



Gallup Creek Bridge (No. 38C0170) on Cooperstown Road Replacement Project

Initial Study/Mitigated Negative Declaration Public Draft

August 16, 2022

Prepared for:

Stanislaus County Public Works Department
1716 Morgan Road,
Modesto, CA 95358

Prepared by:

Stantec Consulting Services Inc.
376 Hartnell Avenue, Suite B
Redding, California 96002

STN #2272009900

Proposed Mitigated Negative Declaration

Pursuant to: Division 13, Public Resources Code

PROJECT DESCRIPTION

Stanislaus County Public Works (County), in coordination with the California Department of Transportation (Caltrans), is proposing to replace the existing Cooperstown Road over Gallup Creek Bridge (Bridge No. 38C0170) with a two-lane bridge structure to provide improved safety and operations (Project). The bridge replacement would include a cast-in-place, two-lane, two-span, concrete slab bridge that would be constructed on the existing alignment. A temporary detour would be approximately 15 feet wide and would be located just south of Cooperstown Road.

DETERMINATION

This proposed Mitigated Negative Declaration (MND) is included to give notice to interested agencies and the public that it is the County's intent to adopt an MND for this Project.

Stanislaus County has prepared an Initial Study for this Project and has determined from this study that the Project would not have a significant impact on the environment for the following reasons:

The Project would have no impact on energy, land use and planning; mineral resources; population and housing; public services, recreation; and tribal cultural resources.

The Project would have a less than significant impact on aesthetics; agriculture and forest resources; greenhouse gas emissions; hydrology and water quality; noise; transportation and traffic; utilities and service systems; and wildlife.

The Project would have less than significant impact with mitigation incorporated on air quality; biological resources; cultural resources; geology and soils; hazards and hazardous materials; and mandatory findings of significance.



Chuck Covolo, P.E., Project Manager
Stanislaus County Public Works Department

8/16/2022

Date

Project Information

- | | |
|--|---|
| 1. Project Title: | Gallup Creek Bridge (No. 38C0170) on Cooperstown Road Replacement Project |
| 2. Lead Agency Name and Address | Stanislaus County Public Works Department
1716 Morgan Road,
Modesto, CA 95358 |
| 3. Contact Person, Phone Number/Email | Chuck Covolo, P.E., Project Manager
(209) 525-4101
covoloc@stancounty.com |
| 4. Project Location | Approximately 3.8 miles northwest of La Grange, Stanislaus County, California; Sections 1 and 2 of Township 3S, Range 13E on the <i>La Grange, California</i> and <i>Cooperstown, California</i> 7.5-minute U.S. Geological Survey quadrangles; Assessor Parcel Numbers: 008-014-017 and 008-014-018. |
| 5. Project Sponsor's Name | Stanislaus County Public Works Department |
| 6. General Plan Designation | Agriculture (AG) |
| 7. Zoning | A-2-40 (General Agriculture, 40-acre parcels) |
| 8. Description of Project | |

The Stanislaus County Public Works Department (County) proposes to improve public safety by replacing Gallup Creek Bridge (No. 38C0170) on Cooperstown Road with a new two-lane bridge in the same location as the existing bridge. The project would be federally funded through the Federal Highway Bridge Program, which is administered by the California Department of Transportation (Caltrans) on behalf of the Federal Highway Administration. Caltrans is responsible for federal oversight of the project, which would be locally administered by the County. The existing bridge is County owned and maintained.

The proposed new bridge would be a two-span, cast-in-place, post-tensioned concrete, slab bridge and aligned on the existing alignment. Spread footings and cast-in-drilled-hole piles were identified as viable foundation alternatives; however, cast-in-drilled-hole piles are preferable due to scour concerns. The soffit of the new bridge would provide at least 2 feet of freeboard over the 100-year stormwater surface elevation. The new roadway profile would not need to be raised significantly. Rock slope protection would be placed at both abutment embankments as a scour countermeasure. The bridge would include Type 85 concrete barrier railings and would be approximately 36 feet wide with the railing. The project would include road improvements designed with an unpaved roadway width of 28 feet (two 12-foot lanes and two 2-foot shoulders) to meet American Association of State Highway and Transportation Officials' (AASHTO) Standards. The project would be aligned within the existing Stanislaus County right-of-way (ROW) for Cooperstown Road, but construction would encroach onto neighboring private land. Due to the low average daily trips and long detour distance on County roads (approximately 20 miles), the bridge would be closed during construction while traffic would use a temporary detour adjacent to the existing Cooperstown Road. This temporary detour would be approximately 15 feet wide and would be located just south of Cooperstown Road. Traffic would cross Gallup Creek via a low-water crossing because the

creek is dry for several months during the summer. The low-water crossing would be constructed by laying a temporary pipe atop the creek bed perpendicular to the road and covering it with clean crushed rock. The pipe and rock used for the temporary crossing would be removed at the end of construction. The existing bridge would be demolished and removed from the project area as construction progresses.

9. Surrounding Land Uses and Setting

Gallup Creek begins in the foothills north of La Grange and is part of the larger Dry Creek watershed which feeds into the Tuolumne River near Modesto. The area is characterized by low rolling hills comprised largely of annual grasslands. Land uses in the area include ranchlands, agriculture, and rural residential developments.

10. Other Public Agencies Whose Approval May Be Required (e.g., permits, financing approval, or participation agreement.)

- Federal Highway Administration
- California Department of Transportation, District 10 (funding authorization)
- U.S. Army Corp of Engineers, Sacramento District (Clean Water Act Section 404 Nationwide Permit)
- U.S. Fish and Wildlife Service, Sacramento Fish And Wildlife Office (Endangered Species Act compliance)
- California Department of Fish & Wildlife, Region 4 (Streambed Alteration Agreement)
- California State Regional Water Quality Control Board, Central Valley Region (Clean Water Act Section 401 Water Quality Certification and Section 402 General Construction Activity Storm Water Permit)

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Acronyms and Abbreviations

°F	degrees Fahrenheit
AASHTO	American Association of State Highway and Transportation Officials
ADT	averaged daily traffic
APE	Area of Potential Effects
AQMD	Air Quality Management District
BA	Biological Assessment
BMP	Best Management Practice
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CNDDDB	California Natural Diversity Database
CO	Carbon Monoxide
County	Stanislaus County Public Works Department
dBA	decibels A-weighted
DWR	Department of Water Resources
GHG	greenhouse gases
IS	Initial Study
ISA	Initial Site Assessment
MMRP	Mitigation Monitoring and Reporting Program
MND	Mitigated Negative Declaration
NAHC	Native American Heritage Commission
NEPA	National Environmental Policy Act
NOx	oxides of nitrogen
O ₃	ozone
PM	particulate matter
PM ₁₀	particulate matter 10 microns or less
PM _{2.5}	particulate matter 2.5 microns or less
project	Gallup Creek Bridge on Cooperstown Road Replacement Project
Q100	probable 100-year flood
ROG	reactive organic gases
ROW	right-of-way
RSP	rock slope protection
RWQCB	Regional Water Quality Control Board
SHPO	State Historic Preservation Office
SJVAAPCD	San Joaquin Valley Air Pollution Control District
SSC	species of special concern
SWRCB	State Water Resources Control Board
USACE	United States Army Corps of Engineers
USFWS	United States Fish and Wildlife Service
WSE	Water Surface Elevation

1. INTRODUCTION

1.1 Introduction and Regulatory Guidance

This document is an Initial Study (IS) that summarizes the technical studies prepared for the proposed Gallup Creek Bridge (No. 38C0170) on Cooperstown Road Replacement Project (project). It includes an evaluation of potential environmental impacts that could result from project implementation and provides justification for a Mitigated Negative Declaration (MND) for the project. This document was prepared in accordance with the current California Environmental Quality Act (CEQA), Public Resources Code Section 21000 et seq., and the State CEQA Guidelines (14 California Code of Regulations 1500 et seq.) that require all state and local agencies to consider the environmental consequences of projects over which they have discretionary authority before acting on those projects. Conservation measures and mitigation measures are proposed to avoid or minimize any significant impacts that are identified.

