through WellSTAR. The NOI form can be accessed in the 'Plugging and Abandonment' section of the following link: https://www.conservation.ca.gov/calgem/for_operators. No well work may be performed on any oil, gas, or geothermal well without written approval from CalGEM. Well work requiring approval includes, but is not limited to, mitigating leaking gas or other fluids from abandoned wells, modifications to well casings, and/or any other re-abandonment work. CalGEM also regulates the top of a plugged and abandoned well's minimum and maximum depth below final grade. CCR section 1723.5 states well casings shall be cut off at least 5 feet but no more than 10 feet below the surface of the ground. If any well needs to be lowered or raised (i.e. casing cut down or casing riser added) to meet this regulation, a permit from CalGEM is required before work can start.

CalGEM makes the following additional recommendations to the local permitting agency, property owner, and developer:

1. To ensure that present and future property owners are aware of (a) the existence of all wells located on the property, and (b) potentially significant issues associated with any improvements near oil or gas wells, CalGEM recommends that information regarding the below identified well(s), and any other pertinent information obtained after the issuance of this letter, be communicated to the appropriate county recorder for inclusion in the title information of the subject real property.
2. CalGEM recommends that any soil containing hydrocarbons be disposed of in accordance with local, state, and federal laws. Please notify the appropriate authorities if soil containing significant amounts of hydrocarbons is discovered during development.

As indicated in PRC section 3106, CalGEM has statutory authority over the drilling, operation, maintenance, and abandonment of oil, gas, and geothermal wells, and attendant facilities, to prevent, as far as possible, damage to life, health, property, and natural resources; damage to underground oil, gas, and geothermal deposits; and damage to underground and surface waters suitable for irrigation or domestic purposes. In addition to CalGEM's authority to order work on wells pursuant to PRC sections 3208.1 and 3224, it has authority to issue civil and criminal penalties under PRC sections 3236, 3236.5, and 3359 for violations within CalGEM's jurisdictional authority. CalGEM does not regulate grading, excavations, or other land use issues.

Should you have any questions, or if any wells are encountered that were not part of this letter, contact CalGEM at (805) 937-7246 or via email at CalGEMNorthern@conservation.ca.gov

Sincerely,

Jon Iverson
Supervising Oil & Gas Engineer - Northern District

cc: Claire Taggesell - Associate Environmental Planner,
claire.taggesell@dot.ca.gov

Jan Perez - CalGEM CEQA Program, jan.perez@conservation.ca.gov
Office of Legislative and Regulatory Affairs, OLRA@conservation.ca.gov
The State Clearinghouse, state.clearinghouse@opr.ca.gov
CSWR

Comment 1:

The California Geologic Energy Management Division (CalGEM) has received the above-referenced project dated May 19, 2025. To assist local permitting agencies, property owners, and developers in making safe and practical land use decisions regarding potential development near oil, gas, or geothermal wells, CalGEM provides a table of the wells within the parcel boundary or in its vicinity, based on CalGEM's Well Finder database (link found at the bottom of this letter).

CalGEM categorically advises against building over, or in any way impeding access to, oil, gas, or geothermal wells. Impeding access to a well could result in the need to remove any structure or obstacle that prevents or impedes access including, but not limited to, buildings, housing, fencing, landscaping, trees, pools, patios, sidewalks, roadways, and decking at the landowner's expense if there is a need to access a well. Maintaining sufficient access is considered the ability for a well servicing unit and associated necessary equipment (consisting of well servicing rig, pumping equipment, pipe trailer) to reach a well from a public street or access way, solely over the parcel on which the well is located. A well servicing unit, and any necessary equipment, should be able to pass unimpeded along and over the route, and should be able to access the well without disturbing the integrity of surrounding infrastructure. Impermeable barriers such as asphalt, concrete, and plastic may trap hazardous gases and liquids underneath and could create a safety hazard if built over a well that later develops a leak.

CalGEM recommends that any well for which access is impeded or built over, against CalGEM's advice, should be evaluated by a qualified petroleum professional for compliance with the statutory objectives of isolating all hydrocarbon-bearing strata; protecting underground and surface waters; prevention of subsequent damage to life, health, property, and other

resources; and prevention of loss of oil, gas, or reservoir energy. CalGEM recommends that wells that do not meet these standards are abandoned or re-abandoned prior to construction. The well information can be accessed through <https://maps.conservation.ca.gov/doggr/wellfinder/>.

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CalGEM advises that all wells identified on the development parcel prior to, or during, development activities be tested for liquid and gas leakage. Surveyed locations in Latitude and Longitude, NAD 83 decimal format, and leak testing results should be provided to CalGEM. CalGEM expects any wells found leaking to be reported to CalGEM immediately.

PRC section 3208.1 gives CalGEM the authority to order or permit the re-abandonment of any well where it has reason to question the integrity of the previous abandonment. Responsibility for re-abandonment costs may be affected by the choices made by the local permitting agency, property owner, and/or developer in considering the general advice set forth in this letter. The PRC continues to define the person or entity responsible for re-abandonment as:

1. The property owner - If the well was plugged and abandoned in conformance with CalGEM requirements at the time of abandonment, and in its current condition does not pose an immediate danger to life, health, and property, but requires additional work solely because the owner of the property on which the well is located proposes construction on the property that would prevent or impede access to the well for purposes of remedying a currently perceived future problem, then the owner of the property on which the well is located shall obtain all rights necessary to re-abandon the well and be responsible for the re-abandonment.

2. The person or entity causing construction over or near the well - If the well was plugged and abandoned in conformance with CalGEM requirements at the time of plugging and abandonment, and the property owner, developer, or local agency permitting the construction failed either to obtain an opinion from the supervisor or district deputy as to whether the previously abandoned well is required to be re-abandoned, or to follow the advice of the supervisor or district deputy not to undertake construction that impedes access, then the person or entity causing the construction over or near the well shall obtain all rights necessary to re-abandon the well and be responsible for the re-abandonment.
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Should any wells require abandonment or re-abandonment, the responsible party must submit a Notice of Intention (NOI) to CalGEM through WellSTAR. The NOI form can be accessed in the 'Plugging and Abandonment' section of the following link: https://www.conservation.ca.gov/calgem/for_operators. No well work may be performed on any oil, gas, or geothermal well without written approval from CalGEM. Well work requiring approval includes, but is not limited to, mitigating leaking gas or other fluids from abandoned wells, modifications to well casings, and/or any other re-abandonment work. CalGEM also regulates the top of a plugged and abandoned well's minimum and maximum depth below final grade. CCR section 1723.5 states well casings shall be cut off at least 5 feet but no more than 10 feet below the surface of the ground. If any well needs to be lowered or raised (i.e. casing cut down or casing riser added) to meet this regulation, a permit from CalGEM is required before work can start.

CalGEM makes the following additional recommendations to the local permitting agency, property owner, and developer:

1. To ensure that present and future property owners are aware of (a) the existence of all wells located on the property, and (b) potentially significant issues associated with any improvements near oil or gas wells, CalGEM recommends that information regarding the below identified well(s), and any other pertinent information obtained after the issuance of this letter, be communicated to the appropriate county recorder for inclusion in the title information of the subject real property.

2. CalGEM recommends that any soil containing hydrocarbons be disposed of in accordance with local, state, and federal laws. Please notify the appropriate authorities if soil containing significant amounts of hydrocarbons is discovered during development.

As indicated in PRC section 3106, CalGEM has statutory authority over the drilling, operation, maintenance, and abandonment of oil, gas, and geothermal wells, and attendant facilities, to prevent, as far as possible, damage to life, health, property, and natural resources; damage to underground oil, gas, and geothermal deposits; and damage to underground and surface waters suitable for irrigation or domestic purposes. In addition to CalGEM's authority to order work on wells pursuant to PRC sections 3208.1 and 3224, it has authority to issue civil and criminal penalties under PRC sections 3236, 3236.5, and 3359 for violations within CalGEM's jurisdictional authority. CalGEM does not regulate grading, excavations, or other land use issues.

Response to comment 1: The CalGEM Well Finder was used to search for wells in the project vicinity. Two idle oil and gas wells, one plugged oil and gas well, and one plugged dry hole were identified near the project limits. The wells are all located outside of the Area of Potential Impact outside of Caltrans right-of-way. The wells will not be affected by project activities.

Caltrans has standard procedures in place in the event that hydrocarbon contaminated soils are unearthed during project construction. Standard Specification 14-11.02 provides procedures to be followed for unanticipated discoveries of contaminated soils/groundwater and will be included in the construction contract. During project construction, Caltrans will notify CalGEM and other appropriate agencies if soils containing significant amounts of hydrocarbons are discovered during soil-disturbing activities. Caltrans will also notify CalGEM if any wells that were not part of this review are encountered during surveys or construction activities. Measure HAZ-6 has been added to cover these notification requirements.

List of Technical Studies Bound Separately (Volume 2)

- Visual Impact Assessment
- Air Quality and Noise Technical Assessment Memo
- Water Quality Assessment Report
- Natural Environment Study
- Paleontological Identification Report
- Hazardous Waste Initial Site Assessment
- Location Hydraulic Study, Floodplain Evaluation Report Summary
- Geologic Hazards Report
- Climate Change Report
- Cumulative Impact Assessment

The following were also prepared for the project to document cultural resources, but this information is confidential and not available to the public:

- Phase I archaeological survey
- Extended Phase I (XPI) testing
- Phase II evaluation report

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

Dianna Beck
District 5 Environmental Division
California Department of Transportation
50 Higuera Street, San Luis Obispo, California 93401

Or send your request via email to: dianna.beck@dot.ca.gov
Or call: 805-459-9406

Please provide the following information in your request:

Project title: Bradley CAPM project

General location information: On U.S. 101, near Bradley

District number-county code-route-post mile: 05-MON-101-R1.9/R9.7

EA/Project ID number: EA 05-1K880/0519000035

ATTACHMENT G

Storm Water Data Report

Dist-County-Route: 05-MON-101Post Mile Limits: R1.9/R9.7Project Type: CAPM & Bridge ReplacementProject ID (EA): 05-1900-0035-0 (05-1K8800)Program Identification: 201.121Phase: ☐ PID ☒ PA/ED ☐ PS&ERegional Water Quality Control Board(s): Central Coast, Region 3

- | | | | |
|----|--|---|--|
| 1. | Does the project disturb 5 or more acres of soil? Per the DNC a PIR Short Form SWDR is appropriate. | Yes ☒ | No ☐ |
| 2. | Does the project disturb more than 1 acre of soil and not qualify for the Rainfall Erosivity Waiver? Per the DNC a PIR Short Form SWDR air appropriate. | Yes ☒ | No ☐ |
| 3. | Is the project required to implement Treatment BMPs (STGA, TMDL, AC)? | Yes ☐ | No ☒ |
| 4. | Does the project impact existing stormwater BMPs? | Yes ☐ | No ☒ |

If the answer to any of the preceding questions is "Yes", prepare a Long Form – Storm Water Data Report.

Total Disturbed Soil Area: 16.86 acresNew Impervious Surface: 0.1 acresApplicable Caltrans Permit: 2012 ☐ 2022 ☒Estimated Construction Start Date 6/5/2029 Est Const. Completion Date: 7/30/2032Risk Level: RL 1 ☐ RL 2 ☒ RL 3 ☐ WPCP ☐ NA ☐Is MWELo applicable? Yes ☐ No ☒

This Short Form – Storm Water Data Report has been prepared under the direction of the following Licensed Person. The Licensed Person attests to the technical information contained herein and the data upon which recommendations, conclusions, and decisions are based. Professional Engineer or Landscape Architect stamp required at PS&E.

11/13/2024

Jose Bautista, Registered Project Engineer

Date

I have reviewed the stormwater quality design issues and find this report to be complete, current and accurate:

11/14/2024

Jennifer Ronnenberg, District SW Coordinator or Designee

Date

[Stamp Required for PS&E only]

for



1. Project Description

- This is a CAPM project on Route 101 in Monterey County near Bradley, from East Garrison Overcrossing (PM R1.9) to Jolon Road Undercrossing (PM R9.7). The project replaces the Left and Right San Antonio River Bridge (44-0141L/R) at PM R6.66 and the left North Bradley Undercrossing (44-0142L) at PM R7.94. In addition to the replacement of 44-0141L/R and 44-0142L, the project proposes to rehabilitate the pavement wear course on the travel lanes and shoulder. It also proposes to replace five culverts, and replace one census station. Secondary improvements include upgrading guardrail and guardrail end treatments, placing tapered edges, replacing dikes and replacing sign panels, as needed.
- The DSA for this project has been calculated to be 16.86 acres. This area accounts for all disturbed soil associated with the bridge replacement and culvert replacement areas and associated contractor staging and stockpile locations.

Table E-1. Summary of Project Areas

	Area (Acre)
Disturbed Soil Area	16.86
Pre project Impervious Area	77.76
Post project Impervious Area	77.81
Total Project Area	266
Increase in Impervious (NNI) Area	0.05
Amount of Replaced Impervious (RIS) surfaces	0.05
Total New Impervious Surfaces (NNI + RIS)	0.1 (4,356 sqft)

- This project is covered under the new Caltrans NPDES Permit (wqo2022-0033-dwq).
- The Salinas River, Nacimiento River, Hames Creek, and the San Antonio River are the receiving water bodies for this project.
- The San Antonio River, Hames Creek, and the Nacimiento River are not 303(d) listed.
- The Salinas River (middle, near Gonzales Rd. crossing to confluence with the Nacimiento River) is listed in the combined 2014 and 2016 303(d) list of impaired waters as being impaired for fecal coliform, temperature (water), toxicity, turbidity, and pH.
- The Salinas River has the beneficial uses set for COLD, SPWN, and MIGR.
- This project is not located in a moderate or high Significant Trash Generating Area, STGA. (2024 STGA Mapping)
- The following permits, reviews, and approvals would be required for project construction:



Agency	Permit/Approval	Status
Central Coast Regional Water Quality Control Board	Section 401 Certification for impacts to waters of the United States and State	To be obtained during PS&E and before construction
United States Army Corps of Engineers	Section 404 Nationwide Permit for impacts to wetlands and waters of the United States	To be obtained during PS&E and before construction
California Department of Fish and Wildlife	Section 1602 Streambed Alteration Agreement for impacts to the Salinas River and San Antonio River and associated riparian habitat.	To be obtained during PS&E and before construction
National Marine Fisheries Service	Biological Opinion for South Central Coast Steelhead Trout	To be obtained prior to approval of the Final Environmental Document
United States Fish and Wildlife Service	Programmatic Biological Opinion for California red-legged frog; Informal Consultation for San Joaquin kit fox, least Bell's vireo, and southwest willow flycatcher	To be obtained prior to approval of the Final Environmental Document

- There are no Drinking Water Reservoirs and/or Recharge Facilities within this project's limits.
- There are no existing Treatment BMPs within this project's limits.
- There is an existing permanent Maintenance facility (stockpile/decanting) within the project limits. Facility D5W52 is located at MON-101 PM 9.7. The contractor will not be allowed the use of this facility unless authorized by the Maintenance Stormwater Coordinator, Enrique Castillo Ramirez. Mapping of the facility is an attachment to this SWDR.
- This project is not located in an urban MS4 area.