1.2 Lead Agency

The Lead Agency is the public agency with primary responsibility for implementing or approving a project. The Stanislaus County Public Works Department (County) is the CEQA Lead Agency. The project would receive funding through federal and state sources and would require approvals from Federal Highway Administration and California Department of Transportation (Caltrans). The Federal Highway Administration has designated Caltrans as the National Environmental Policy Act (NEPA) Lead Agency on its behalf. NEPA approval will be a Categorical Exclusion supported by technical studies.

1.3 Supporting Technical Studies

The technical studies listed below are available for review at the County. Please contact:

Chuck Covolo, P.E., Project Manager
Stanislaus County Public Works Department
1716 Morgan Road
Modesto, CA 95358
Phone: (209) 525-4101

Technical studies conducted for this project are available to the public upon request (with the exception of the cultural resources reports) include:

- Archeological Survey Report/Historic Property Survey Report; Extended Phase 1 Archaeological Evaluation Report; Environmentally Sensitive Area Action Plan; and Finding of No Adverse Effect Document (These reports are confidential and available to qualified readers only)
- Natural Environment Study Report
- Biological Assessment
- Delineation of Potential Waters of the United States Report
- Foundation Report
- Initial Site Assessment
- Preliminary Hydraulic Study
- Visual Resources Impact Assessment Memorandum
- Water Quality Technical Memorandum

1.4 Document Organization

The IS consists of the following chapters:

- **Chapter 1.0 – Introduction** describes the purpose and content of this document.
- **Chapter 2.0 – Project Description** provides a comprehensive description of the project, tentative schedule, required permit approvals, and project alternatives.
- **Chapter 3.0 – Environmental Impacts and Mitigation Measures** describes the environmental impacts of the project using the CEQA Environmental Checklist. Where appropriate, mitigation measures are provided that would reduce potentially significant impacts to a less-than-significant level.
- **Chapter 4.0 – Determination** provides the environmental determination for the project.
- **Chapter 5.0 – Mitigation Monitoring and Reporting Program** provides a comprehensive list of all conservation measures and project-specific mitigation measures proposed for the project, along with timing/implementation, enforcement responsibility, and monitoring responsibility.
- **Chapter 6.0 – Report Preparation** identifies the individuals responsible for preparation of this document.
- **Chapter 7.0 – References** provides a list of references used to prepare this document.

2. PROJECT DESCRIPTION

2.1 Location

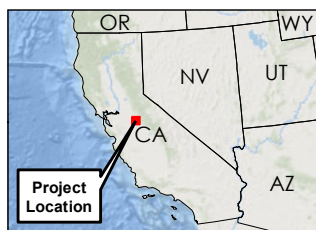
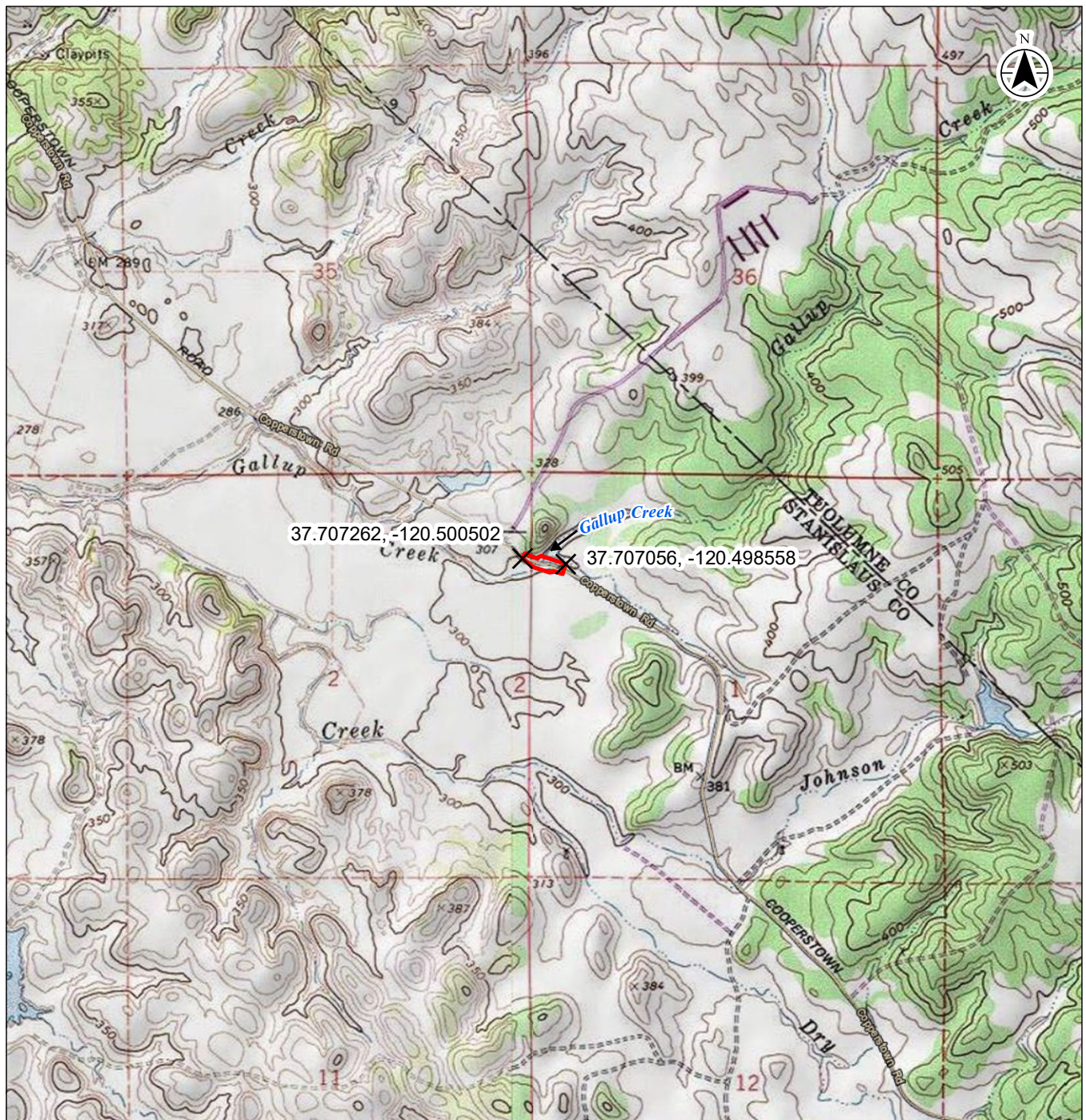
The Gallup Creek Bridge (38C0170) on Cooperstown Road Replacement Project (project) is located approximately 3.8 miles northeast of the unincorporated community of La Grange, approximately 2.7 miles northwest of the intersection with La Grange Road, in eastern Stanislaus County, California. The project study area encompasses 1.76 acres, extending approximately 550 feet along Cooperstown shown on the *La Grange, California* and *Cooperstown, California* 7.5-minute U.S. Geological Survey quadrangles in Township 3S, Range 13E, Sections 1 and 2. The approximate center of the action area is located at 37.706938 degrees latitude, -120.499568 degrees longitude (North American Datum 83) (Figure 1).