2. Construction Site BMPs

- This project proposes to create 16.86 ac of DSA. Therefore this project will require a Storm Water Pollution Prevention Plan (SWPPP) and coverage under the Construction General Permit.
- A preliminary project risk level assessment has determined this project to be a risk level 2. See the attached risk level assessment for more information.
 - The R-Factor is- 1.38
 - The K-Factor is- 0.28
 - The LS Factor is- 2.73
 - The sediment risk is Low (59.99 ton/acre)
- The Latitude/Longitude for this project is 35.8548/-120.7920
- The cost of construction site BMPs is estimated at 1.5% of the total construction cost.

- 17 acres will be used in the calculation to determine Construction General Permit (CGP) NOI/NOT fees.

1 Number of FYs of construction schedule

2 Additional years for vegetation period or other NOT requirements

3 Total years

\$1,380 Storm Water Construction Annual Fees for 17 ac

\$4,140.00 Total NOI/NOT Stormwater CGP fees

- During construction, effective combinations of temporary and permanent erosion and sediment controls will be used. Storm water management for the site will be coordinated through the contractor with Caltrans construction personnel to effectively manage erosion from the DSAs by implementing a Storm Water Pollution Prevention Plan (SWPPP). Selected BMPs that will be included but not limited to the SWPPP for the project are defined as follows:

Temporary Soil Stabilization

- Minimize active DSAs during the rainy season by utilizing scheduling techniques.
- Preserve existing vegetation to the maximum extent feasible.
- Implement temporary protective cover/erosion control on all non-active DSAs and soil stockpiles.
- Control erosive forces of storm water runoff with effective storm flow management such as temporary concentrated flow conveyance devices, earthen dikes, drainage swales, lined ditches, outlet protection/velocity dissipation devices, and slope drains as determined feasible.

Temporary Sediment Controls

- Implement linear sediment controls such as fiber rolls, check dams, or gravel bag berms on all active and non-active DSAs during the rainy season.
- To further help prevent sediment discharge, stabilized construction site entrances, temporary drainage inlet protection, and street sweeping and vacuuming will be necessary.
- Implement appropriate wind erosion controls year round.

Non Storm Water Management

- The appropriate non-storm water BMPs will be implemented year-round as follows:
- Water conservation practices are implemented on all construction sites and wherever water is used.
- Paving and Grinding procedures are implemented where paving, surfacing, resurfacing, grinding, or saw cutting may pollute storm water runoff or discharge to the storm drain system or watercourses.
- Procedures and practices designed for construction contractors to recognize illicit connections or illegally dumped or discharged materials on a construction site and report incidents to the Resident Engineer.
- The following activities must be performed at least 100 feet from concentrated flows of storm water, drainage courses, and inlets if within the floodplain and at least 50 feet if outside of the floodplain; stockpiling materials, storing equipment and liquid

waste containers, washing vehicles or equipment, fueling and maintaining vehicles and equipment.

- Pile driving operations will be part of the construction activities.
- Concrete curing will be used in the construction of structures such as bridges and abutments. Concrete curing includes the use of both chemical and water methods. Proper procedures will minimize pollution of runoff during concrete curing.
- Since the project involves structure demolition/removal over the San Antonio River, proper procedures will be implemented to minimize pollution during these activities.
- The following construction site BMPs are anticipated to be bid items for this project:
 - Job Site Management
 - Prepare Stormwater Pollution Prevention Program
 - Storm Water Sampling and Analysis Day
 - Stormwater Annual Report
 - Move In/Move Out (Temporary Erosion Control)
 - Temporary Hydraulic Mulch (Bonded Fiber Matrix)
 - Temporary Check Dam
 - Temporary Drainage Inlet Protection
 - Temporary Fiber Roll
 - Temporary Large Sediment Barrier
 - Temporary Construction Entrance
 - Street Sweeping
 - Temporary Concrete Washout
 - Temporary Fence (type ESA)

Supplemental Items

- Water Pollution Control Maintenance Sharing
- Additional Water Pollution Control

State Furnished Items

- Annual Construction General Permit Fee
- Concurrence from Construction regarding the temporary Construction Site BMP implementation strategy and associated quantities will be obtained during the PS&E Phase.

4. Maintenance BMPs

- Coordination with Maintenance regarding the incorporation of BMPs is ongoing.
- Maintenance BMPs may include maintenance vehicle pullouts, access gates and roads, and maintenance worker safety features.

3. Required Attachments¹

- Vicinity Map
- Evaluation Documentation Form

¹ Additional attachments may be required as applicable or directed by the District/Regional Design Storm Water Coordinator (e.g. BMP line item estimate, DPP, CS checklists, etc).

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

PROJECT PLANS FOR CONSTRUCTION ON
STATE HIGHWAY
IN MONTEREY COUNTY
NEAR BRADLEY

FROM 0.3 MILE SOUTH OF EAST GARRISON OVERCROSSING
TO JOLON ROAD UNDERCROSSING

TO BE SUPPLEMENTED BY STANDARD PLANS DATED 2018

INDEX OF PLANS

NO SCALE

STEVEN McDONALD
DESIGN MANAGER

THE CONTRACTOR SHALL POSSESS THE CLASS OR CLASSIES
OF LICENSE AS SPECIFIED IN THE "NOTICE TO BIDDERS".

ALISON MEHREL
PROJECT MANAGER

CONTRACT NO. **05-1K8804**
PROJECT ID **0519000035**

DATE COUNTY ROUTE TOTAL PROJECT SHEET NO. OF SHEETS

05 MON 101 R1.9/R9.7

LOCATION MAP

PROJECT ENGINEER REGISTERED CIVIL ENGINEER

DATE

PLANS APPROVAL DATE

THE STATE OF CALIFORNIA OR ITS
AGENCIES SHALL NOT BE RESPONSIBLE FOR
COMPLETION OF SCANNED COPIES OF THIS PLAN SHEET.

APPENDIX E

Evaluation Documentation Form, EDF

DATE: **8/5/2024**

Project ID (EA): **05-1900-0035-0 (05-1K8800)**

No.	Criteria	Yes ✓	No ✓	Supplemental Information for Evaluation
1.	Begin Project evaluation regarding requirement for implementation of Treatment BMPs	✓		See Figure 4-1, Project Evaluation Process for Consideration of Permanent Treatment BMPs. Continue to 2.
2.	Is the scope of the Project to install Treatment BMPs (e.g., Alternative Compliance, TMDL, or Trash Amendment Compliance)?		✓	If Yes , go to 8. If No , continue to 3.
3.	Is there a direct or indirect discharge to surface waters?	✓		If Yes , continue to 4. If No , go to 9.
4.	As defined in the WQAR, does the Project have: 1. Areas of Special Biological Significance (ASBS), 2. A TMDL area where Caltrans is named stakeholder, or 3. Other Pollution Control Requirements for surface waters within the project limits?		✓	If Yes to any , contact the District/Regional Stormwater Coordinator to discuss the Department's obligations, go to 8 or 5. PSR _____ (Dist./Reg. SW Coordinator initials) The Salinas River is 303(d)listed. As per the DNC, go to question #5. If No , continue to 5.
5.	Are any existing Treatment BMPs partially or completely removed? (ATA condition #1, See PPDG Section 4.4.1)		✓	If Yes , go to 8 AND continue to 6. If No , continue to 6.
6.	Is this a Routine Maintenance Project?		✓	If Yes , continue to 9. If No , go to 7.
7.	Does the project result in <u>10,000 sf or more</u> of new impervious surface (NIS)?		✓	If Yes , go to 8. <u>5,700 sf NIS (NIS=NNI+ RIS)</u> If No , continue to 9.
8.	Project is required to implement Treatment BMPs.	Complete Checklist T-1, Part 1.		
9.	Project is not required to implement Treatment BMPs. PSR _____ (Dist. /Reg. SW Coord. Initials)  (Project Engineer Initials) <u>11/13/2024</u> (Date)	Document for Project Files by completing this form and attaching it to the SWDR.		

Maintenance Facility Mapping



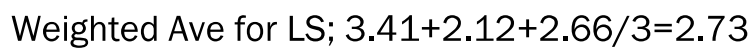
RISK LEVEL DETERMINATION			Information Source
Project Identifier/EA :	05-1900-0035-K (05-1K880K)		
Project Description:	Bradley CAPM, Culverts, and San Antonio R. Bridge Replacement		
Dist-County-Route:	05-MON-101		
Regional Water Board:	Region 3, Central Coast		
MS4 Area:	No		
Begin PM:	R1.9		
End PM:	R9.7		
Mid Project Latitude:	35.8548		
Mid Project Longitude:	-120.7920		
Mid Project Postmile:	5.8		
Begin Construction:	2/1/2029		
End Construction:	4/1/2031		
DSA (Acres):	40.00		
Total Project Area (Acres):			
Total Imperv Before Const(Acres):			
Total Imperv After Const(Acres):			
Slope Ratio/Percent Grade:			
Average Length of Slopes:			
Project Engineer:	Sumangali Hoode		
Project Landscape Architect:	Jessica Bailey		
Risk Level Components	w/GIS Map Method for Sediment Risk (A)	w/Individual Method for Sediment Risk (B)	
R factor	78.48	0.00	EPA/NPDES Calculator
K factor & soil category	0.28	0.00	NRCS website for online soil surveys
LS factor	2.73	0.00	SWRCB Risk Determination Worksheet
Soil loss(ton/acre)	59.99	0.00	SWRCB Risk Determination Worksheet
Sediment Risk (low, med, or High)	Medium	Low	SWRCB Risk Determination Worksheet
Receiving Water	Salinas River		
303(d) listed for sediment	No		
Beneficial uses for:			
Cold	Yes		
Spawn	Yes		
Migratory	Yes		
Receiving Water Risk (low or high)	High	Low	
Combined Risk Level (1, 2, or 3)	Level 2	Level 1	
Prepared By: Pete Riegelhuth	Date: 5/14/2020		
Checked By:	Date:		

SEDIMENT RISK WORKSHEET (A)

Project Identifier/ EA: 05-1900-0035-K (05-1K880K)	
Entry	
A) R Factor	
proportional to a rainfall factor composed of total storm kinetic energy (E) times the maximum 30-min intensity (I30) (Wischmeier and Smith, 1958). The numerical value of R is the average annual sum of EI30 for storm events during a rainfall record of at least 22 years. "Isoerodent" maps were developed based on R values calculated for more than 1000 locations in the Western U.S. Refer to the link below to determine the R factor for the project site. http://cfpub.epa.gov/npdes/stormwater/LFW/lewCalculator.cfm	
R Factor Value	78.48
B) K Factor (weighted average, by area, for all site soils)	
transportability of the sediment, and (3) the amount and rate of runoff given a particular rainfall input, as measured under a standard condition. Fine-textured soils that are high in clay have low K values (about 0.05 to 0.15) because the particles are resistant to detachment. Coarse-textured soils, such as sandy soils, also have low K values (about 0.05 to 0.2) because of high infiltration resulting in low runoff even though these particles are easily detached. Medium-textured soils, such as a silt loam, have moderate K values (about 0.25 to 0.45) because they are moderately susceptible to particle detachment and they produce runoff at moderate rates. Soils having a high silt content are especially susceptible to erosion and have high K values, which can exceed 0.45 and can be as large as 0.65. Silt-size particles are easily detached and tend to crust, producing high rates and large volumes of runoff. Use Site-specific data must be submitted. Site-specific K factor guidance	
K Factor Value	0.28
C) LS Factor (weighted average, by area, for all slopes)	
The effect of topography on erosion is accounted for by the LS factor, which combines the effects of a hillslope-length factor, L, and a hillslope-gradient factor, S. Generally speaking, as hillslope length and/or hillslope gradient increase, soil loss increases. As hillslope length increases, total soil loss and soil loss per unit area increase due to the progressive accumulation of runoff in the downslope direction. As the hillslope gradient increases, the velocity and erosivity of runoff increases. Use the LS table located in separate tab of this spreadsheet to determine LS factors. Estimate the weighted LS for the site prior to construction. LS Table	
LS Factor Value	2.73
Watershed Erosion Estimate (=R x K x LS) in tons/acre	59.990112
Site Sediment Risk Factor	Medium
Low Sediment Risk: < 15 tons/acre	
Medium Sediment Risk: >=15 and <75 tons/acre	
High Sediment Risk: >= 75 tons/acre	
Prepared By: Pete Riegelhuth	
Checked By:	

Project Identifier/EA: 05-1900-0035-K (05-1K880K)		Entry	Score
A. Watershed Characteristics		yes/no	
A.1. Does the disturbed area discharge (either directly or indirectly) to a 303(d)-listed water body impaired by sediment? For help with impaired water bodies please check the attached worksheet or visit the link below: 2006 Approved Sediment-impaired WBs Worksheet http://www.waterboards.ca.gov/water_issues/programs/tmdl/303d_lists2006_epa.shtml <u>OR</u>		yes	High
A.2. Does the disturbed area discharge to a water body with designated beneficial uses of SPAWN & COLD & MIGRATORY? http://www.ice.ucdavis.edu/geowbs/asp/wbquse.asp			

Project Identifier/EA: 05-1900-0035-K (05-1K880K)				
<u>Receiving Water Risk</u>		<u>Sediment Risk</u>		
		Low	Medium	High
	Low	Level 1	Level 2	
	High	Level 2		Level 3
	Project Sediment Risk:		Medium	
	Project RW Risk:		High	
	Project Combined Risk:		Level 2	



Facility Information

Start Date: 02/01/2029	Latitude: 35.8549
End Date: 04/01/2031	Longitude: -120.7904

Calculation Results

Rainfall erosivity factor (R Factor) = **78.48**

A rainfall erosivity factor of 5.0 or greater has been calculated for your site's period of construction.

You do NOT qualify for a waiver from NPDES permitting requirements and must seek Construction General Permit (CGP) coverage. If you are located in an [area where EPA is the permitting authority](#), you must submit a Notice of Intent (NOI) through the NPDES eReporting Tool (NeT). Otherwise, you must seek coverage under your state's CGP.