2.2 Existing Facility Conditions

Cooperstown Road is classified as an Off-System Local Road by Caltrans. The Gallup Creek bridge (38C0170) on Cooperstown Road was built in 1965 (although the truss itself is believed to be much older) and is approximately 83 feet long by 20 feet wide. The existing bridge consists of a single-span riveted and bolted steel Pratt Pony Truss structure supported by concrete abutments with unknown foundations. The existing approaches are two-lane gravel roadways approximately 20 feet wide including shoulders. The current average daily traffic (ADT) is about 50 vehicles per day with a future ADT of 105 ADT (projected to 2035). The design speed for the proposed bridge would remain at the current 35 miles per hour.

2.3 Project Purpose and Need

The purpose of this project is to improve public safety by providing a safe crossing of Gallup Creek for the public by replacing the existing, functionally obsolete, and reduced load capacity bridge with a structure that meets current acceptable standards. Constructed in 1965, the existing single-lane bridge is too narrow for the daily traffic volumes in addition to pedestrian usage. The bridge barriers do not meet current safety standards. The latest Caltrans Inspection Report classified the bridge as “Functionally Obsolete” with a Sufficiency Rating of 54.2. This only makes the bridge eligible for rehabilitation; however, replacement justification was provided to Caltrans and was subsequently approved. The replacement was approved because the existing bridge has a narrow, non-standard width. If it were rehabilitated, a new one-way bridge would need to be built adjacent to the existing bridge, which would render the cost of rehabilitation redundant.



▭ Action Area (1.76 acres)
X Map Reference Point

0 2,000
 Feet
 1 inch = 2,000 feet (At page size of 8.5"x11")



Project Location
 Stanislaus County, California
 Public Land Survey: T03S, R13E, Sec. 1, 2
 USGS 7.5 Quad: La Grange 1987

Client/Project
 Stanislaus County Department of Public Works
 Gallup Creek Bridge (38C0170) on Cooperstown
 Road Replacement Project

Figure No.

1

Title
Project Location

Notes
 1. Coordinate System: NAD 1983 StatePlane California III FIPS 0403 Feet
 2. Base map: ESRI USA Topo Maps Web Mapping Service

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2.4 Proposed Project

Replacement of Existing Structure

The proposed new bridge would be a two-span, cast-in-place, post-tensioned concrete, slab bridge and aligned on the existing alignment. Spread footings and cast-in-drilled-hole piles were identified as viable foundation alternatives; however, cast-in-drilled-hole piles are preferable due to scour concerns. The soffit of the new bridge would provide at least 2 feet of freeboard over the 100-year stormwater surface elevation. The new roadway profile would not need to be raised significantly. Rock slope protection (RSP) would be placed at both abutment embankments as a scour countermeasure. The bridge would include Type 85 concrete barrier railings and would be approximately 36 feet wide with the railing. The project would include road improvements designed with an unpaved roadway width of 28 feet (two 12-foot lanes and two 2-foot shoulders) to meet American Association of State Highway and Transportation Officials' (AASHTO) Standards. The project would be aligned within the existing Stanislaus County right-of-way (ROW) for Cooperstown Road, but construction would encroach onto neighboring private land.

No designated disposal or borrow sites would be required to complete the project. All construction debris, including wash water and removed paint, would be disposed of per state and county codes.

Demolition of the existing bridge will be performed in accordance with the Caltrans Standard Specifications modified to meet environmental permit requirements. All concrete and other debris resulting from the demolition of the existing bridge would be removed from the project site and disposed of by the contractor. The construction contractor will be responsible for preparing a bridge demolition plan that conforms to the permit requirements.

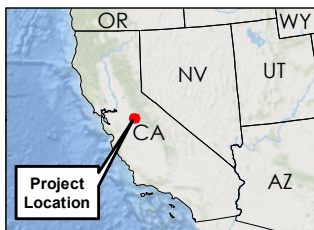
A small dozer will be used to grade the staging area and access to the creek. A backhoe and/or bobcat will be used to remove debris and material. Concrete trucks and long-reach concrete pump trucks will be used for the new bridge construction. Other equipment may include light trucks, man-lifts, generators, hoe ram, jackhammers, saw-cut machines, crane, and drill rig.

Right of Way

The alignment for the proposed new bridge and roadway approaches would follow the existing alignment, but with minor, temporary encroachments requiring construction easements on both sides of the bridge. The majority of the project study area corresponds to an existing Stanislaus County ROW easement through portions of adjacent parcels (Figure 2). Assessor Parcel Numbers included in the project area are 008-014-017 and 008-014-018.

Utilities

No utility relocations are anticipated for the proposed project.



- Notes**
1. Coordinate System: NAD 1983 StatePlane California III FIPS 0403 Feet
 2. Base map: ESRI World Imagery Web Mapping Service, Vivid, Maxar, 8/29/2018
 3. Public Land Survey: T03S, R13E, Sec. 1, 2
 4. USGS 7.5 Quad: La Grange 1987

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- Project Area (1.76 acres) Potential
- Staging Area
- New Bridge Piers
- Rock Slope Protection
- Existing Right of Way
- Existing Bridge Footprint
- Cut and Fill
- Low Water Crossing
- Main Road Alignment
- New Bridge Footprint
- Temporary Construction Easement
- Temporary Detour



Project Location
Stanislaus County, California
2272009900
Prepared by TM on 2020-09-25

Client/Project
Stanislaus County Department of Public Works
Gallup Creek Bridge (38C0170) on Cooperstown Road
Replacement Project

Figure No.

2

Title

Project Design

Other Construction Activities

Temporary Detour

Due to the low average daily trips and long detour distance on county roads (approximately 20 miles), the bridge would be closed during construction while traffic would use a temporary detour adjacent to the existing Cooperstown Road. This temporary detour would be approximately 15 feet wide and would be located just south of Cooperstown Road. Traffic would cross Gallup Creek via a low-water crossing because the creek is dry for several months during the summer. The low-water crossing would be constructed by laying a temporary pipe atop the creek bed perpendicular to the road and covering it with clean crushed rock. The pipe and rock used for the temporary crossing would be removed at the end of construction. The existing bridge would be demolished and removed from the project area as construction progresses.

Construction Access and Contractor Staging

The project would use two staging areas, both located within the County ROW (Figure 2). A temporary construction easement may be required for the temporary detour. The contractor would use Cooperstown Road to access the active construction site and staging areas. Contractors would also use the temporary detour to move vehicles and equipment from one side of the bridge to the other. When Gallup Creek is dry, contractors may drive construction vehicles and equipment up the creek bed to access the construction site from ground level.

Site Considerations

During construction, the area of vegetation clearing will be minimized and will be confined to the project footprint, including grading locations, construction access roads, and staging areas. No tree removal will be required. Environmentally sensitive areas will be flagged and designated to prevent impact by construction activities. All environmentally sensitive areas are to be avoided by all construction activities, material, and personnel. After construction is complete, creek bank, access roads, staging area, and any other disturbed areas will be restored to preconstruction conditions.

Sequencing

The general construction activities would include establishment of staging areas, establishment of the temporary detour (including placement of the pipe and rock in Gallup Creek), removal of the existing bridge, installation of the new bridge, improvements to the roadway, placement of rock slope protection, removal of the temporary detour, and restoration of disturbed areas.

2.5 Conservation Measures

The following conservation measures and best management practices (BMPs) will be followed during project construction to avoid or minimize potential environmental impacts:

Conservation Measure #1: Erosion and Sedimentation Control

Erosion control measures shall be implemented during construction of the project. These measures shall conform to the provisions in Section 21 of the Caltrans Standard Specifications (Caltrans 2018) and the

special provisions included in the contract for the project. Such provisions include the preparation of a Storm Water Pollution Prevention Plan or Water Pollution Control Program depending on size of the area of disturbance, these plans would describe and illustrate the use of BMPs to be implemented at the project site.