SAN ARDO

Elevation: 449 feet

Start Year: 1959

End Year: 1977

Number of Years: 19

Average number of days per month with precipitation:

Month	>=0.1 in	>=0.5 in
January	3.4	1.6
February	3.3	1.3
March	2.8	1.2
April	2.3	0.5
May	0.4	0.1
June	0.2	0.1
July	0.1	0
August	0.2	0.1
September	0.5	0.1
October	1.1	0.4
November	2.9	1.5
December	2.8	0.9
Yearly Total	19.7	7.7

APPENDIX E

ATTACHMENT H

Transportation Management Plan

DISTRICT 5

TRANSPORTATION MANAGEMENT PLAN DATA SHEET/CHECKLIST

District / EA / EFIS: 05-1K880 0519000035
 Project Engineer: Anonh Sengmany
 Date Prepared: 8/9/2023

Co.-Rte-PM: Mon-101-R1.9/R9.7
 Description: San Antonio River Bridge CAPM
 Working Days: 470 days with Traffic Control (500 total Working Days)

Check each box and reference your attachments to the item(s) number(s) shown on the list.

1.0 Public Information

- 1.1 Public Awareness Campaign
- 1.2 Other Strategies

Required	Recommended	Not required	COMMENTS
x			Include \$45,000
		x	

2.0 Motorist Information Strategies

- 2.1 Changeable Message Signs - Portable Info Only
- 2.2 Construction Area Signs
- 2.3 Highway Advisory Radio (fixed and mobile)
- 2.4 Planned Lane Closure Web Site
- 2.5 Caltrans Highway Information Network (CHIN)

x			Estimate \$300,000 for 4 signs
x			Refer to SSP 12-3.32C
		x	
x			Construction to provide information to TMC
		x	Construction to provide information to TMC

3.0 Incident Management

- 3.1 COZEPP (during k-rail moving & work in live traffic)
- 3.2 Freeway Service Patrol

x			Include \$660,000 (150 shifts)
		x	

4.0 Construction Strategies

- 4.1 Lane/Ramp Closures Charts
 - 4.1.1 Daytime or extended hours requested
- 4.2 Reversing Traffic Control - AFAD Required
- 4.3 Total Facility Closure Requested
 - 4.3.1 24 hour Lane Closure/No# of Calendar Days
 - 4.3.2 24 hour Ramp Closure/No# of Calendar Days
- 4.4 Median Crossover
- 4.5 Coordination with adjacent construction
- 4.6 Contingency Plan
 - 4.6.1 Material/Equipment Standby
 - 4.6.2 Emergency Detour Plan
 - 4.6.3 Emergency Notification Plan
- 4.7 Construction Work Zone Speed Limit Reduction Determination
- 4.8 Penalties - Late Pick-up or Reopening
- 4.9 Special Days:
- 4.10 Bicycle and Pedestrian Accommodations
- 4.11 Positive Work Zone Protection

x	Yes		No	Attached
x	Yes		No	Provided what can be
x	Yes		No	For use on Surface Streets
	Yes	x	No	Not requested at this time.
				Not requested at this time
				Not requested at this time
x				24/7 Crossover requested. Will be reevaluated in PS&E. As RTL draws closer the volumes may grow and Crossover may no longer be a long term option.
	x			Evaluated closer to construction
x				Standard SSP
	x			Construction/Contractor to provide
	x			Construction/Contractor to provide
	x			Construction/Contractor to provide
x				Complete and return CEM 1301
x				Will be calculated during PS&E.
x				Standard Designated Holidays (12-4.02A) Martin Luther King Jr. Day, Cesar Chavez Day, Mid State Fair. Additional Special Days will need to be evaluated during PS&E.
x				Confirm with the district traffic safety branch that bicycle and pedestrian facilities exist through the project area and what accommodations are
x				Complete and return CEM 1302; Refer to DIB 91

5.0 Anticipated Delays

- 5.1 Lane Closure Review Committee
 - (for anticipated delays over 30 minutes)
- 5.2 Planned full freeway closures
- 5.3 Minimal delay anticipated -
 - If yes, further action is not required

	x			For anticipated delays over 30 mins. The longterm crossover design is anticipated to have delays over 30 minutes.
				Not requested at this time.
	Yes	x	No	Fulltime lane closure for the Minimal Delay anticipated with night hours.

6.0 Other Strategies - Project Specific

- 6.1 Traffic Volume Counts
- 6.2 Prohibit Long Term Closures
- 6.3

x				Per RE
	x			It is anticipated that additional traffic counts may be necessary to complete Lane Closure Charts and Delays. Traffic Management is working with Census to determine if count station data can be collected on a monthly basis.
x				Include language prohibiting long term closures between November 15 to January 2 of any year.

7.0 TMP Certification

x				TMP Certification must be requested via email to Roger D. Barnes (DTM) two (2) weeks in advance of due date. Included SSPs, Plans, BEES, completed CEM 1301 and 1302 Forms.
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ATTACHMENT I

Risk Register

Risk Identification					Risk Assessment			Risk Response			Quantifying "Red" (High P & I) Level Risks							
Status	ID #	Type	Category	Title	Risk Statement	Current status / assumptions	Risk Trigger	Probability (P)	Cost Impact Schedule Impact (I)	Cost Score Schedule Score (P+I)	Strategy	Response Actions	Risk Owner	Updated	Impacted Phase	Support (Hrs) Capital Cost (\$k)	Schedule (Days)	Calculated Contingency
Active	9	Threat	Environmental	LEW surveys	Due to proximity to historical occurrence records, USFWS may determine that protocol surveys for least birds vireo are needed, which would require a task order for a permitted river biologist and would negatively impact project schedule and cost.	It is assumed that USFWS will require surveys for least birds vireo. USFWS consultation 05-FR20 during that time. This would negatively impact project schedule and cost.	USFWS consultation	1-Very Low (1-10%)	2 - Low (<\$2.06K) 8 - High (>6 months)	2	Accept	Calliana Biologists will subcontract qualified biologists to conduct the surveys and provide results.	Jennifer Moonjian	3/4/2020	O-PA&E Sup	O 100 hours ML 250 hours P 800 hours	O 80 days ML 110 days P 165 days	\$2k
								5%		8				P 110	1-PS&E Sup	O 40 hours ML 40 hours P 90 hours	O 10 days ML 14 days P 52 days	3
Active	10	Threat	Environmental	Steelhead Consultation	Based on the consultation process with NMFS, it is possible that NMFS may not issue take for steelhead in the San Antonio River. This would require Calliana to implement additional avoidance measures to avoid negatively impact project schedule, cost, and scope.	It is assumed that NMFS will issue take.	NMFS consultation	1-Very Low (1-10%)	2 - Low (<\$2.06K) 16 - Very High (>6 months)	2	Mitigate	Calliana Biologists will explore creative solutions and continued negotiation with regulatory agencies.	Karen Holmes	3/4/2020	O-PA&E Sup	O 80 hours ML 120 hours P 600 hours	O 30 days ML 60 days P 90 days	4
								5%		16					1-PS&E Sup	O 120 hours ML 120 hours P 200 hours	O 60 days ML 60 days P 90 days	3
Active	11	Threat	Environmental	Former Project's Bio Mitigation	Proposed mitigation for 05-FR20 located within the same area of San Antonio River may be impacted by this project. CDHW and other regulatory agencies may require additional mitigation measures, which could result in a decrease in construction and support project schedule and cost.	It is assumed that Calliana can avoid previous mitigation measures and CDHW will not require higher mitigation ratios.	Existing mitigation site footprint proximity	3-Moderate (31-50%)	2 - Low (<\$2.06K) 8 - High (>6 months)	6	Mitigate	Biologist and Permit Coordinator will negotiate off-site mitigation options with regulatory agencies.	Karen Holmes	3/10/2020	1-PS&E Sup	O 60 hours ML 120 hours P 200 hours	O 40 days ML 30 days P 140 days	7k
								40%		24					9-RW Cap	O 800k ML 140k P 140k	O 40 days ML 30 days P 140 days	35k
Active	12	Opportunity	Structure Design	North Bradley Road UC	As a result of further study during the PA&E phase, it is found that a rehabilitation of North Bradley Road UC (44-0142L) is viable, which could result in a decrease in construction and support cost.	It is assumed that the replacement of North Bradley Road UC (44-0142L) is necessary.	Concrete bridge material test results are available and Structure Maintenance & Investigations (SMAI) has completed an internal PEER review	3-Moderate (31-50%)	2 - Low (<\$2.724k) 4 - Moderate (1-3 months)	6	Accept	SMAI will convene internal strategy meeting as soon as concrete material test results are available to determine the viability of rehabilitation option at the North Bradley Road UC locations.	SMAI - D. Campbell	4/14/2020	1-PS&E Sup	O 760 hours ML 1,000 hours P 1,250 hours	O 9 days ML 0 days P 0 days	50k
									12						4-Con Cap	O 2,000k ML \$2,800k P \$3,000k	O 200 days ML 300 days P 400 days	\$1,120k
Active	13	Threat	Structure Design	Bridge Maintenance	No bridge maintenance or other structure work is required for the bridge or right North Bradley Road UC	It is assumed that the replacement of North Bradley Road UC (44-0142L) is necessary at the left San Antonio River Bridge or right North Bradley Road UC	Future bridge inspection work recommendations	2-Low (11-30%)	16 - Very High (>\$10,696k) 16 - Very High (>6 months)	32	Accept	Reevaluate structure scope during the PA&E phase as part of the detailed Advance Planning Study effort.	DES - M. Downs	4/14/2020	1-PS&E Sup	O 1,500 hours ML 100 hours P 1,000 hours	O 80 days ML 100 days P 100 days	50k
								20%		32					4-Con Cap	O 2,000k ML \$5,000k P \$14,610k	O 200 days ML 300 days P 400 days	\$1,221k
Active	14	Threat	Structure Design	San Antonio River Bridge Replacement Configuration	As a result of the PA&E phase hydrologic analysis, it is found that the San Antonio River Bridge (44-0141R) replacement span configuration or number of spans will need to be modified, which could result in an increase in the support and construction cost.	No scour or other hydrologic issues are assumed with right North Bradley Road UC. The replacement configuration of the bridge is not in line with the existing left bridge piers.	PA&E phase Preliminary Hydrologic Report development	3-Moderate (31-50%)	2 - Low (<\$2.724k) 4 - Moderate (1-3 months)	6	Accept	Reevaluate the span configuration of the San Antonio River Bridge (44-0141R) replacement taking into consideration the detailed Advance Planning Study effort during the PA&E phase.	DES - M. Downs	4/14/2020	1-PS&E Sup	O 300 hours ML 400 hours P 500 hours	O 30 days ML 40 days P 40 days	20k
								40%		12					4-Con Cap	O 2,000k ML \$400k P \$500k	O 60 days ML 80 days P 120 days	17
Relieved	15	Threat	Environmental	Finding of Adverse Effect for Cultural Resources	As a result of archaeological survey and extended Phase II testing, one archaeological site MNT-315H is impacted by the project. This will require a Finding of Adverse Effect and MCA with SHPO which takes a minimum of 6 months for approval by SHPO, possibly delaying PA&E.	It is assumed that the project will not have a finding of Adverse Effect for Archaeology	If site MNT-315H is determined to be eligible by our consultants once their data are analyzed	2-Low (11-30%)	2 - Low (<\$2.627k) 4 - Moderate (1-3 months)	4	Accept	If site MNT-315H is eligible, we will write a Finding of Adverse Effect as soon as we are able to, in order to get it approved by SHPO prior to PA&E; this would also require mitigation costs.	Krista Kisha	2/10/2025	O-PA&E Sup	O 500 hours ML 3,000 hours P 5,000 hours	O 60 days ML 80 days P 120 days	77k
								20%		8					1-PS&E Sup	O 300 hours ML 300 hours P 300 hours	O 30 days ML 60 days P 80 days	#VALUE!
															1-PS&E Sup	O 500 hours ML 1,000 hours P 1,000 hours	O 60 days ML 80 days P 120 days	25k
Relieved	16a	Threat	Design	Design Standards	Superiorization at the NB San Antonio River Bridge is non-standard at 9%. A DSDD is needed to avoid the standard 9% super. Also the reverse curves are non-standard un-run-off and un-run. If the DSDD is not approved we may need to realign NB road, which would require additional studies, support cost, and capital costs.	Assuming we can write the DSDD and get it approved in the PA&E phase.	HQ and DS Design team refuses to accept DSDD.	2-Low (11-30%)	16 - Very High (>\$14,507k) 16 - Very High (>6 months)	32	Escalate	We have had a few meetings with Brian Fuller and from HQ. It is likely that we will get a DSDD keep the same 9% super. Also the reverse curves are non-standard un-run-off and un-run. It is very difficult to realign the highway and build larger radius curves.	Anonh Sangmany	4/10/2024	2-PA&E Sup	O 200 hours ML 300 hours P 400 hours	O 100 days ML 200 days P 300 days	42
								20%		32					2-PA&E Sup	O 300 hours ML 300 hours P 300 hours	O 30 days ML 60 days P 80 days	7k
															3-Con Sup	O 300 hours ML 500 hours P 800 hours	O 200 days ML 300 days P 450 days	42
Relieved	16b	Threat	Design	Design Standards (DSDD not approved (see above))	We assume the DSDD is approved.	DSDD not approved	DSDD not approved	2-Low (11-30%)	16 - Very High (>6 months)	32	Escalate	Will continue to meet with Brian Fuller, Design will write the DSDD and get approval	Anonh Sangmany	4/10/2024	4-Con Cap	O 1,000k ML \$2,000k P \$2,000k	O 300 days ML 380 days P 450 days	16k
								20%		32					4-Con Cap	O 1,000 hours ML 2,000 hours P 2,000 hours	O 349 days ML 349 days P 349 days	\$400k
																		70

Risk Identification					Risk Assessment			Risk Response			Quantifying "Red" (High P & I) Level Risks								
Status	ID #	Type	Category	Title	Risk Statement	Current status / assumptions	Risk Trigger	Probability (P)	Cost Impact Schedule Impact (I)	Cost Score Schedule Score (P-I)	Strategy	Response Actions	Risk Owner	Updated	Impacted Phase	Support (Hrs) Capital Cost (\$k)	Schedule (Days)	Calculated Contingency	
Active	17	Threat	Structure Design	Bridge Inspections	Bi-annual bridge inspections determine the SB San Antonio River Bridge to be in poor condition due to further Alkal-silica reactivity (ASR) damage. The next bridge inspection is scheduled mid-October 2025.	The last bridge inspection determined the SB river bridge to be in good condition.	Future bridge inspections determine the SB river bridge to be in poor condition.	2-Low (11-30%)	16 - Very High (>\$14,507k) 16 - Very High (>6 months)	32	Escalate	Escalate	Biannual Bridge inspections will be conducted.	Patrick Piacentini	12/23/2023	1-PS&E Sup	O 500 hours ML 800 hours P 1,000 hours PERT 784 hours	O 100 ML 200 P 360 210 days	\$20k
								20%								2-RW Sup	O 100 hours ML 300 hours P 400 hours PERT 17 hours	O 100 ML 200 P 360 210 days	\$11k
																	PERT 517 hours		42
																3-Con Sup	O 350 hours ML 600 hours P 900 hours PERT 693 hours	O 100 ML 200 P 360 210 days	\$16k
																	PERT 693 hours		42
																4-Con Cap	ML \$30,000k P \$50,000k PERT \$31,500k	ML 300 P 500 317 days	\$5,300k
																	P 500		64
																1-PS&E Sup	O 40 hours ML 80 hours ML 80 hours PERT 60 hours	O 200 ML 350 P 300 317 days	\$4k
Active	19	Threat	Environmental	Geotech	As a result of delays to PAED due to adding in the SB San Antonio River Bridge and the need for waters permits, the permitted window of time to complete the geotech drilling may be shortened too much or missed, which would lead to a geotech drilling delay to the following summer season (2026) and may ultimately delay PS&E.	PAED public notice and public hearing is likely to be delayed. This could result in a geotech drilling delay to the following summer season (2026) and may ultimately delay PS&E.	Risk triggered if we cannot obtain waters permits in time to conduct geotech work before the 2025 work window closes.	3-Moderate (31-50%)	2 - Low (<\$3,027k) 16 - Very High (>6 months)	6	Avoid	ARB Design/Geotech to closely coordinate as we approach PAED to submit permits.	Karen Holmes	2/10/2025				127	
Reliefed	20	Threat	Environmental	Env Doc/PAED Schedule	The SB San Antonio River Bridge has been back into the project. Mistakes have been updated following this action under the assumption that some of the remaining steps can be expedited. As a result of anticipated delays in receiving waters permits, the permitted window of time to complete the PAED public notice and public hearing is likely to be delayed. This could result in a geotech drilling delay to the following summer season (2026) and may ultimately delay PS&E.	We assume we will be able to expedite the DED & FED preparation and approval process to achieve PAED before 6/30/25.	Unanticipated delays such as response to DED comments cause achieving M20 to take longer than estimated.	2-Low (11-30%)	2 - Low (<\$3,027k) 4 - Moderate (1-3 months)	4	Avoid	The updated Structures APS look significantly more time to complete than originally anticipated. It was 1/16/25. As a result, PAED is now anticipated to occur on or near 7/31/2025, even with DED and DPR updates and assistance. Subline noted that it is an avoided risk.	Danna Beck	11/12/2024	0-PA&ED Sup	O 80 hours ML 120 hours P 160 hours PERT 120 hours	O 30 ML 30 P 300 65 days	\$3k	
Active	21	Opportu ny	Environmental	Permits	Current assumption is the USACE will regulate the San Antonio River Bridge project and delay schedule.	USACE will regulate the San Antonio River Bridge project and delay schedule.	USACE wants a higher mitigation ratio than 3:1 due to temporal loss to the stream and number of seasons of work. Could increase cost of project and delay schedule.	3-Moderate (31-50%)	2 - Low (<\$3,027k) 8 - High (3-6 months)	6	Avoid	Callans environmental staff will begin engaging USACE agency staff early to inquire about likely permitting and jurisdictional paths forward to avoid a late surprise on permitting and mitigation.	Karen Holmes	2/10/2025	1-PS&E Sup	O 100 hours ML 80 hours PERT 120 hours	O 30 ML 30 P 300 317 days		
Active	22	Threat	Environmental	Permits	As a result of the need for geotech drilling within the San Antonio River and floodplain, additional permits may be needed for Section 7 Consultation if geotech needs to access the river and floodplain to perform geotech drilling instead of boring through the bridges.	Geotech can bore through the bridges and does not have to access under the bridges. Therefore, section 7 Consultation will not be required prior to geotech drilling.	Geotech will update the DPR 11-page estimate.	3-Moderate (31-50%)	2 - Low (<\$3,027k) 4 - Moderate (1-3 months)	6	Avoid	Callans environmental staff will work with the design and geotech team to avoid accessing the river and surrounding streambank for geotech drilling. If impacts cannot be avoided, environmental will coordinate with agencies to determine the need for section 7 consultation.	Jennifer Moorjian	2/10/2025	0-PA&ED Sup	O 100 hours ML 80 hours PERT 120 hours	O 30 ML 30 P 300 317 days		
Reliefed	23	Threat	Funding	CON & RW Capital	Due to unit price increases and market changes, additional CON and RW Capital may be needed.	The cost of construction has increased due to inflation and material supply issues. The cost of concrete, steel, fuel, asphalt, paints, brines, and labor, has all increased recently.	Design will update the DPR 11-page estimate.	4-High (51-70%)	16 - Very High (>\$14,507k) 2 - Low (<1 month)	64	Escalate	A PCR request will be needed to ask for additional phase 4 funds.	Mark Lechtman	3/19/2025	4-Con Cap	O \$15,000k ML \$30,000k P \$50,000k PERT \$30,834k	O 50 ML 100 P 200 109 days	\$15,501k	
Active	24	Threat	Environmental	Construction	As a result of there being an archaeological resource (CA-MNP-3157) located in the Area of Potential Effect (APE) for the project, additional resources may be identified during construction, which may be eligible for the National Register of Historic Places.	The portion of CA-MNP-3157 located in the APE does not contribute to the eligibility of the site.	Unknown features or other cultural resources are identified during construction, which are eligible for listing on the National Register.	2-Low (11-30%)	2 - Low (<\$3,856k) 8 - High (3-6 months)	4	Accept	If unknown features or other cultural resources are identified that are eligible for the National Register then mitigation will be required.	Krista Kisha	8/19/2025	3-Con Sup	O 200 hours ML 250 hours PERT 250 hours	O 80 ML 180 P 360 195 days	\$7k	
Active	25a	Threat	Geotechnical	PTE for Geotechnical Drilling	The NB San Antonio River Bridges in the 0 phase, a renewed permission to enter (PTE) with Camp Roberts is needed. Due to delays in receiving PTE from Camp Roberts, we may not be able to complete the drilling in the permitted window (which is likely to close on October 31st, 2025).	It is assumed we will receive PTE from Camp Roberts by October 6th.	Risk triggered if we are not given the access agreements (PTE) in time to conduct geotech work before the 2025 work window closes.	2-Low (11-30%)	4 - Moderate (\$3,856k - \$7,730k) 16 - Very High (>6 months)	8	Avoid	Environmental Coordinator's persistent in approaching Camp Roberts staff.	Danna Beck, Ryan McFee	9/17/2025	1-PS&E Sup	O 1,000 hours ML 2,000 hours PERT 5,834 hours	O 270 ML 360 P 965 306 days	\$146k	
Active	25b	Threat	Geotechnical	PTE for Geotechnical Drilling	The NB San Antonio River Bridges in the 0 phase, a renewed permission to enter (PTE) with Camp Roberts is needed. Due to delays in receiving PTE from Camp Roberts, we may not be able to complete the drilling in the permitted window (which is likely to close on October 31st, 2025).	It is assumed we will receive PTE from Camp Roberts by October 6th.	Risk triggered if we are not given the access agreements (PTE) in time to conduct geotech work before the 2025 work window closes.	2-Low (11-30%)	4 - Moderate (\$3,856k - \$7,730k) 16 - Very High (>6 months)	8	Avoid	Environmental Coordinator's persistent in approaching Camp Roberts staff.	Danna Beck, Ryan McFee	9/17/2025	2-RW Sup	O 200 hours ML 800 hours PERT 587 hours	O 100 ML 200 P 360 204 days	\$12k	

ATTACHMENT J

SHOPP Performance Measures Reports

District: 05 **Tool ID:** 19940 **Project ID:** 0519000035

Res In PID WP: 07/31/19 **Project Manager: Mark Leichtfuss**

☒	Bridge
☒	Pavement
☒	Drainage
☐	Facilities
☒	Signs and Lighting
☒	Mobility
☐	Roadside
☒	Bicycle and Pedestrian Infrastructure
☐	Sustainability /Climate Change /Mitigation
☐	Advance Mitigation
☐	Major Damage & Reberments
☒	Green-house Gases
☐	Relinquishment

Performance & Accomplishments (PPC)

[illegible]

ATTACHMENT K

Complete Street Decision Document

Complete Streets Decision Document (CSDD)

- 1) Is the project located entirely on a facility where bicyclists and pedestrians are legally prohibited and the project does not involve a shared use path, pedestrian/bicycle structure or work impacting a local road crossing or interchange? (For example, a project including freeway mainline and ramp work, not including the ramp connection with the minor road, where the project freeway segment legally prohibits bicyclists and pedestrians.)

☒ NO - Proceed to Question 2
☐ YES - Stop here. The project is exempt from further complete streets evaluation. Sign and attach to the Project Initiation Document (PID).

- 2) Is the primary project purpose to address assets that are outside of the roadbed where pedestrian and bicycle travel is not affected, and proposed project will not affect future pedestrian and bicycle facilities? Examples may include culvert outfalls, storm water treatment facilities, bridge substructure or scour mitigation, planting or vegetation removal, retaining walls, etc.

☒ NO - Continue to Question 3
☐ YES - Stop here. The project is exempt from further complete streets evaluation. Sign and attach to PID.

- 3) Has a Transportation Planning Scoping Information Sheet (TPSIS) been completed for this project?

☐ NO – Proceed to Question 4
☒ YES – Skip to Question 5 (Note: TPSIS is attached to the PID)

- 4) Which of the following planning documents were consulted to determine bicycle, pedestrian or transit needs? Select all that apply and proceed to Question 5.

- ☐ a. District Active Transportation Plan
☐ b. Other Caltrans or local/regional agency bike/ped/transit/safe routes to school plans
☐ c. ADA Transition Plan/Grievances (consult with the District ADA Coordinator)
☐ d. Corridor planning documents
☐ e. Other (list here) _____

- 5) Based on the reviews completed in Question 4 or identified in the TPSIS, after a review of the roadway geometrics, or identified by the PDT, are there any bicycle, pedestrian, or transit needs, deficiencies or opportunities for improvement identified for the project location?

☒ NO – Provide brief description of findings: A focus meeting was held on 02/08/2024 with the PDT and it was discussed that there are no deficiencies that should be addressed as part of this project. Throughout the project limits, bicyclists are not prohibited. Standard shoulders are provided for these road users and there are no improvements necessary.

Stop here. The project meets the requirements for consideration of Complete Streets elements.
Sign and attach to the PID.

☐ YES – Describe them here and proceed to Question 6: _____

- 6) Based on the needs identified in Question 5, what would be the preferred complete streets elements to address those needs (e.g. road diet, separated bikeway, reconstructed sidewalk, etc.)? Resources include the Complete Streets Elements Toolbox, the Contextual Guidance for Bikeway Facility Selection, the Bikeway Facility Selection Guidance Memorandum, etc. List them in the table below and provide a rough estimated cost to construct preferred project complete streets elements (including right-of-way and support costs) and proceed to Question 7.

FACILITY TYPE	UNIT	QUANTITY	ESTIMATED TOTAL COST

- 7) Was there any known public and stakeholder opposition to any preferred complete streets elements identified for the project? Provide response and proceed to Question 8.

_____ NO
_____ YES – Describe the opposition position here: _____

- 8) Does the programmable project alternative/project scope include all the complete streets elements identified in Question 6?

_____ NO - Proceed to Question 9
_____ YES - Stop here. The project has met the requirements for consideration of complete streets elements. Sign and attach to PID.

- 9) Does the project include any of the complete streets elements that are identified in Question 6? Or are there any proposed incremental improvements related to the complete streets elements in Question 6? Provide response and proceed to Question 10.

_____ NO – The programmable project alternative does not include any complete streets elements, and therefore does not address identified needs for complete streets elements.
_____ YES – List them here:

FACILITY TYPE	UNIT	QUANTITY	ESTIMATED TOTAL COST

- 10) Does the project funding have constraints that would preclude the ability to incorporate additional complete streets elements into the project (For example, cannot combine funding with other sources.)? Provide response and proceed to Question 11.

_____ NO
_____ YES – Describe the constraints here: _____

- 11) Provide a rationale and justification for not including all the recommended complete streets elements into the project: (Consider the engineering justification, right-of-way constraints, environmental impacts, etc.). _____

Prepared by:

Jose Bautista

Jose Bautista, PID Preparer in responsible charge
Design Branch A/District 6

Concurred by:

Matthew Welker

Matthew Welker
District Complete Streets Coordinator

03/18/2024

Date

Brandy K. Rider

Brandy Rider
Deputy District Director, Planning

03/25/2024

Date

Tim Campbell

Tim Campbell
Deputy District Director, Design or
Division Chief, Design/Project Development

03/25/2024

Date

Scott Eades
District Director

Date

Distribution: Attach completed original CSDD to PID and email to HQ Division of Design at CSDD@dot.ca.gov

ATTACHMENT L

**Bridge Strategy Meeting Fact Sheet and Bridge
Inspection Report**

Structure Maintenance & Investigations
BRIDGE MAINTENANCE STRATEGY FACT SHEET
San Antonio River, Br No. 44 0141R on Route US Hwy 101 in Monterey County
June 11, 2019

Project Location

05-MON-101-R6.66

Constructed in 1965, this 460 - foot long bridge, is a continuous (with 1 hinge) 7 span, cast in place, RC T-girder (5), structure. The substructure consists of open-end diaphragm abutments, with Pier 2 founded on spread footings, and the remaining piers founded on a reinforced concrete (RC) pile caps on steel piles.



Map Location (19 miles northwest of Paso Robles)



Aerial view



Looking northwest toward the left edge of bridge



Looking west toward Abutment 1

The 2009 Average Daily Traffic (ADT) was reported to be 16,200 of which approximately 19% were trucks.

Background:

Since 1984, biennial bridge inspection reports have mentioned cracking at Abutment 8 as being indicative of Alkali Silica Reactivity (ASR). ASR is a chemical reaction between the alkali hydroxides in the pore solution of concrete and certain forms of reactive silica minerals occurring in some aggregates. The reaction product, an alkali-silica gel, will absorb water and swell if the concrete is in a moist environment. The swelling of the gel can lead to expansion and cracking of the concrete. The amount of moisture present is the catalyst to the rate of reaction and damage accumulation.

Structure Maintenance & Investigations
BRIDGE MAINTENANCE STRATEGY FACT SHEET
San Antonio River, Br No. 44 0141R on Route US Hwy 101 in Monterey County
June 11, 2019

Typical indicators are map cracking or scaling. The visibly active areas of ASR are located on the right- and left-wing walls and at the adjacent soffit and face of Abutment 8. The map pattern cracks are approximately up to 0.06 inch in width with moderate efflorescence and staining.

In 1998 a STRAIN recommendation was made to replace Abutment 8 due to continued ASR deterioration. This recommendation was removed following the 2009 Routine Inspection in lieu of a monitoring strategy (citing no significant change in the rate of ASR deterioration or load carrying capacity).



Typical Conditions at Abutment 8

Since 1984, biennial bridge inspection reports have mentioned fine to medium cracks originating from the equalizer bolt holes at the hinge diaphragms in Span 4 (Hinge 4), specifically and now most notably in Bay 1. Since that time, the cracks have progressed to pattern and diagonal cracks, and are approximately up to 0.125 inch in width.