Erosion control measures to be included in the Storm Water Pollution Prevention Plan, Water Pollution Control Program, or to be implemented by the County include the following:

- To the extent practicable, activities that increase the erosion potential will be restricted to the relatively dry summer and early fall period to minimize the potential for rainfall events to transport sediment to surface water features. If these activities must take place during the late fall, winter, or spring, then temporary erosion and sediment control structures will be in place and operational at the end of each construction day and will be maintained until permanent erosion control structures are in place.
- Vegetation clearing and ground disturbing activity will be limited to the minimum area necessary for project implementation.
- Areas where woody vegetation needs to be removed will be identified in advance of ground disturbance and will be limited to only those areas that have been approved by the County DPW. Within 10 days of completion of construction in those areas, weed-free mulch will be applied to disturbed areas to reduce the potential for short-term erosion. Prior to a rain event, or when weather forecasts by the National Weather Service indicate a greater than 50 percent possibility of rain within the next 24 hours, weed-free mulch will be applied to all exposed areas at the completion of the day's activities. Soils will not be left exposed during the rainy season.
- Suitable best management practices, such as silt fences, straw wattles, or catch basins, will be placed below all construction activities at the edge of surface water features to intercept sediment before it reaches the waterway. These structures will be installed prior to any clearing or grading activities. Erosion control measures that employ monofilament netting will be prohibited within the work area.
- If spoil sites are used, they will be sited such that they do not drain directly into a surface water feature, if possible. If a spoil site drains into a surface water feature, catch basins will be constructed to intercept sediment before it reaches the feature. Spoil sites will be graded and vegetated to reduce the potential for erosion.
- Sediment control measures will be in place prior to the onset of the rainy season and will be monitored and maintained in good working condition until disturbed areas have been revegetated.
- All disturbed areas will be restored to pre-construction contours and revegetated, either through hydroseeding or other means, with native or approved non-invasive exotic species.

Conservation Measure #2: Prevention of Accidental Spills

Construction specifications will include the following measures to minimize the potential for adverse effects resulting from accidental spills of pollutants (e.g., fuel, oil, grease):

- A site-specific spill prevention plan would be completed and implemented for all potentially hazardous materials. This would include containment methods for any use of concrete or other hazardous materials according to Caltrans Standard Specifications (2018) Section 14-11.03. The plan would include the proper handling and storage of all potentially hazardous materials including concrete, as well as the proper procedures for cleaning up and reporting any spills. If necessary, containment berms would be constructed to prevent spilled materials from reaching surface water features.
- Equipment and hazardous materials would be stored at least 50 feet away from all waterways.
- Vehicles and equipment used during construction would receive proper and timely maintenance to reduce the potential for mechanical breakdowns leading to a spill of materials. Maintenance and fueling would be conducted in an area at least 50 feet away from waterways or within an adequate fueling containment area.
- For removal of the existing bridge, it would be required to submit a debris containment and collection plan per Caltrans Standard Specifications (2018) section 14-11.13B (2). The plan must include shop drawings of containment systems complying with section 59-2.01C (2) and include the name and location of the disposal facility that would accept any hazardous waste if determined to be present.

Conservation Measure #3: Prevention of Spread of Invasive Species

Construction specifications will include a requirement to prevent the spread of invasive plants in the work area. The contractor will implement the following measures:

- All equipment used for off-road construction activities will be weed-free prior to entering the project area.
- If project implementation calls for mulches or fill, they will be weed free.
- Any seed mixes or other vegetative material used for revegetation of disturbed sites will consist of locally adapted native plant materials to the extent practicable.

Conservation Measure #4: General Measures for Protection of Special-Status Wildlife Species

The County will implement the following general conservation measures to avoid or minimize the potential for adverse effects on special-status wildlife species:

- Prior to initiation of construction activities, workers will participate in environmental awareness training provided by a qualified biologist. The training will instruct workers: 1) how to identify special-status species, their various life forms, their habitat components; 2) the potential for these species to be discovered and/or affected during construction activities; 3) how to identify sensitive habitats (e.g., wetlands, riparian); and 4) what to do if special-status species are encountered during construction activities.
- Construction access and equipment will be located on existing roads or previously disturbed parking areas.

- Vehicle speeds within off-road portions of the work area shall not exceed 15 mph to avoid collisions with wildlife.
- Disturbance of soil, vegetation, naturally occurring debris piles (including fallen trees, woodrat nests, or dead tree snags), rocky outcrops, and existing burrows or crevices will be avoided or minimized to the extent possible.
- To the extent practicable, all holes or trenches will be covered at the end of each workday to prevent wildlife from becoming trapped. All holes and trenches will be inspected before each workday to facilitate the release of any trapped wildlife. A qualified biologist will be consulted if work crews are unable to safely assist in the release of trapped wildlife.
- To minimize attractants to wildlife, trash will be stored in containers that can be closed and latched or locked to prevent access by wildlife. All loose trash will be cleaned up daily.

Conservation Measure #5: Human Remains

Surface surveys are not infallible and buried resources may be overlooked. Implementation of the following conservation measures will avoid or minimize the potential for significant effects to newly discovered resources:

- If human remains are discovered during project activities, all activities near the find will be suspended and the Stanislaus County Sheriff–Coroner will be notified. If the coroner determines that the remains may be those of a Native American, the coroner will contact the Native American Heritage Commission (NAHC). Treatment of the remains will be conducted in accordance with the direction of the County Coroner and/or NAHC as appropriate.

Conservation Measure #6: Greenhouse Gas Emissions

Construction contract documents include provisions to minimize project-related greenhouse gas (GHG) emissions. The following measures will be implemented to reduce construction-related GHG emissions:

- Reuse and recycle construction and demolition waste including, but not limited to, soil, vegetation, concrete, lumber, metal, and cardboard.
- Ensure that the project enhances, and does not disrupt or create barriers to, non-motorized transportation (e.g., bicycles, pedestrians) through proper pre-construction planning.
- Protect existing trees to the extent possible and encourage the planting of new trees.

Conservation Measure #7: Wildfire Potential

Construction contract documents include measures to minimize project-related potential for wildfire ignition:

- Per the requirements of Public Resources Code Section 4442, the County will include a note on all construction plans that internal combustion engines will be equipped with an operational spark arrester, or the engine must be equipped for the prevention of fire.

2.6 Tentative Schedule

Construction would require one season to complete. It is anticipated to start in the spring of 2024 pending receipt of required environmental approvals, regulatory permits, and availability of project funding, and the bridge would be completed in approximately 7–8 months, ending in the late fall of 2024.

2.7 Required Permits and Approvals

The following permits will be required to implement the project:

- U.S. Army Corps of Engineers – Sacramento District: Section 404 Nationwide Permit 14 (Linear Transportation Projects)
- U.S. Fish and Wildlife Service – Pacific Southwest Region (Sacramento Fish And Wildlife Office): Federal Endangered Species Act Compliance
- Caltrans National Environmental Policy Act Determination (Categorical Exclusion [pursuant to 23 CFR 221.117(c)] issued March 17, 2021)
- California Department of Fish and Wildlife – Region 4: Section 1602 Streambed Alteration Agreement
- Central Valley Regional Water Quality Control Board: Section 401 Water Quality Certification
- Stanislaus County CEQA Notice of Determination to adopt the Initial Study/Mitigated Negative Declaration

2.8 Project Alternatives

In addition to the proposed project (which is Alternative 2 in the type selection study), the County also considered a “No Project” alternative and two additional build alternatives (Alternative 1 and 3), which are described below.

No Project Alternative

Under the No Project alternative, the County would not proceed with the replacement of the existing Gallup Creek bridge. However, Caltrans determined the existing bridge to be structurally deficient. Implementation of the No Project alternative could result in future public safety issues associated with its structural integrity.