Typical Conditions at Hinge 4

Event Description:

On April 23, 2019, a full depth deck hole developed in the left wheel line of Lane 2 at Abutment 8 Span 7 and was immediately repaired by the District 5 Bridge Crew. The area where the pothole occurred is within a larger section of the deck that appears subject to on-going ASR degradation

The Area Bridge Maintenance Engineer (ABME) Chris Udarbe, Area Bridge Maintenance Supervisor Andrew Corker, and the District 5 Bridge Crew performed an in-depth deck investigation that included inspection of the deck, and UBIT inspection of the RC girders, deck soffit, and the hinge on May 5, 2019. Additionally, the deck was chained to estimate the amount of delaminated area and unsound concrete. Cores were taken from the deck to test for Alkali Silica Reactivity, chlorides, sulfates and compressive strength testing.

Structure Maintenance & Investigations
BRIDGE MAINTENANCE STRATEGY FACT SHEET
San Antonio River, Br No. 44 0141R on Route US Hwy 101 in Monterey County
June 11, 2019



Through Deck Hole at Abutment 8 Span 7

Results of the in-depth investigation revealed the following information:

- The exterior girders (Girders 1 and 5) at Hinge 4, as well as the hinge seat and adjacent diaphragms are showing severe deterioration with shear flow cracks extending into the deck.
- Chaining of the deck revealed significant deck delaminations throughout the wheel lines of both travel lanes; a moderate number of deck spalls and failed patches, and moderate to severe map/pattern cracking.
- Significant soffit and deck distress were observed, predominantly at the hinge (Hinge 4) and adjacent to Abutment 8.
- Based on historical BIRs on record since the bridge was built in 1965, the ASR in the deck appears to be occurring at a much slower rate than the ASR in Abutment 8. This is likely due to the abutments being directly exposed to continual moisture from the surrounding soil thereby exhibiting more severe symptoms of ASR than the deck that is less exposed to continued state of moisture saturation.
- The concrete deck cores were sent to METS and evaluated for ASR, chloride and sulfate content. See the attached test results and ASR Memo provided by METS.
- Abutment 8 continues to degrade due to active ASR which has spread to the adjacent deck in Span 7.
- The hinge in Span 4 continues to degrade due to initial shortening of the structure when it was first constructed in 1965. There are significant areas of delaminations and shear flow cracks throughout the girders and diaphragms at the supporting side of the hinge, adjacent to Pier 5. This condition is most severe at the exterior girders (Girders 1 and 5) and adjacent bays where there are significant shear flow cracks that extend from the girder to deck interface.
- Approximately 30% of the deck surface is delaminated, predominantly in the wheel lines of the travel-way, and most notably in Lane 2.

A Structure Maintenance & Investigations (SM&I) Bridge Maintenance Strategy Meeting was convened on June 11, 2019 to identify viable repair strategies. A follow-up meeting was convened on June 20th, 2019 with District 5 and Structures Design to discuss recent events and recommendations for deck

Structure Maintenance & Investigations
BRIDGE MAINTENANCE STRATEGY FACT SHEET
San Antonio River, Br No. 44 0141R on Route US Hwy 101 in Monterey County
June 11, 2019

repair (scope and cost) that would be prudent to add concurrently to the existing SHOPP Project 1F820 (currently scoped for scour mitigation, hinge repair and seismic retrofit) for construction in 2020.

June 20, 2019 Follow-up Bridge Maintenance Strategy participants:

SM&I - Design & Analysis Chief Kevin Keady, Investigations North Chief Erol Kaslan, Bridge Asset Management Chief John Gillis, Bridge Program Advisor Diana Campbell, Area Bridge Maintenance Engineer Supervisor Andrew Corker, and Area Bridge Maintenance Engineer Chris Udarbe.

District 5: Project Manager for Project 1F820 Carla Yu, Design Senior Claudia Espino, District 5 Program Advisor Kelly McClain, Maintenance Engineering Kelly McKinley, and SHOPP Asset Manager Darron Hill

HQ Structure Design: Traci Menard Branch Chief and Anthony Logus Project Engineer.

Alternatives Considered:

1. **Do Nothing** - This alternative was not considered because the hinge in Span 4 and the deck in the immediate area adjacent to Abutment 8 will continue to deteriorate to the point where they will no longer be able to provide load support. Furthermore, the ASR degradation of Abutment 8 and its influence on the superstructure elements will continue.
2. **Interim repairs**— Repair exterior girders 1 and 5 at hinge 4, reconstruct full depth section of the deck over Bay 3 (girders 3 & 4) adjacent to Abutment 8 Hinge 4 and reconstruct portions of the deck over Bay 3 (Girders 3 to 4) adjacent to Abutment 8 to temporarily mitigate the continued deterioration, and poly the entire deck.
3. **Place a deck on deck** - Construct a deck on deck and upgrade the barrier for the entire length of the bridge. This alternative was not viable due to the degradation of the substructure.
4. **Replace the Bridge** – ASR is present in the concrete bridge elements and further deterioration may take place in the future. Continued monitoring of the existing cracks should take place to ensure any further deterioration until the replacement project.

Recommended Action:

The Bridge Maintenance Strategy session participants unanimously recommended that District 5 move forward with **Alternative 2**, under the current SHOPP 1F820 Project, due to the long lead time for a bridge replacement project to ensure the safety of the public using the bridge followed up with **Alternative 4** to replace the bridge in a future project.

*California Department of Transportation
Division of Maintenance*

Structure Maintenance and Investigations

B_{RIDGE}

I_{NSPECTION}

R_{ECORDS}

I_{NFORMATION}

S_{YSTEM}

The requested documents have been generated by BIRIS.

These documents are the property of the California Department of Transportation and should be handled in accordance with Deputy Directive 55 and the State Administrative Manual.

Records for “Confidential” bridges may only be released outside the Department of Transportation upon execution of a confidentiality agreement.



BRIDGE INSPECTION REPORT

Routine Inspection

BRIDGE NO.:
44 0141R

STRUCTURE NAME:
SAN ANTONIO RIVER

INSPECTION DATE:
October 27, 2023

BRIDGE LOCATION INFORMATION

(9) LOCATION	05-MON-101-R6.66	(7) FACILITY CARRIED	US HIGHWAY 101 NB
(11) POSTMILE	6.66	(6) FEATURE INTERSECTED	SAN ANTONIO RIVER & DR
(16) LATITUDE	35°51'18.67"	(5) INVENTORY RTE(ON/UNDER)	ON 121001010
(17) LONGITUDE	120°47'57.76"	(104) ON NATIONAL HIGHWAY SYSTEM	ROUTE ON NHS

STRUCTURAL HEALTH CONDITION SUMMARY INFORMATION

(58) DECK	(5 FAIR)	DECK AREA (M) ²	1,458
(59) SUPERSTRUCTURE	7 GOOD	SUFFICIENCY RATING	59.9
(60) SUBSTRUCTURE	5 FAIR	PAINT CONDITION	N/A
(62) CULVERT	N N/A (NBI)	STRUCTURALLY DEFICIENT (SD) STATUS	NOT SD
(67) STRUCTURE EVALUATION	5 ABOVE MIN TOLERABLE	(113) SCOUR	3 SC - UNSTABLE

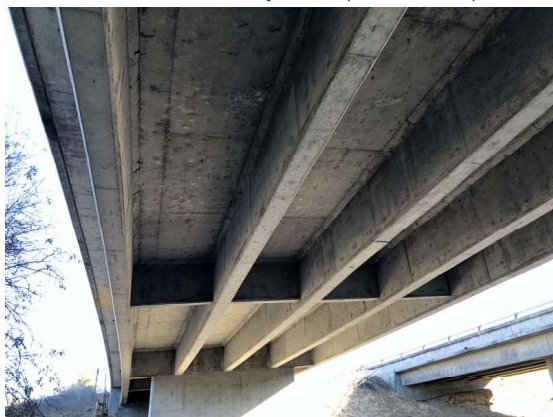
PHOTOGRAPH IDENTIFICATION



Routine-Roadway View (10/27/2021)



Routine-Elevation View (10/27/2021)



Routine-Underside View (10/27/2021)



Routine-Map View (12/28/2021)

TEAM LEADER Chris V. Udarbe

REPORT AUTHOR Chris V. Udarbe

INSPECTED BY CV.Udarbe/K.Hoang

Chris V. Udarbe
Chris V. Udarbe (Registered Civil Engineer)

1/22/2024

Date



STRUCTURE OVERVIEW

AGENCY INFORMATION

INSPECTION INFORMATION

(1) STATE NAME

CALIFORNIA

069

(2) HIGHWAY DISTRICT

05

(3) COUNTY CODE

(44)MONTEREY

(4) PLACE CODE

(00000)

(21) MAINTAIN

01 STATE HIGHWAY AGENCY

(22) OWNER

01 STATE HIGHWAY AGENCY

(98) BORDER BRIDGE STATE CODE

N/A

% SHARE

N/A

(99) BORDER BRIDGE STRUCTURE NUMBER

N/A

(90) INSPECTION DATE

10/23

(91) FREQUENCY

24

MO

(92) CRITICAL FEATURE INSPECTION

(93) CFI DATE

A) NSTM INSP

N-NO

MO A)

N/A

B) UNDERWATER INSP

N-NO

MO B)

N/A

C) OTHER SPECIAL INSP

N-NO

MO C)

12/03

CONSTRUCTION INFORMATION

(27) YEAR BUILT

1965

(45) MAIN SPANS

7

(43a) STRUCTURE TYPE MAIN

2: CONCRETE CONT

(106) YEAR MODIFIED

N/A

(46) APPR SPANS

0

(43b) DESIGN TYPE MAIN

04: TEE BEAM

(34) SKEW

0

(48) MAX SPAN (M)

22

(44a) STRUCTURE TYPE APPR

0: OTHER/ NOT APPLICABLE

(49) LENGTH (M)

140.2

(35) STR FLARE

0-NO

(44b) DESIGN TYPE APPR

00: OTHER/NOT APPLICABLE

(112) NBIS BR LENGTH

Y

JOINTS

1

NO. OF HINGES

1

STRUCTURE DESCRIPTION

Original Structure (1965): Continuous (with 1 hinge) 7 span RC T-girders (5) with RC deck on RC pier walls and RC open end diaphragm abutments with monolithic wingwalls. Pier 2 founded on spread footings. All other supports founded on steel piles.

Superstructure Modification (1968): A threaded rod (equalizer bolt) was placed in each bay at Hinge 4 extending through the diaphragm.

Seismic Retrofit (1985): Restrainer cables were placed on Girders 3 and 4 at Hinge 4.

Seismic Retrofit (2021): Hinge 4 (Bays 1 and 2) diaphragms reconstructed and pipe seat extenders placed. Deck reconstructed at Bay 3, Span 7.

SPAN CONFIGURATION

1 @ 43.5 ft, 5 @ 72.0 ft, 1 @ 54.0 ft

OPERATIONAL INFORMATION

LOAD CAPACITY

(31) DESIGN LOAD

6 MS18(HS20)+MOD

(65) CALC METHOD

8 LRFR RATING FACTOR

(66) INVENTORY RATING

RF= 0.79

(63) CALC METHOD

8 LRFR RATING FACTOR

(64) OPERATING RATING

RF= 1.02

(70) BRIDGE POSTING

5 AT/ABOVE LEGAL LOADS

(41) STRUCTURE STATUS

A-OPEN, NO RESTRICTION

PERMIT RATING

PPPPP

OVERLAY THICKNESS

1 inches

POSTING LOADS

Safe Loads

Existing Ordinance/Order

Posting Signs

Type 3

Legal

N/A

N/A

U.S. Tons

Type 3S2

Legal

N/A

N/A

U.S. Tons

Type 3-3

Legal

N/A

N/A

U.S. Tons

Speed

70

N/A

N/A

MPH

Posting Date

N/A

Load Rating Summary Date

10/10/17

Load Rating Type

Calculated

Load Rating Tool - Date

BrR 6.8.2 AASHTO - 10/10/17

Additional Ordinance/Order Requirements

NONE

Additional Signs

NONE

MINIMUM VERTICAL CLEARANCE

MINIMUM LATERAL UNDERCLEARANCE

(53) MIN VERT CLEAR OVER BRIDGE RDWY

Unimpaired

(55) MIN LAT UNDERCLEAR RT REF

H-HIGHWAY

4.6 M

(54) MIN VERT UNDERCLEAR REF

H-HIGHWAY

4.72 M

(56) MIN LAT UNDERCLEAR LT

0.0 M

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44 0141R/AAAP/117125

CONDITION INFORMATION

INSPECTION COMMENTARY

SCOPE AND ACCESS

Clear flowing water was present under Span 3 at a maximum depth of 3.0 feet at the time of this investigation. The Span 3 side of Pier 4 was submerged up to 2.5 feet. A complete routine inspection was performed of all above ground elements from the deck and ground, and with the use hip waders, an extension probe, and binoculars when required.

A UBIT was used to inspect all superstructure and substructure elements within approximately 30 feet of the underside of the deck on 05/01/2019 and 05/02/2019. Refer to the 05/01/2019 Other Inspection Report for the findings of that investigation.

HISTORY

Concrete core samples were taken from the deck in Spans 1 and 7 on 05/02/2019 and analyzed for chloride, sulfate content, and compressive strength. Per these test results, there was no active corrosion of the steel or sulfate attack on the concrete. For additional information regarding the core sample test results refer to the Corrosion Test Summary Report dated 05/20/2019 and the Compressive Testing summary dated 05/08/2019.

In 2011, three concrete core samples were taken from Abutment 8 and were analyzed for ASR. These cores contained extensive cracking and abundant alkali silica gel. These tests revealed the concrete has undergone severe deterioration. Further deterioration in the abutment is expected due to the abundance of chert particles which have yet to react. For additional information regarding the core sample test results refer to the Material Test Results dated 02/03/2012.

In 2006, two concrete core samples were taken from Abutment 8 and were analyzed for chloride content. The tests indicated corrosion has not been initiated in the abutment due to chlorides. For additional information regarding the core sample test results refer to the Miscellaneous Bridge Book Item dated 10/23/2006.

In 2001, two core samples were taken from Abutment 8 of this structure (abutment face and the right wingwall) and tested for ASR. The test results confirmed its presence, therefore this structure is coded as "ASR-Confirmed". For additional information regarding the core sample test results refer to the Material Test Results dated 04/09/2001.

The continued monitoring of Abutment 8 due to the presence of advanced ASR deterioration is required.

ROADWAY CLEARANCE

During this inspection the horizontal and vertical clearances were spot checked and compared to the vertical clearance diagram dated 10/13/2015. No significant changes were noted.

The minimum clearance under the structure for San Antonio Drive (Span 2) is 15 FT 6 IN.

There is a minimum vertical clearance sign that reads: "15 FT 6 IN" attached to the right exterior girder over Span 2. Refer to Photo 2 from the 10/17/17 routine BIR.

WATERWAY

Work request 10965, to revise the current Item 113 code, is in process. Scour mitigation work was completed in 2021 under project EA 05-1F820. The current Item 113 code, Scour Critical Bridges, is 3 (Scour Critical) for this structure. The channel cross section was spot checked during this inspection and there was no significant change at the critical locations when compared to the channel cross section taken on 10/13/2015.

SPECIAL INSPECTION INFORMATION

STEEL INVESTIGATION DETAILS - NOT APPLICABLE FOR THIS BRIDGE.

UNDERWATER INVESTIGATION DETAILS - NOT APPLICABLE FOR THIS BRIDGE.

DECK AND ROADWAY

DECK CROSS SECTION

1.0 ft br, 2.0 ft cu, 28.0 ft, 2.0 ft cu, 1.0 ft br

DECK GEOMETRY

(49) LENGTH	140.2 M
(51) NET WIDTH	8.5 M
(52) TOTAL WIDTH	10.4 M
(50) CURB OR SIDEWALK	LEFT 0.6 M RIGHT 0.6 M
(32) APPROACH RDWY WIDTH	10.4 M
(33) BRIDGE MEDIAN	0 NO MEDIAN

DECK ROADWAY/OPERATIONAL INFORMATION

(42a) TYPE OF SERVICE	1-HIGHWAY
(12) BASE HIGHWAY NETWORK	1-PART OF NET
(13) LRS INVENTORY RTE & SUBRTE	000000010101
(104) NATIONAL HIGHWAY SYSTEM	1-ROUTE ON NHS
(26) FUNCTIONAL CLASS	02-OTHER PRIN ART RURAL
(100) DEFENSE HIGHWAY	1-STRAHNET
(101) PARALLEL STRUCTURE	R-RIGHT STRUCTURE
(102) DIRECTION OF TRAFFIC	1-1 WAY
(10) INVENTORY ROUTE MIN VERT CLEAR	99.99 M
(47) INVENTORY ROUTE TOTAL HORIZ CLEAR	8.5 M
(68) DECK GEOMETRY	3 INTOLERABLE - CORRECT
(72) APPR ROADWAY ALIGN	6 EQUAL MIN CRITERIA
(105) FEDERAL LANDS HWY	0-NOT APPLICABLE
(110) DESIGNATED NATIONAL NETWORK	1-PART OF NET
(20) TOLL	3-ON FREE ROAD
(28a) LANES	2
SPEED	70
(103) TEMPORARY STRUCTURE	N/A

DECK STRUCTURE INFORMATION

(107) DECK STRUCTURE TYPE	1-CIP CONCRETE
(108) WEARING SURFACE / PROTECTIVE SYSTEM	
A) TYPE OF WEARING SURFACE	2-INTEGRAL CONC.
B) TYPE OF MEMBRANE	0-NONE
C) TYPE OF DECK PROTECTION	0-NONE
OVERLAY THICKNESS (inches)	1 inches
(29) AVERAGE DAILY TRAFFIC	8100
(30) YEAR OF ADT 2009	(109) TRUCK ADT % 0 %
(19) BYPASS, DETOUR LENGTH	2 KM
(114) FUTURE ADT	19340
(115) YEAR OF FUTURE ADT	2043
(37) HISTORICAL SIGNIFICANCE	5: NOT ELIGIBLE FOR NRHP

DECK ELEMENT INSPECTION RATINGS AND NOTES

(58) DECK RATING = (5)

Elem No.	Defect/Prot Defect	Element Description	Env	Total Qty	Units	Qty in each Condition State			
						CS 1	CS 2	CS 3	CS 4
16		Top Flange-RC	2	1458	sq.m	1257	201	0	0
1120		Efflorescence/Rust Staining	2	51		0	51	0	0
1130		Cracking (RC and Other)	2	150		0	150	0	0
511		Deck Wearing Surface-Concrete	2	1192	sq.m	1192	0	0	0
(16) Top Flange-RC									
The polyester concrete overlay applied to the deck in 2021 now obscures the previously reported delaminations and cracks. Refer to the 10/08/2019 routine BIR for the previously existing deck delamination and crack conditions.									
A 16.5 foot length of the deck over Bay 3 in Span 7 was reconstructed in 2021 under project EA 05-1F820. The reconstruction appears sound and functioning as intended.									
(16-1120) Efflorescence/Rust Staining									
There are hairline transverse cracks, spaced as close as 2 feet apart, with light efflorescence throughout the soffit. The cracks typically extend 2-4 feet in length. Some of the cracks also have brown staining. This condition is most densely concentrated near the piers and is most severe in Bays 3 and 4 of Span 6. This condition has not significantly changed when compared to Photo 6 of the 10/13/2015 routine BIR. (Quantity = 1% of the total)									
There are sections of hairline, pattern soffit cracking, spaced as close as 6 inches apart, with light to moderate efflorescence as follows:									
A 4 foot x 2 foot area in Bay 4, 15 feet from Pier 3 (Span 2). This condition has not significantly changed when compared to Photo 7 of the 10/13/2015 routine BIR. (Quantity = 2 SM)									
A 4 foot x 6 foot area in Bay 4, between Hinge 4 and Pier 5. This condition has not significantly changed when compared to Photo 7 of the 10/13/2015 routine BIR. (Quantity = 2 SM)									
Multiple areas, up to 4 foot x 4 foot in area, in Bays 2-4 (predominantly in Bay 3) throughout Span 5. This condition has not significantly changed when compared to Photo 7 from the 05/01/2019 Other Inspection Report. (Quantity = 2 SM x 8 locations)									

DECK ELEMENT INSPECTION RATINGS AND NOTES

(58) DECK RATING = (5)

Elem No.	Defect/Prot	Defect	Element Description	Env	Total Qty	Units	Qty in each Condition State			
							CS 1	CS 2	CS 3	CS 4
(16-1120) Efflorescence/Rust Staining										
A 4 foot x 8 foot area in Bay 3, adjacent to Pier 7. This condition has not significantly changed when compared to Photo 8 from the 05/01/2019 Other Inspection Report. (Quantity = 3 SM)										
Multiple areas, up to 6 foot x 4 foot in area, in Bays 3 and 4 (predominantly in Bay 3, twice) near Abutment 8; throughout the last 16 feet of Span 7. This condition has not significantly changed when compared to Photo 8 of the 10/13/2015 routine BIR. (Quantity = 3 LM x 3 locations = 9 SM)										
(16-1130) Cracking (RC and Other)										
There are diagonal soffit cracks up to 0.03 inch wide, spaced as close as 6 inches apart, in both overhangs located near Abutment 8. This condition is most severe in the left overhang. This condition has not significantly changed when compared to Photos 9 and 10 of the 10/13/2015 routine BIR. (Quantity = 2 SM * 2 Locations = 4 SM)										
There are pattern soffit cracks up to 0.02 inch wide spaced as close as 3 inches apart, in Bays 1 to 4 located near Abutment 8. These cracks are typically diagonally oriented, spaced 3-12 inches, and indicative of ASR deterioration. This condition is most severe in Bay 3. This condition has not significantly changed when compared to Photo 15 from the 05/01/2019 Other Inspection Report and Photo 11 of the 10/13/2015 routine BIR. (Quantity = 10% of the total)										
(16-511) Deck Wearing Surface-Concrete										
A one inch polyester concrete overlay was applied to the entire deck in 2021 under project EA 05-1F820.										
There were no significant defects noted.										

JOINT - APPROACH - RAIL**RAIL INFORMATION**

(36a) Rail Code 0 (36b) Transition 1 (36c) Appr Guardrail 1 (36d) Appr Guardrail End 1 Roadway Speed 70 MPH

JOINT/APPROACH/RAIL ELEMENT INSPECTION RATINGS AND NOTES

Elem No.	Defect/Prot	Defect	Element Description	Env	Total Qty	Units	Qty in each Condition State			
							CS 1	CS 2	CS 3	CS 4
302			Joint-Compression Seal	2	10	m	10	0	0	0
(302) Joint-Compression Seal										
The Type B joint seal was replaced in 2021 under project EA 05-1F820.										
There were no significant defects noted.										
During the 05/01/2019 Other inspection, the joint gap measured 2.75 inches at Hinge 4. The approximate temperature was 76°F.										
333			Railing-Other	2	280	m	270	10	0	0
1080			Delamination/Spall/Patched Area	2	10		0	10	0	0
7000			Damage	2	7		0	7	0	0
(333-1080) Delamination/Spall/Patched Area										
There are multiple 2-3 inch x 6-8 inch delaminations and patched spalls throughout the interior face of both bridge rails. This condition is the result of inadequate cover over the reinforcement. This condition has not significantly changed when compared with Photo 24 of the 10/13/2015 routine BIR. No corrective action recommended at this time. (Quantity = 1% of the total)										
There is minor corner and/or edge spalling (due to vehicle impacts) with no exposed rebar in the right RC curb at various locations along the length of the structure. These spalls are the result of numerous minor vehicular impacts throughout the life of the structure and are cosmetic in nature. No corrective action is recommended at this time. This condition has not significantly changed when compared with Photo 5 from the 10/17/2017 routine BIR. (Quantity = 5% of the right rail = 2.5% of the total quantity)										
(333-7000) Damage										
See the curb spall description under Defect 333-1080 for information regarding this defect.										

SUPERSTRUCTURE**SUPERSTRUCTURE ELEMENT INSPECTION RATINGS AND NOTES**

(59) SUPERSTRUCTURE RATING = 7

Elem No.	Defect/Prot	Defect	Element Description	Env	Total Qty	Units	Qty in each Condition State			
							CS 1	CS 2	CS 3	CS 4

SUPERSTRUCTURE**SUPERSTRUCTURE ELEMENT INSPECTION RATINGS AND NOTES**

(59) SUPERSTRUCTURE RATING = 7

Elem No.	Defect/Prot Defect	Element Description	Env	Total Qty	Units	Qty in each Condition State			
						CS 1	CS 2	CS 3	CS 4
110		Girder/Beam-RC	2	701	m	652	38	11	0
1080		Delamination/Spall/Patched Area	2	1		0	0	1	0
1130		Cracking (RC and Other)	2	48		0	38	10	0
(110) Girder/Beam-RC									
The Bay 1 and 2 end diaphragms at the supporting side (Span 4) of Hinge 4 were reconstructed in 2021 under project EA 05-1F820.									
The diagonal to vertical cracks, up to 0.125 inch wide, in the bottom and exterior face of Girders 1 and 5 on the supporting side of Hinge 4 were epoxy injected in 2021 under project EA 05-1F820.									
(110-1080) Delamination/Spall/Patched Area									
There is a spall (up to 8 inches in diameter X 1 inch deep) at the bottom left corner of Girder 5 in Span 5, approximately 20 feet from Pier 6. No rebar was exposed. See attached Photo 1. No corrective action is recommended at this time.									
(110-1130) Cracking (RC and Other)									
There are diagonal to vertical cracks up to 0.016 inch wide, spaced as close as 12 inches apart, throughout both vertical faces of all girders (predominantly near the supports). Refer to Photo 12 of the 10/13/2015 routine BIR. No corrective action is recommended at this time. (Quantity = 3 LM x 14 [support] locations = 42 LM, CS2)									
There are horizontal (interface) cracks up to 0.02 inch wide, along the deck chamfer interface of the girders throughout the structure. This condition is most predominant near the supports where these cracks extend from 1-10 feet in length. These cracks still appear to be in their initial stages of growth and there were no apparent signs of movement observed. Refer to Photos 11 and 12 from the 05/01/2019 Other Inspection Report and Photos 13 and 14 of the 10/13/2015 routine BIR. (Co-located defect, CS 2)									
There are horizontal (interface) cracks up to 0.04 inch wide, at the top of Girders 4 and 5 along the girder/soffit chamfer which emanate at Abutment 8 and extend up to 5 feet into Span 7. This condition is most severe in Girder 4. Refer to Photos 15 and 16 of the 10/13/2015 routine BIR. (Quantity = 2 LM * 2 Locations = 4 LM, CS 2)									
182		EQ Restrainer Cable-Other	2	4	ea.	4	0	0	0
(182) EQ Restrainer Cable-Other									
Pipe seat extenders were installed one in each bay at the hinge in 2021 under project EA 05-1F820.									
There were no significant defects noted.									
312		Bearing-Enclosed	2	1	each	1	0	0	0
(312) Bearing-Enclosed									
This element is included to indicate the presence of enclosed bearings as part of this structure at the hinge in Span 4. The bearings were not exposed for visual inspection. No indirect signs of bearing distress were noted in surrounding elements.									

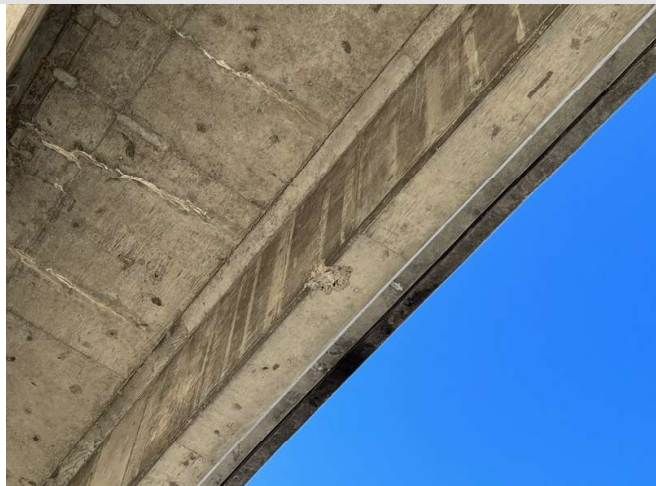
SUPERSTRUCTURE PHOTOGRAPHS

Photo 1

Spall at the bottom left corner of Girder 5 in Span 5, approximately 20 feet from Pier 6.

SUBSTRUCTURE**DESCRIPTION UNDER STRUCTURE**

(42b) TYPE OF SERVICE UNDER	6-HIGHWAY-WATERWAY	(38) NAVIGATION CONTROL	N: NOT APPLICABLE
(69) UNDERCLEARANCES V - H	7 ABOVE MINIMUM	(111) PIER PROTECTION	N/A
(71) WATER ADEQUACY	9 ABOVE DESIRABLE	(39) NAVIGATION VERTICAL CLEARANCE	0.0 M
(61) CHANNEL PROTECTION	6 BANK SLUMPING	(116) VERT-LIFT BRIDGE NAV MIN VERTICAL CLEAR	M
(113) SCOUR	3 SC - UNSTABLE	(40) NAVIGATION HORIZONTAL CLEARANCE	0.0 M
SCOUR POA DATE	08/19/2019		

CHANNEL DESCRIPTION

Medium width, moderate gradient, trapezoidal channel with non-cohesive soils (sand and gravel) and heavily vegetated slopes. Flow is from south to north.