Alternative 1 – Two-Span, Cast-in-Place Concrete Slab Bridge, Existing Alignment

Alternative 1 is a two-span, cast-in-place (CIP), reinforced concrete slab bridge 90.7 feet in length supported by concrete end diaphragm abutments founded on cast-in-drilled-hole (CIDH) and concrete pile extensions at the middle pier. This alternative would be constructed on the existing alignment and would be skewed to roughly match the stream. Alternative 1 was not chosen because of more it constricts the channel and because of future channel scour concerns.

Alternative 3 – Two-Span, Precast Concrete Voided Slab, Existing Alignment

Alternative 3 is a two-span, precast, prestressed concrete voided slab unit bridge 102 feet in length supported on concrete seat type abutments founded on cast-in-drilled-hole (CIDH) piles and 24-inch concrete pile extensions at the pier location. This alternative would be constructed on the existing alignment and would be skewed to roughly match the stream. This alternative will allow for quicker construction time due to the precast elements (by approximately one month). However, it was not selected because it is more expensive than the recommended alternative.

3. ENVIRONMENTAL SETTING, IMPACTS, AND MITIGATION MEASURES

This chapter incorporates the Environmental Checklist contained in Appendix G of the CEQA Guidelines, including the CEQA Mandatory Findings of Significance. Each resource section provides a brief description of the setting, a determination of impact potential, and a discussion of the impacts. Where appropriate, mitigation measures are provided to reduce potential impacts to a less-than-significant level. A discussion of cumulative impacts is included at the end of this chapter.

Addressed in this section are the following 20 environmental categories and mandatory findings of significance:

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

Each of these issue areas was fully evaluated and one of the following four impact determinations was made:

- **No Impact:** No impact to the environment would occur as a result of implementing the proposed project.
- **Less-than-Significant Impact:** Implementation of the proposed project would not result in a substantial and adverse change to the environment and no mitigation is required.
- **Less than Significant with Mitigation Incorporated:** A “significant” impact that can be reduced to a less-than-significant level with the incorporation of project-specific mitigation measures.
- **Potentially Significant Impact:** Implementation of the proposed project could result in an impact that has a “substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project” (CEQA Guidelines Section 15382).

3.1 Environmental Setting

Regional Setting

The site is located within San Joaquin Valley and near the eastern margin of the Great Valley geomorphic province of California. The Great Valley is located within the central portion of California and is an alluvial plain roughly 50 miles wide located between the Coast Ranges on the west and the Sierra

Nevada on the east. It is a northwest trending structural trough about 400 miles long that was formed by the westward tilting of the Sierra Nevada block.

Local Setting

The 1.76-acre project site is located along Cooperstown Road at its intersection with Gallup Creek, approximately 2.7 miles northwest of its intersection with La Grange Road. Gallup Creek begins in the foothills north of La Grange and is part of the larger Dry Creek watershed, which feeds into the Tuolumne River near Modesto. The area is characterized by low rolling hills largely made up of annual grasslands. Cooperstown Road is mainly used for local access to residences and ranchlands. The average daily traffic on Cooperstown Road near Gallup Creek is approximately 50 trips per day. The project area is largely bounded by rural residential and ranchlands.

Climate

Climate within the project area is as described below based on historical data collected at Knights Ferry, California approximately 12 miles northwest of the project area. The project area is characterized by a Mediterranean climate with moderate winters and hot, dry summers. Precipitation in the project area averages approximately 17 inches annually. Average air temperatures range between a January high of 53 degrees Fahrenheit (°F) and a July high of 95 °F. The year-round average high is approximately 74 °F. The growing season (i.e., 50% probability of air temperature 28°F or higher) in the project area is year-round. The soil temperature regime is thermic.

Existing Land Uses

Cooperstown Road crosses Gallup Creek approximately 2.7 miles northwest of its intersection with La Grange Road. Cooperstown Road is generally used for local access to residences and ranchlands. The project area is largely bounded by rural residential and ranchlands. Lands immediately adjacent to the project study area are zoned as A-2-40 (General Agriculture, 40-acre parcels).

Topography

The topography of the project area immediately adjacent to the Gallup Creek is nearly level; however, the topography rises slightly northwest of Cooperstown Road in the project area. Gallup Creek bisects the project area, which is the only drainage in the project area. The project area is located at an elevation of approximately 300 feet above mean sea level.

Air Quality

The proposed Project is located within the San Joaquin Valley Air Basin and is under the jurisdiction of the San Joaquin Valley Air Pollution Control District (SJVAPCD). No additional capacity is proposed for the project (no new through- or turn-lanes) and the project would not result in any new trips, vehicle miles traveled, or vehicle hours traveled in the permanent condition. Table 1 of the Caltrans Transportation Project-Level Carbon Monoxide Protocol lists specific types of projects that are exempt from all emissions analyses for determining air quality conformity. Included in the list is "Widening narrow pavements or reconstructing bridges (no additional travel lanes)". Additionally, since the project is consistent with these requirements, the Project will not be increasing operational traffic and it is assumed to be consistent with SJVAPCD and is exempt from local conformity review.

Hydrological Setting

Surface Waters

The project is located in the Gallup Creek-Dry Creek Watershed (Hydrologic Unit Code 180400091301), with the main hydrology provided by Gallup Creek. Gallup Creek is an intermittent stream whose headwaters are located approximately five miles northeast in the Sierra Nevada Foothills. Inputs from five unnamed drainages and Salt Springs Creek converge into Gallup Creek between the project area and the headwaters to Gallup Creek. Through the project area Gallup Creek varies from 24-64 feet wide. The hydrology for this creek is likely provided by sheet flow, springs, and groundwater. Drainage within the project area generally flows from northeast to southwest. Gallup Creek flows approximately 2.5 miles west to its confluence with Dry Creek, which is tributary to the Tuolumne River approximately 25 miles to the west. The Tuolumne River is a traditional navigable water.

At this time there are no known water quality assessments of Gallup Creek. There is also no gauge data available regarding pathogens, nutrients, or sediment. As such, Gallup Creek is not considered impaired under Clean Water Act (CWA) Section 303(d).

Groundwater

The proposed project is located in the San Joaquin Valley Groundwater Basin – Modesto Subbasin (Subbasin Number 5-22.02), which covers approximately 247,000 acres or 385 square miles. The Modesto subbasin lies between the Stanislaus River to the north and Tuolumne River to the south, and between the San Joaquin River on the west and crystalline basement rock of the Sierra Nevada foothills on the east. According to calculations conducted by the California Department of Water Resources (DWR) and cooperators, the total storage capacity of this subbasin is estimated to be 6,500,000 acre-feet to a depth of 300 feet. The annual natural recharge into the subbasin is estimated to be 86,000 acre-feet and the annual applied water recharge into the subbasin is estimated to be 92,000 acre-feet. Annual urban and agricultural extractions are estimated to be 81,000 and 145,000 acre-feet, respectively.

Existing groundwater quality in this basin is characterized as being calcium bicarbonate type in the eastern subbasin to a calcium-magnesium bicarbonate type or calcium-sodium bicarbonate type in the western portion. Total Dissolved Solids values range from 60 to 8,300 mg/L, with a typical range of 200 to 500 mg/L.

Soils

Three soil map units occur in the project area. They are described in the Custom Soil Resource Report for Stanislaus County, California Natural Resources Conservation Service, 2020). Soil map units occurring within the project area are listed below:

- **Lava and sandstone rockland, 15 to 50 percent slopes:** This is a non-hydric, excessively drained residuum from igneous rock sources. Depth to the restrictive layer is approximately 0 to 10 inches.
- **Honcut loam, 0 to 1 percent slopes:** This is a non-hydric, well-drained alluvium from igneous and metamorphic rock sources. Depth to the restrictive layer is more than 80 inches. Depth to the water table is more than 80 inches.