ROADWAY DESCRIPTION UNDER STRUCTURE

(5a) POSITION:	2 ONE ROUTE UNDER	NOT AN NBI UNDER RECORD		
ROADWAY NAME:	SAN ANTONIO DR.			
(5d) ROUTE		(104) NATIONAL HIGHWAY SYSTEM	0 NOT NHS	
(11) POST MILE		(26) FUNCTIONAL CLASS	09 RURAL LOCAL	
(5b) KIND HIGHWAY	8 OTHER (INCL TOLL RDS)	(100) DEFENSE HWY	0 NOT DEF HWY	
(5c) LEVEL SERVICE	8 SERVICE ROAD	(110) NATIONAL TRUCK NETWORK	0 NOT PART OF NATL NETWO	
(10) VERTICAL CLEAR (m)	4.72	(20) TOLL FACILITY	3 ON FREE ROAD	
(47) HORIZONTAL CLEAR (m)	18.70	(28b) LANES	2	
(19) DETOUR LENGTH	8	(29) RECENT ADT	1 (30) ADT YEAR	2011
(102) DIRECTION TRAFFIC	2 2-WAY TRAFFIC	(109) TRUCK % ADT	1	

SUBSTRUCTURE ELEMENT INSPECTION RATINGS AND NOTES

(60) SUBSTRUCTURE RATING = 5

Elem No.	Defect/Prot Defect	Element Description	Env	Total Qty	Units	Qty in each Condition State			
						CS 1	CS 2	CS 3	CS 4
210		Pier Wall-RC	2	38	m	38	0	0	0
(210) Pier Wall-RC									
There were no significant defects noted.									
215		Abutment-RC	2	40	m	29	3	8	0
1130		Cracking (RC and Other)	2	11		0	3	8	0
521		Concrete Coat.(Meth/Sealer)	2	30	sq.m	25	0	0	5
3540		Effectiveness-(Concrete PC)	2	5		0	0	0	5
(215) Abutment-RC									
The wingwalls are monolithic with the abutments and extend 16 feet each (64 feet total) per the as-built plans.									
(215-1130) Cracking (RC and Other)									
There are near full height vertical cracks up to 0.02 inch wide, spaced as close as 6 feet apart, throughout both abutments. These cracks are predominantly located along the vertical interface of the interior girders and their bearing points. This condition has not significantly changed when compared to Photo 13 from the 05/01/2019 Other Inspection Report. No corrective action recommended at this time. (Quantity = 1 LM x 2 locations = 2 LM, total)									
There are horizontal to vertical cracks up to 0.02 inch wide, spaced as close as 1 foot apart, at the front face of the diaphragm at Abutment 8. These cracks originate from the adjacent girders, along the chamfer interface with the deck, and extend vertically down into the abutment. This condition has not significantly changed when compared to Photo 14 from the 05/01/2019 Other Inspection Report. (Quantity = 1 LM x 4 bays = 4 LM)									
There are unsealed pattern cracks up to 0.06 inch wide, spaced as close as 6 inches apart, throughout the left wingwall of Abutment 8. This condition has not significantly changed when compared to Photo 6 from the 10/17/2017 routine BIR. The 2019 work recommendation to mitigate this condition by epoxy injection is still valid. (Quantity = 5 LM)									
(215-521) Concrete Coat.(Meth/Sealer)									
The face of Abutment 8 as well as both wingwalls were treated with an acrylic compound following the 11/1985 inspection and prior to the 01/1987 inspection. Refer to Photos 18 and 19 of the 10/13/2015 routine BIR and Photo 6 from the 10/17/2017 routine BIR.									

SUBSTRUCTURE

SUBSTRUCTURE ELEMENT INSPECTION RATINGS AND NOTES

(60) SUBSTRUCTURE RATING = 5

Elem No.	Defect/Prot Defect	Element Description	Env	Total Qty	Units	Qty in each Condition State			
						CS 1	CS 2	CS 3	CS 4
(215-521) Concrete Coat.(Meth/Sealer)									
([Quantity = 2 LM x 10 LM] + [1 LM * 10 LM] = 30 SM)									
This compound is peeling and blistering throughout the face of Abutment 8. A white powdery substance (which appears to be efflorescence) is beneath the compound. This condition was first documented in the 11/15/1994 BIR. Refer to Photo 20 of the 10/13/2015 routine BIR.									
(215-521-3540) Effectiveness-(Concrete PC)									
The majority of the concrete sealant compound has been worn from the face of the left wingwall of Abutment 8. The sealant throughout this area is no longer effective. Refer to Photo 21 of the 10/13/2015 routine BIR. (Quantity = 1 LM * 5 LM = 5 SM)									
220		Pile Cap/Footing-RC	2	4	m	0	4	0	0
6000		Scour	2	4		0	4	0	0
(220-6000) Scour									
The top surface of the Pier 4 pile cap is exposed on the Span 3 side and the upstream face. There is up to 6 inches of vertical exposure over a length of 10 feet. The 12/14/2013 routine BIR documented up to 18 inches of vertical exposure at this location. No corrective action is warranted at this time. Refer to Photo 22 of the 10/13/2015 routine BIR. (Quantity = 4 LM)									
225		Pile-Steel	2	1	ea.	1	0	0	0
(225) Pile-Steel									
The pile element is included to indicate the presence of piles on this structure. The piles were not exposed for visual inspection. No indication of pile distress was noted in any substructure element.									
256		Slope Protection	2	3	ea.	3	0	0	0
(256) Slope Protection									
This element is for the concrete paving slope protection at Pier 3 (Span 3 side) and rock slope protection at Pier 5 (both sides) and at Abutment 8.									
Rock slope protection was installed at Pier 5 and Abutment 8 in 2021 under project EA 05-1F820.									
There were no significant defects noted.									

WORK RECOMMENDATIONS

DECK WORK RECOMMENDATIONS - NONE

JOINT/APPR/RAIL WORK RECOMMENDATIONS - NONE

SUPERSTRUCTURE WORK RECOMMENDATIONS - NONE

SUBSTRUCTURE WORK RECOMMENDATIONS - NONE

OTHER WORK RECOMMENDATIONS

Rec Date	05/01/2019	Work By	SHOPP	Est Cost	\$4,000,000	Dist Target	
Status	LONG LEAD	Action	Bridge-Replace(Bridg	Str Target	10 YEARS	EA	1K880
Replace the right bridge per SM&I Strategy Meeting decision 06/11/2019. Cost basis \$260/SF from 2015 comparative bridge estimate for RC T-girder bridge.							

*California Department of Transportation
Division of Maintenance*

Structure Maintenance and Investigations

B_{RIDGE}

I_{NSPECTION}

R_{ECORDS}

I_{NFORMATION}

S_{YSTEM}

The requested documents have been generated by BIRIS.

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BRIDGE INSPECTION REPORT

Routine Inspection

BRIDGE NO.:
44 0141L

STRUCTURE NAME:
SAN ANTONIO RIVER

INSPECTION DATE:
October 27, 2023

BRIDGE LOCATION INFORMATION

(9) LOCATION	05-MON-101-R6.66	(7) FACILITY CARRIED	US HIGHWAY 101 SB
(11) POSTMILE	6.66	(6) FEATURE INTERSECTED	SAN ANTONIO RIVER & DR
(16) LATITUDE	35°51'17.99"	(5) INVENTORY RTE(ON/UNDER)	ON 121001010
(17) LONGITUDE	120°47'57.69"	(104) ON NATIONAL HIGHWAY SYSTEM	ROUTE ON NHS

STRUCTURAL HEALTH CONDITION SUMMARY INFORMATION

(58) DECK	7 GOOD	DECK AREA (M) ²	1,458
(59) SUPERSTRUCTURE	7 GOOD	SUFFICIENCY RATING	71.2
(60) SUBSTRUCTURE	7 GOOD	PAINT CONDITION	N/A
(62) CULVERT	N N/A (NBI)	STRUCTURALLY DEFICIENT (SD) STATUS	NOT SD
(67) STRUCTURE EVALUATION	6 EQUAL MIN CRITERIA	(113) SCOUR	3 SC - UNSTABLE

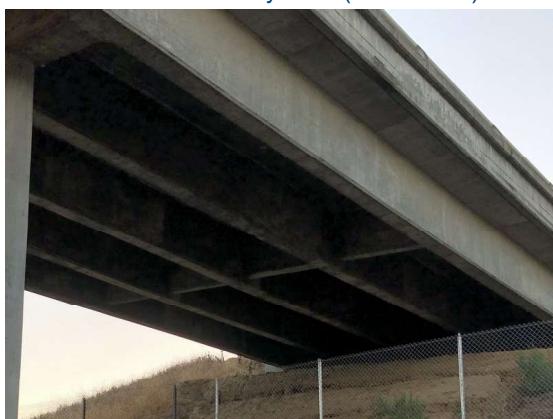
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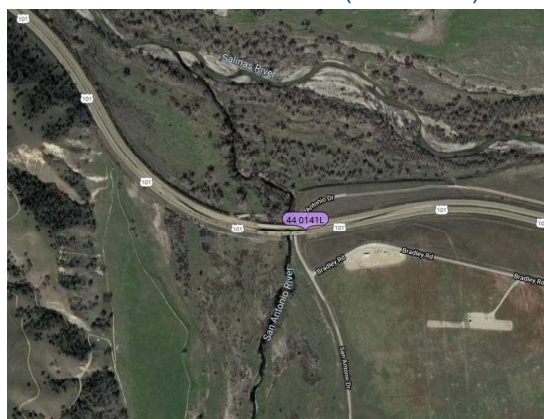
Routine-Roadway View (01/26/2016)



Routine-Elevation View (10/08/2019)



Routine-Underside View (10/27/2021)



Routine-Map View (12/28/2021)

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1/22/2024

Date



STRUCTURE OVERVIEW

AGENCY INFORMATION

INSPECTION INFORMATION

(1) STATE NAMECALIFORNIA 069

(2) HIGHWAY DISTRICT05

(3) COUNTY CODE(44)MONTEREY

(4) PLACE CODE(00000) _____

(21) MAINTAIN01 STATE HIGHWAY AGENCY

(22) OWNER01 STATE HIGHWAY AGENCY

(98) BORDER BRIDGE STATE CODEN/A % SHAREN/A

(99) BORDER BRIDGE STRUCTURE NUMBERN/A

(90) INSPECTION DATE10/23

(91) FREQUENCY24 MO

(92) CRITICAL FEATURE INSPECTION

A) NSTM INSPN-NO MO A)N/A

B) UNDERWATER INSPN-NO MO B)N/A

C) OTHER SPECIAL INSPN-NO MO C)12/03

CONSTRUCTION INFORMATION

(27) YEAR BUILT1965

(45) MAIN SPANS7

(43a) STRUCTURE TYPE MAIN2: CONCRETE CONT

(106) YEAR MODIFIEDN/A

(46) APPR SPANS0

(43b) DESIGN TYPE MAIN04: TEE BEAM

(34) SKEW0

(48) MAX SPAN (M)22

(44a) STRUCTURE TYPE APPR0: OTHER/ NOT APPLICABLE

(49) LENGTH (M)140.2

(35) STR FLARE0-NO

(44b) DESIGN TYPE APPR00: OTHER/NOT APPLICABLE

(112) NBIS BR LENGTHY

JOINTS1

NO. OF HINGES1

STRUCTURE DESCRIPTION

Original Structure (1965): Continuous (with 1 hinge) 7 span RC T-girders (5) with RC deck on RC pier walls and RC open end diaphragm abutments (with monolithic wingwalls), all founded on steel piles.

Superstructure Modification (1968): A threaded rod (equalizer bolt) was placed in each bay at Hinge 4.

Seismic Retrofit (1985): Restrainer cables were placed on Girders 3 and 4 at Hinge 4.

SPAN CONFIGURATION

1 @ 43.5 ft, 5 @ 72.0 ft, 1 @ 54.0 ft

OPERATIONAL INFORMATION

LOAD CAPACITY

(31) DESIGN LOAD6 MS18(HS20)+MOD

(65) CALC METHOD8 LRFR RATING FACTOR

(66) INVENTORY RATINGRF= 0.79

(63) CALC METHOD8 LRFR RATING FACTOR

(64) OPERATING RATINGRF= 1.02

(70) BRIDGE POSTING5 AT/ABOVE LEGAL LOADS

(41) STRUCTURE STATUSA-OPEN, NO RESTRICTION

PERMIT RATINGPPPPP

OVERLAY THICKNESS1 inches

POSTING LOADS

	Safe Loads	Existing Ordinance/Order	Posting Signs	
Type 3	Legal	N/A	N/A	U.S. Tons
Type 3S2	Legal	N/A	N/A	U.S. Tons
Type 3-3	Legal	N/A	N/A	U.S. Tons
Speed	70	N/A	N/A	MPH

Additional Ordinance/Order Requirements

NONE

Additional Signs

NONE

Posting DateN/A

Load Rating Summary Date04/04/14

Load Rating TypeCalculated

Load Rating Tool - DateVIRTIS 6.5.0 AASHTO - 03/04/14

MINIMUM VERTICAL CLEARANCE

MINIMUM LATERAL UNDERCLEARANCE

(53) MIN VERT CLEAR OVER BRIDGE RDWYUnimpaired

(55) MIN LAT UNDERCLEAR RT REFH-HIGHWAY4.4 M

(54) MIN VERT UNDERCLEAR REFH-HIGHWAY5.41 M

(56) MIN LAT UNDERCLEAR LT0.0 M

CONDITION INFORMATION

INSPECTION COMMENTARY

SCOPE AND ACCESS

Clear flowing water was present under Span 3 at a maximum depth of 1 foot at the time of this investigation. The Span 3 side of Pier 4 was submerged up to 1 foot. A complete routine inspection was performed of all above ground elements from the deck and ground, and with the use of hip waders, an extension probe, and binoculars when required.

A UBIT was used to inspect all superstructure and substructure elements within approximately 30 feet of the underside of the deck on 05/01/2019. Refer to the 05/01/2019 Other Inspection Report for the findings of that investigation.

HISTORY

Concrete core samples were taken from the deck in Spans 1 and 7 on 05/01/2019 and analyzed for chloride, sulfate content, and compressive strength. Per these test results, there was no active corrosion of the steel or sulfate attack on the concrete. For additional information regarding the core sample test results refer to the Corrosion Test Summary Report dated 05/20/2019 and the Compressive Testing summary dated 05/08/2019.

In 2001, concrete core samples were taken from various locations in both this structure as well as the right structure (44 0141R), and analyzed for Alkali Silica Reactivity (ASR), specific gravity, modulus of elasticity, compressive strength, and tensile strength. The one core sample from this structure (Pier 2 column) which was tested for ASR confirmed its presence. As such, this structure is coded as "ASR - Confirmed." For additional information regarding the core sample test results refer to the Material Test Results dated 04/09/2001.