- **Hornitos gravelly fine sandy loam, 3 to 8 percent slopes:** This is a non-hydric, well-drained residuum weathered from sandstone rock sources. Depth to the restrictive layer is approximately 10 to 14 inches. Depth to the water table is more than 80 inches.

Geology

The underlying geology of the project site and immediately surrounding area consists of the late Pleistocene Modesto formation. The Modesto formation buries a westward extension of the Riverbank formation found in the Central Valley and also extends eastward to the foothills, including the project site, through older formations as a river terrace. The geology in the immediate vicinity of the project site is complex, with the Tertiary Valley Springs formation and Lone formation being found just to the north and south and the widespread Jurassic Gopher Ridge Volcanics in the hills to the east of the project site.

Vegetation Community Types

Habitat communities in the project site were classified based on habitat descriptions provided in *A Guide to Wildlife Habitats of California* (Mayer and Laudenslayer 1988) and the results of the field survey. A total of three habitat types were identified in the action area which include annual grassland, barren, and riverine (Figure 3). Descriptions of these habitats are provided below.

Annual Grassland

Annual grassland is a dominant habitat type in the project site. It is characterized as a dense herbaceous layer and is dominated by introduced annual grasses, including soft brome (*Bromus hordeaceus*), ripgut brome (*B. diandrus*), slender oats (*Avena barbata*), wall barley (*Hordeum murinum*), and bulbous bluegrass (*Poa bulbosa*). Common forbs include black mustard (*Brassica nigra*), valley tassel (*Castilleja attenuata*), broadleaf filaree (*Erodium botrys*), gumweed (*Grindelia camporum*), California burclover (*Medicago polymorpha*), German knotgrass (*Scleranthus annuus* ssp. *annuus*), and red-sand spurrey (*Spergularia rubra*). Within the action area, three blue oak (*Quercus douglasii*) trees occur in the annual grassland habitat.

Barren

Barren areas are present on the dirt road (Cooperstown Road) and the associated road shoulders. Vegetation is absent on the road surface, although sparse opportunistic grasses and forbs are present on the road shoulders.

Riverine

Gallup Creek, who is classified as an intermittent drainage, provides the only riverine habitat within the project study area. The creek is characterized by run and riffle areas with cobble and gravel substrates. Vegetation within the active stream channel is sparse and limited to the banks of the stream. Gallup Creek was dry during the field surveys completed on May 8, 2013, and June 17, 2020, although a deep section of the creek, approximately 100 feet upstream of the bridge, contained standing water.

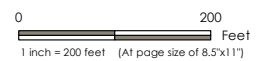


- Project Study Area (1.76 acres)
- Annual Grassland
- Barren
- Riverine

Notes

1. Coordinate System: NAD 1983 StatePlane California III FIPS 0403 Feet
2. Base map: ESRI World Imagery Web Mapping Service, Vivid, Maxar, 8/29/2018
3. Public Land Survey: T03S, R13E, Sec. 1, 2
4. USGS 7.5 Quad: La Grange 1987

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Project Location
Stanislaus County, California

2272009900
Prepared by TM on 2020-06-23

Client/Project
Stanislaus County Department of Public Works
Gallup Creek Bridge (38C0170) on Cooperstown Road
Replacement Project

Figure No.

3

Title

Habitat Types

3.2 Environmental Impacts and Mitigation Measures

Aesthetics

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
I. AESTHETICS — Would the project:				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion of Impacts

- a) **No Impact.** A Visual Impact Assessment memorandum, which assesses the likely aesthetic alterations as a result of the project, was prepared for the project (Quincy Engineering Inc., 2013). The environmental setting is rural Stanislaus County with the land use consisting of mostly agricultural (livestock grazing). While distant views of the Sierra Nevada foothills from the project area exist, no officially designated scenic resources, view sheds, scenic roadways, or recreation areas are located in the vicinity of the project area. The project consists of replacing the existing Gallup Creek bridge and Cooperstown Road approaches with similar structures along the existing alignment and would be constructed in a manner consistent with the existing aesthetic. The project would have no impact on a designated scenic vista.
- b) **Less-than-Significant Impact.** Cooperstown Road is not designated as a state scenic highway. The closest officially designated state scenic highway is approximately 38 miles to the southwest (Caltrans 2022). Cooperstown road is also not identified as a local scenic highway in the County's General Plan. The project would have no impact to scenic resources within a state scenic highway. Removal of vegetation would be limited and localized to allow for the new bridge alignment. Vegetation removal impacts would be minimal, decreasing over time as vegetation re-establishes and viewers (e.g., tourists, residents) acclimate to the changes associated with the new bridge and its approaches. Project impacts on existing scenic qualities would be less than significant.
- c) **Less-than-Significant Impact.** The project includes the replacement of the existing bridge with a similarly-sized structure and no changes to the existing rural landscape are expected. Construction activities resulting from the project would not require the removal of any of the oak trees located

within the project site. Retention of oaks in the project area would maintain the intactness of the existing view. Additionally, the project site is not considered highly disturbed, and the vegetation does not receive substantial maintenance. Any affected vegetation is anticipated to grow back with no substantial permanent changes to existing views anticipated. The proposed use of the existing bridge and roadway alignments and low structure profile would retain the qualities of the natural viewshed. Therefore, the project's impact on existing visual character and quality of existing views would be less than significant.

- d) **Less-than-Significant Impact.** Construction and operation of the project are not expected to result in increased glare in the project area. The minor removal of vegetation would not increase the potential for glare from project area surfaces. The project would not introduce any new light sources or materials prone to glare. Because it would follow the existing alignment, headlights of vehicles traveling through the area would be buffered by surrounding vegetation, topography, and the limited number of sensitive receptors (e.g., residences) in line with the road. Project impacts from light or glare would be less than significant.

Mitigation Measures

No project-specific mitigation is required under this subject.

Agricultural and Forest Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
II. AGRICULTURAL 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 forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined by Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production as defined by Government Code Section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion of Impacts

- a) **Less-than-Significant Impact.** Certain lands within and surrounding the project area have been designated by the state as Prime Farmland (if irrigated). However, the land is not currently irrigated. Therefore, no lands within or surrounding the project area are considered Farmland as defined by the California Resources Agency. The lands surrounding the project area are used primarily for livestock grazing. The placement of new fill material for the road bed and abutments would remove a small amount of grassland; however, this is not expected to convert any grazing land because livestock are restricted from entering the County ROW by a fence. Construction of the temporary detour could convert a small amount of grassland (i.e., grazing land) to road uses; however, any loss would be negligible and short-term. Because there is no Farmland in the vicinity of the project area, as defined by the California Resources Agency, the project would not result in the conversion of Farmland. Project impacts regarding the conversion of Farmland to non-agricultural use would be less than significant.
- b) **Less-than-Significant Impact.** The project would temporarily encroach on land (APNs 008-014-017 and 008-014-018) that is currently under Williamson Act contract and zoned as Agriculture (Stanislaus County 2006). Construction of the temporary detour could convert a small amount of grassland (i.e., grazing land) on these parcels to road uses; however, any loss would be negligible and short-term as grasses would grow back following construction. Because the encroachment would be temporary, and because any loss of grazing land would be negligible, the project would not impair the use of the land for agricultural use. Therefore, the project would have a less-than-significant impact to lands under Williamson Act contract or land zoned as agriculture.
- c) **No Impact.** No forest land, timberland, or timberland zoned for timber production is located in the project area or vicinity. The project would not cause rezoning of forestland, timberland, or timberland zoned for timber production.
- d) **No Impact.** The project area does not include any designated forest land. The project would not convert any forest land to non-forest uses and would not result in the loss of forest lands in Stanislaus County.
- e) **No Impact.** There are no lands within or surrounding the project area that are considered Farmland as defined by the California Resources Agency. No other aspects of the project would result in changes in the existing environment that could result in the conversion of Farmland to non-agricultural use. The project area does not include any forest land. Therefore, the project would have no impact with respect to this issue.

Mitigation Measures

No project-specific mitigation is required under this subject.

Air Quality

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
III. AIR QUALITY — Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion of Impacts

- a) **No Impact.** The proposed project is consistent with the site land use and zoning, as designated in the Stanislaus County General Plan and Zoning Code. All construction easements would be temporary; the replacement of an existing bridge along the existing alignment, with no additional travel lanes, would not increase traffic. Therefore, construction and operation of the proposed project would not conflict with or obstruct implementation of any federal, state, or local air quality plan and there would be no impact.
- b) **Less than Significant with Mitigation Incorporated.** The project is located within the San Joaquin Valley Air Basin, under the jurisdiction of San Joaquin Valley Air Pollution Control District (SJVAPCD). The California Air Resources Board (CARB) designates areas of the state as being in attainment, non-attainment, or unclassified for any state standard:
- Attainment – pollutant concentrations do not violate a pollutant standard within the area;
 - Non-Attainment – pollutant concentrations violate the standard at least once within a calendar year;
 - Unclassified – pollutant data are not sufficient to determine the attainment or nonattainment status for an air basin.

The air quality attainment status for Stanislaus County is summarized in Table 1.

Table 1. NAAQS and CAAQS Attainment Status for Stanislaus County

Pollutant	Designation/Classification	
	Federal Standards	State Standards
Ozone – 8-Hour	No Federal Standard	Non-attainment/Severe
Ozone – 1-Hour	Non-attainment/Extreme	Non-attainment
PM10	Attainment	Non-attainment
PM 2.5	Non-attainment	Non-attainment
Carbon Monoxide	Attainment/Unclassified	Attainment/Unclassified
Nitrogen Dioxide	Attainment/Unclassified	Attainment
Sulfur Dioxide	Attainment/Unclassified	Attainment
Sulfates	No Federal Standard	Attainment
Lead	No Designation/Classification	Attainment
Hydrogen Sulfide	No Federal Standard	Unclassified
Visibility Reducing Particles	No Federal Standard	Unclassified
Vinyl Chloride	No Federal Standard	Attainment

Sources: CARB 2021a; EPA 2022

Although Stanislaus County is in “non-attainment” status for ozone and PM-2.5 for both state and federal standards, and in “nonattainment” status for PM-10 for state standards (California Air Resources Board 2021a), due to its smaller size, the project would not substantially contribute to cumulative air quality impacts in the San Joaquin Valley.

Long-Term Emissions

The proposed project is not increasing traffic capacity as it would replace an existing one-lane bridge with a new two-lane structure, with no additional travel lanes as the bridge approaches along Cooperstown Road already accommodate two-lanes of traffic. Consequently, additional long-term emissions associated with increased traffic in the project study area are not expected to be generated as a result of operation of the project.

Construction Emissions

Temporary construction activities for the proposed project may include site preparation and bridge construction that would involve excavation, grading, and other construction activities. Construction equipment, such as front-end loaders, bulldozers, graders, dump trucks, backhoes, excavators, and pick-up trucks, would be used to during construction. During construction, short-term air quality impacts are expected from the release of particulate emissions (airborne dust) generated by excavation, grading, hauling, and other activities related to construction. These emissions would be intermittent and temporary and limited to the immediate area surrounding the construction site. The total construction time is anticipated to be 4-5 months.

Of these emissions PM-10 is of greatest concern for construction projects. PM-10 can originate not only from construction vehicle and equipment emissions, but also from fugitive dust. While Stanislaus County is in “non-attainment” for ozone precursor emissions, most notably NO_x and reactive organic gases, they are significant only in the case of large or intense construction

projects, which is not the case for this project (SJVAPCD 2022). Construction emissions were estimated using the latest Sacramento Metropolitan Air Quality Management District's Road Construction Model (Version 9.00, SMAQMD 2018). Construction emissions for the proposed project are presented in Table 2. The emissions presented are based on the best information available at the time of calculations. The emissions represent the peak daily construction emissions that would be generated by construction of the proposed project.

Table 2. Construction Emissions from Construction Activity

Activity	CO (lbs./day)	NOx (lbs/day)	ROG (lbs/day)	SOx (lbs/day)	PM10 (lbs/day)	PM2/5 (lbs/day)
Grubbing/Land Clearing	9.56	8.93	0.91	0.02	0.59	0.39
Grading/Excavation	64.79	79.66	7.71	0.16	3.49	3.00
Drainage/Sub-Grade	46.73	55.38	5.42	0.11	2.47	2.11
Paving	12.86	9.11	0.93	0.02	0.47	0.41
Maximum Daily (lbs/day)	64.79	79.66	7.71	0.16	3.49	3.00
Project Total (tons/construction project)	5.07	6.02	0.59	0.01	0.27	0.23

Source: SMAQMD Road Construction Model 2018

The SJVAPCD emphasizes implementation of effective and comprehensive control measures rather than detailed quantification of construction emissions. All construction activities would follow the SJVAPCD rules and would implement all appropriate air quality Best Management Practices (BMPs), including minimizing equipment idling time and use of water or similar chemical palliative to control fugitive dust. Specifically, SJVAPCD requires all construction projects to comply with Regulation VIII Control Measures (SJVAPCD 2002). All of the control measures relevant to this project have been included in Mitigation Measure AQ -1 (Air Quality/ Dust Control). Implementation of these measures would reduce PM-10 impacts to a level considered less-than- significant.

- c) **No Impact.** During construction, short-term degradation of air quality is expected from the release of particulate emissions (airborne dust) generated by excavation, grading, hauling, and other activities related to construction. Emissions from construction equipment powered by gasoline and diesel engines are also anticipated and would include CO, NOx, volatile organic compounds, directly emitted PM10 and PM2.5, and toxic air contaminants (TACs) such as diesel exhaust particulate matter. The greatest potential for TAC emissions would be related to diesel particulate emissions associated with heavy equipment operations during grading and excavation activities. In addition, incidental amounts of toxic substances such as oils, solvents, and paints would be used during construction. These substances would comply with all applicable SJVAPCD rules for their manufacture and use. However, there are no sensitive receptors such as schools, hospitals, or daycare centers located within three miles of the project site and the nearest residence is over 0.5 miles away. Therefore, the project would have no impact on exposing sensitive receptors to substantial pollution concentrations.

- d) **Less-than-Significant Impact.** Construction activities would involve the use of gasoline or diesel-powered equipment that emits exhaust fumes. Construction could also involve asphalt paving, which has a distinctive odor during application. While persons near the construction work area may find these odors objectionable, emissions would be infrequent, would dissipate rapidly, and would be temporary. The effect of odors generated by project construction would be less than significant.