ROADWAY CLEARANCE

During this inspection the horizontal and vertical clearances were spot checked and compared to the vertical clearance diagram dated 10/13/2015. No changes were noted.

The minimum clearance under the structure for San Antonio Drive (Span 2) is 17 FT 9 IN.

The minimum clearance under the adjacent right bridge (44 0141R) is 15 feet - 6 inches. A work recommendation has been created to place a vertical clearance sign on the left exterior girder of this structure that indicates: 15 FT 6 IN.

WATERWAY

Work request 10963, to revise the current Item 113 code, is in process. Scour mitigation work was completed in 2021 under project EA 05-1F820. The current Item 113 code, Scour Critical Bridges, is 3 (Scour Critical) for this structure. The channel cross section was spot checked during this inspection and there was no significant change at the critical locations when compared to the channel cross section taken on 10/13/2015.

SPECIAL INSPECTION INFORMATION

STEEL INVESTIGATION DETAILS - NOT APPLICABLE FOR THIS BRIDGE.

UNDERWATER INVESTIGATION DETAILS - NOT APPLICABLE FOR THIS BRIDGE.

DECK AND ROADWAY**DECK CROSS SECTION**

1.0 ft br, 2.0 ft cu, 28.0 ft, 2.0 ft cu, 1.0 ft br

DECK GEOMETRY**DECK ROADWAY/OPERATIONAL INFORMATION**

(49) LENGTH	140.2 M	(42a) TYPE OF SERVICE	1-HIGHWAY
(51) NET WIDTH	8.5 M	(12) BASE HIGHWAY NETWORK	1-PART OF NET
(52) TOTAL WIDTH	10.4 M	(13) LRS INVENTORY RTE & SUBRTE	000000010101
(50) CURB OR SIDEWALK	LEFT 0.6 M RIGHT 0.6 M	(104) NATIONAL HIGHWAY SYSTEM	1-ROUTE ON NHS
(32) APPROACH RDWY WIDTH	10.4 M	(26) FUNCTIONAL CLASS	02-OTHER PRIN ART RURAL
(33) BRIDGE MEDIAN	0 NO MEDIAN	(100) DEFENSE HIGHWAY	1-STRAHNET

DECK STRUCTURE INFORMATION

(107) DECK STRUCTURE TYPE	1-CIP CONCRETE	(101) PARALLEL STRUCTURE	L-LEFT STRUCTURE
(108) WEARING SURFACE / PROTECTIVE SYSTEM		(102) DIRECTION OF TRAFFIC	1-1 WAY
A) TYPE OF WEARING SURFACE	2-INTEGRAL CONC.	(10) INVENTORY ROUTE MIN VERT CLEAR	99.99 M
B) TYPE OF MEMBRANE	0-NONE	(47) INVENTORY ROUTE TOTAL HORIZ CLEAR	8.5 M
C) TYPE OF DECK PROTECTION	0-NONE	(68) DECK GEOMETRY	3 INTOLERABLE - CORRECT
OVERLAY THICKNESS (inches)	1 inches	(72) APPR ROADWAY ALIGN	6 EQUAL MIN CRITERIA
(29) AVERAGE DAILY TRAFFIC	8100	(105) FEDERAL LANDS HWY	0-NOT APPLICABLE
(30) YEAR OF ADT 2009	(109) TRUCK ADT % 18 %	(110) DESIGNATED NATIONAL NETWORK	1-PART OF NET
(19) BYPASS, DETOUR LENGTH	2 KM	(20) TOLL	3-ON FREE ROAD
(114) FUTURE ADT	19340	(28a) LANES	2
(115) YEAR OF FUTURE ADT	2043	SPEED	70
(37) HISTORICAL SIGNIFICANCE	5: NOT ELIGIBLE FOR NRHP	(103) TEMPORARY STRUCTURE	N/A

DECK ELEMENT INSPECTION RATINGS AND NOTES

(58) DECK RATING = 7

Elem No.	Defect/Prot Defect	Element Description	Env	Total Qty	Units	Qty in each Condition State			
						CS 1	CS 2	CS 3	CS 4
16		Top Flange-RC	2	1458	sq.m	1385	73	0	0
1120		Efflorescence/Rust Staining	2	73		0	73	0	0
511		Deck Wearing Surface-Concrete	2	1192	sq.m	1192	0	0	0
(16) Top Flange-RC									
The polyester concrete overlay applied to the deck in 2021 now obscures the previously reported delaminations and cracks. Refer to the 10/08/2019 routine BIR for the previously existing deck delamination, spall, and crack conditions.									
(16-1120) Efflorescence/Rust Staining									
There are hairline transverse and longitudinal soffit cracks spaced as close as 1 foot apart (with light efflorescence) in each bay of all spans. The cracks typically extend 2-4 feet in length. This condition is most densely concentrated near the piers and is most severe throughout Span 3. This condition has not significantly changed when compared to Photo 4 of the 10/13/2015 routine BIR. (Quantity = 5% of the total)									
(16-511) Deck Wearing Surface-Concrete									
A one inch polyester concrete overlay was applied to the entire deck in 2021 under project EA 05-1F820.									
There were no significant defects noted.									

JOINT - APPROACH - RAIL**RAIL INFORMATION**

(36a) Rail Code 0 (36b) Transition 0 (36c) Appr Guardrail 1 (36d) Appr Guardrail End 1 Roadway Speed 70 MPH

JOINT/APPROACH/RAIL ELEMENT INSPECTION RATINGS AND NOTES

Elem No.	Defect/Prot Defect	Element Description	Env	Total Qty	Units	Qty in each Condition State			
						CS 1	CS 2	CS 3	CS 4
302		Joint-Compression Seal	2	10	m	10	0	0	0
(302) Joint-Compression Seal									

JOINT - APPROACH - RAIL**JOINT/APPROACH/RAIL ELEMENT INSPECTION RATINGS AND NOTES**

Elem No.	Defect/Prot	Defect	Element Description	Env	Total Qty	Units	Qty in each Condition State				
							CS 1	CS 2	CS 3	CS 4	
(302) Joint-Compression Seal											
The Type B joint seal was replaced in 2021 under project EA 05-1F820.											
There were no significant defects noted.											
333			Railing-Other		2	280	m	0	280	0	0
	1010		Cracking		2	196		0	196	0	0
	1080		Delamination/Spall/Patched Area		2	84		0	84	0	0
	7000		Damage		2	35		0	35	0	0
(333-1010) Cracking											
There is pattern cracking up to 0.02 inch wide, spaced as close as 3 inches apart, throughout the top surface of both RC curbs along the length of the structure. This condition has not significantly changed when compared to Photo 7 of the 10/13/2015 BIR. No corrective action recommended at this time. (Quantity = 100% - Co-located Defects)											
(333-1080) Delamination/Spall/Patched Area											
There are multiple 2-3 inch x 6-8 inch delaminations throughout the interior and exterior faces of both bridge rails. This condition has not significantly changed when compared to Photo 8 of the 10/13/2015 routine BIR. (Quantity = 5% of the total)											
There are numerous patched spalls on the interior face of the left bridge rail. These patched areas typically measure 3-6 inches x 6-12 inches and were placed to mitigate spalling resulting from inadequate cover over the reinforcement. The patches are sound and functioning as intended. This condition has not significantly changed when compared to Photo 9 of the 10/13/2015 routine BIR. (Quantity = 25% of the left rail = 12.5% of the total quantity)											
There is minor corner and edge spalling due to traffic impacts in the left RC curb at various locations along the length of the structure. This condition has not significantly changed when compared to Photo 10 of the 10/13/2015 routine BIR. (Quantity = 25% of the left rail = 12.5% of the total quantity)											
Based on the severity and quantity of these conditions, no corrective action is recommended at this time.											
(333-7000) Damage											
See the spall description under Defect 333-1080 for information regarding this defect.											

SUPERSTRUCTURE**SUPERSTRUCTURE ELEMENT INSPECTION RATINGS AND NOTES**

(59) SUPERSTRUCTURE RATING = 7

Elem No.	Defect/Prot Defect	Element Description	Env	Total Qty	Units	Qty in each Condition State			
						CS 1	CS 2	CS 3	CS 4
110		Girder/Beam-RC	2	701	m	672	29	0	0
1130		Cracking (RC and Other)	2	29		0	29	0	0
(110-1130) Cracking (RC and Other)									
There are diagonal to vertical cracks up to 0.016 inch wide, spaced as close as 2 feet apart, throughout both vertical faces of all girders (predominantly near the supports). Some of these cracks extend into the soffit, through the chamfer, up to 8 inches in length. This condition has not significantly changed when compared to Photo 5 from the 05/01/2019 Other Inspection Report. (Quantity = 2 LM x 14 [support] locations = 28 LM, CS2)									
There is a horizontal crack up to 0.016 inch wide, along the left deck chamfer interface of Girder 3 approximately 15 feet from Pier 4 in Span 4. This condition has not significantly changed when compared to Photo 6 from the 05/01/2019 Other Inspection Report. (Quantity = 1 LM, CS2)									
No corrective action is warranted for the conditions listed above at this time.									
182		EQ Restrainer Cable-Other	2	4	ea.	4	0	0	0
(182) EQ Restrainer Cable-Other									
This element is for the restrainer cables on Girders 2 and 4, the pipe seat extenders (Bays 1 and 2), and the threaded rods (Bays 3 and 4) at Hinge 4.									
Pipe seat extenders were installed in Bays 1 and 2 at the hinge in 2021 under project EA 05-1F820.									

SUPERSTRUCTURE**SUPERSTRUCTURE ELEMENT INSPECTION RATINGS AND NOTES**

(59) SUPERSTRUCTURE RATING = 7

Elem No.	Defect/Prot Defect	Element Description	Env	Total Qty	Units	Qty in each Condition State			
						CS 1	CS 2	CS 3	CS 4
(182) EQ Restraint Cable-Other									
There were no significant defects noted.									
312		Bearing-Enclosed	2	1	each	1	0	0	0
(312) Bearing-Enclosed									
This element is included to indicate the presence of enclosed bearings as part of this structure at the hinge in Span 4. The bearings were not exposed for visual inspection. No indirect signs of bearing distress were noted in surrounding elements.									

SUBSTRUCTURE**DESCRIPTION UNDER STRUCTURE**

(42b) TYPE OF SERVICE UNDER	6-HIGHWAY-WATERWAY	(38) NAVIGATION CONTROL	N: NOT APPLICABLE
(69) UNDERCLEARANCES V - H	9 ABOVE DESIRABLE	(111) PIER PROTECTION	N/A
(71) WATER ADEQUACY	9 ABOVE DESIRABLE	(39) NAVIGATION VERTICAL CLEARANCE	0.0 M
(61) CHANNEL PROTECTION	6 BANK SLUMPING	(116) VERT-LIFT BRIDGE NAV MIN VERTICAL CLEAR	M
(113) SCOUR	3 SC - UNSTABLE	(40) NAVIGATION HORIZONTAL CLEARANCE	0.0 M
SCOUR POA DATE	08/19/2019		

CHANNEL DESCRIPTION

Medium width, moderate gradient, trapezoidal channel with non-cohesive soils (sand and gravel) and heavily vegetated slopes. Flow is from south to north.

ROADWAY DESCRIPTION UNDER STRUCTURE

(5a) POSITION:	2 ONE ROUTE UNDER	NOT AN NBI UNDER RECORD
ROADWAY NAME:	SAN ANTONIO DR.	
(5d) ROUTE	(104) NATIONAL HIGHWAY SYSTEM	0 NOT NHS
(11) POST MILE	(26) FUNCTIONAL CLASS	09 RURAL LOCAL
(5b) KIND HIGHWAY	8 OTHER (INCL TOLL RDS)	(100) DEFENSE HWY
(5c) LEVEL SERVICE	8 SERVICE ROAD	(110) NATIONAL TRUCK NETWORK
(10) VERTICAL CLEAR (m)	5.41	(20) TOLL FACILITY
(47) HORIZONTAL CLEAR (m)	21.50	(28b) LANES
(19) DETOUR LENGTH	8	(29) RECENT ADT
(102) DIRECTION TRAFFIC	2 2-WAY TRAFFIC	(109) TRUCK % ADT

SUBSTRUCTURE ELEMENT INSPECTION RATINGS AND NOTES

(60) SUBSTRUCTURE RATING = 7

Elem No.	Defect/Prot Defect	Element Description	Env	Total Qty	Units	Qty in each Condition State			
						CS 1	CS 2	CS 3	CS 4
210		Pier Wall-RC	2	38	m	38	0	0	0
(210) Pier Wall-RC									
There were no significant defects noted.									
215		Abutment-RC	2	40	m	40	0	0	0
(215) Abutment-RC									
The base of Abutment 1 is exposed and undermined up to 3.5 inches vertically and up to 2 feet longitudinally across a distance of approximately 8 feet, near the right edge of the structure. This condition is the result of erosion by roadway runoff and/or settlement of the soil slope and is not due to scour. This condition has not significantly changed when compared to Photo 5 of the 10/13/2015 routine BIR. No defect required at this time.									
The wingwalls are monolithic with the abutments and extend 16 feet each (64 feet total) per the As-built plans.									
225		Pile-Steel	2	1	ea.	1	0	0	0

SUBSTRUCTURE

SUBSTRUCTURE ELEMENT INSPECTION RATINGS AND NOTES

(60) SUBSTRUCTURE RATING = 7

Elem No.	Defect/Prot	Defect	Element Description	Env	Total Qty	Units	Qty in each Condition State			
							CS 1	CS 2	CS 3	CS 4
(225) Pile-Steel										
The pile element is included to indicate the presence of piles on this structure. The piles were not exposed for visual inspection. No indication of pile distress was noted in any substructure element.										
256			Slope Protection		2	4 ea.	4	0	0	0
(256) Slope Protection										
This element is for the concrete paving slope protection at Pier 3 (Span 3 side) and rock slope protection at Pier 5 (both sides) and at Abutment 8.										
Rock slope protection was installed at Pier 5 and Abutment 8 in 2021 under project EA 05-1F820.										
There were no significant defects noted.										

WORK RECOMMENDATIONS

DECK WORK RECOMMENDATIONS - NONE

JOINT/APPR/RAIL WORK RECOMMENDATIONS - NONE

SUPERSTRUCTURE WORK RECOMMENDATIONS - NONE

SUBSTRUCTURE WORK RECOMMENDATIONS - NONE

OTHER WORK RECOMMENDATIONS

Rec Date	10/17/2017	Work By	BRIDGE CREW	Est Cost	\$1,000	Dist Target
Status	PROPOSED	Action	Bridge-Install Sign	Str Target	ROUTINE	EA

Place a vertical clearance sign on the left exterior girder of this structure that indicates: 15 FT 6 IN. This signage will advise motorists of the controlling vertical clearance under the adjacent right bridge (44 0141R) of 15 feet - 6 inches.

ATTACHMENT M

Distribution List

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