Mitigation Measures

Mitigation Measure AQ -1: Air Quality/Dust Control

In the construction bid documents, the County shall include provisions that the contractor shall implement a dust control program to limit fugitive dust emissions. The dust control program shall include, but not be limited to, the following elements, as appropriate:

- The construction contractor shall comply with the SJVAPCD Regulation VIII as it pertains to fugitive dust (PM10).
- To control dust, apply water to inactive portions of the construction site and exposed stockpiles at least twice daily or until soils are sufficiently stable to prevent being carried away Tabby winds.
- Water shall be applied on disturbed open soil by means of pressure-type distributors or pipelines equipped with a spray system or hoses and nozzles that will ensure even distribution of water.
- All distribution equipment shall be equipped with a positive means of shutoff.
- If reclaimed water is used, the sources and discharge must meet California Department of Health Services water reclamation criteria and the Central Valley Regional Water Quality Control Board requirements. Non-potable water shall not be conveyed in tanks or drain pipes that will be used to convey potable water and there shall be no connection between potable and non-potable supplied. Non-potable tanks, pipes and other conveyances shall be marked “NON-POTABLE WATER – DO NOT DRINK.”
- Equipment or manual watering will be conducted on all stockpiles, dirt/gravel roads, and exposed or disturbed soil surfaces (inactive construction sites), as necessary, to reduce airborne dust.
- Pursuant to California Vehicle Code, all trucks hauling soil and other loose material to and from the construction site shall be covered or should maintain at least 6 inches of freeboard (i.e., minimum vertical distance between the top of the load and the trailer).
- Any topsoil removed during construction shall be stored on-site in piles no higher than four feet to allow development of microorganisms prior to replacing the soil in the construction area. The topsoil piles shall be clearly marked and flagged. Topsoil piles that will not immediately be used in the construction area shall be revegetated with a non-persistent erosion control mixture.
- Soil piles for backfill shall be marked and flagged separately from native topsoil stockpiles. These soil piles shall also be surrounded by silt fencing, straw wattles, or other sediment barriers or covered unless they are to be used immediately.

- All stockpiles, dirt/gravel roads, and exposed or disturbed soil surfaces shall be watered by hand or with watering equipment, as necessary, to reduce airborne dust.
- All on-site unpaved roads and off-site unpaved access roads shall be effectively stabilized of dust emissions using water or chemical stabilizer/suppressant.
- All land clearing, grubbing, scraping, excavation, land leveling, grading, cut & fill, and demolition activities shall be effectively controlled of fugitive dust emissions utilizing application of water or by presoaking.
- Following the addition of materials to, or the removal of materials from, the surface of outdoor storage piles, said piles shall be effectively stabilized of fugitive dust emissions utilizing sufficient water or chemical stabilizer/suppressant. Materials applied as temporary stabilizers will also provide wind erosion control benefits.
- If the project generates 150 or more vehicle trips per day, the construction contractor shall prevent carryout and trackout.

Timing/Implementation: Prior to a construction/during construction/post construction

Enforcement: SJVAPCD

Monitoring: County and/or its contractor

Biological Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
IV. BIOLOGICAL RESOURCES — Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion of Impacts

- a) **Less than Significant with Mitigation Incorporated.** A Biological Assessment (BA) (Stantec 2021) and a delineation of Waters of the United States (Stantec 2020a) were used to assess the project impacts on special-status biological resources known to occur in the project area and the results are outlined in the project's Natural Environment Study (Stantec 2020b).

Aquatic habitat is present in the project area, although Gallup Creek was dry during the site visit on May 8, 2013, and June 2020. The aquatic habitat in the project area does not include holding, spawning, or rearing habitat suitable for special-status anadromous fish species such as Chinook salmon (*Oncorhynchus tshawytscha*) or steelhead (*Oncorhynchus mykiss ssp. irideus*).

Special-Status Plants

Although designated critical habitat for Hoover's spurge (*Chamaesyce hooveri*), succulent owl's clover (*Castilleja campestris ssp. succulenta*), Colusa grass (*Neostapfia colusana*), and Greene's tuctoria (*Tuctoria greenei*) is present within the project study area, it would not be impacted or

adversely modified given the absence of all physical or biological features (PBFs). A PBF is essential to the conservation of a species upon which its designated or proposed critical habitat is based, such as space for growth of individuals and populations and for normal behavior; food, water, air, light, minerals, or other nutritional or physiological requirements; cover or shelter; sites for breeding, reproduction, rearing of offspring, germination, or seed dispersal; and habitats that are protected from disturbance or are representative of the species' historic geographic and ecological distribution. Only one PBF must be present for a location to be considered critical habitat. No portion of the project study area functions as either of the two PBFs for the vernal pool plants. The project study area is composed of barren habitat (i.e., road surface and shoulders), riverine habitat (i.e., Gallup Creek), and annual grassland. None of these habitat areas include vernal pools, swales, or other ephemeral wetland features that hold water for sufficient lengths of time necessary for the species to complete their life cycle. Therefore, no portion of the project study area functions as PBFs for these species. This project will have no impact on succulent owl's clove, Hoover's spurge, Colusa grass, and Greene's Tuctoria or their designated critical habitat.

Based on the review of habitat requirements of the regionally occurring special-status plants and the results of the field assessment, it was determined that annual grassland in the project study area provides potentially suitable habitat for six special-status plant species:

- Hoover's calycadenia (*Calycadenia hooveri*);
- Beaked clarkia (*Clarkia rostrata*);
- Hoover's cryptantha (*Cryptantha hooveri*);
- Spiny-sealed button-celery (*Eryngium spinosepalum*);
- Forked hare-leaf (*Lagophylla dichotoma*);
- Merced monardella (*Monardella leucocephala*).

The botanical survey conducted on May 8, 2013, occurred within the blooming period of five of the six plants listed above. No special-status plant species were observed during the botanical survey. Hoover's Calycadenia, which blooms from July through September. Hoover's calycadenia is an annual herb that blooms from July to September and may not have been identifiable during the May 8, 2013, botanical survey. Several individuals of a closely related species, spicate calycadenia (*Calycadenia spicata*) were observed in bloom on May 7, 2013, near Rydberg Creek, about 1.5 miles northwest of the project study area during surveys performed for a different project. While the blooming period for this species is earlier than Hoover's calycadenia, its presence indicates that the *Calycadenia* genus would have been recognizable during the botanical survey in the BSA. No species in the *Calycadenia* genus were observed in the project study area.

Drought conditions during the spring of 2013 resulted in somewhat less than normal precipitation near the BSA during the 2013 botany surveys. The BSA is in the Tuolumne River Basin and received 72 percent of its historic precipitation during the 2013 water year (data available online at http://cdec.water.ca.gov/snow_rain.html). Generally, the plant species that are most affected by low rainfall and drought are those that occur in vernal pool habitat due to the species' dependence on pools supplied by rainwater. The BSA does not contain vernal pool habitat; therefore, the drought conditions of 2013 would not significantly affect the results of the botanical survey. While the 2020 site visit determined that conditions are similar to those observed in 2013, due to the length of time since the previous survey, a botanical survey is recommended prior to construction and during the

blooming periods of potential special-status plants (Mitigation Measure BIO-1 [Special-Status Plants]) to ensure impacts to special-status plants would be less than significant.

Special-Status Wildlife

Based on the review of habitat requirements and the results of the field assessment, the following eight special-status wildlife species were determined to have the potential to use habitats in the project area or immediate vicinity (Stantec 2020b):

Fish

- San Joaquin roach (*Lavinia symmetricus* ssp. 1): State-listed SSC

Amphibians and Reptiles

- California tiger salamander (*Ambystoma californiense*): Federally Threatened / State Threatened
- California red-legged frog (*Rana draytonii*): Federally Threatened / State-listed SSC
- Western pond turtle (*Actinemys marmorata*): State-listed SSC

Birds

- Swainson's hawk (*Buteo swainsoni*): State Threatened
- white-tailed kite (*Elanus leucurus*): State Fully Protected
- loggerhead shrike (*Lanius ludovicianus*): State-listed SSC

Mammals

- San Joaquin kit fox (*Vulpes macrotis*): Federally Endangered / State Threatened

San Joaquin Roach. San Joaquin roach is designated as a Species of Special Concern by the CDFW. This fish species is found in small, warm streams that are tributary to the San Joaquin River system south of the Cosumnes River. San Joaquin roach may also occur in warm intermittent streams. This species tends to use streams with deep, isolated pools and large cobbles. Habitat within the project study area is marginal for San Joaquin roach. Deep-bottomed pools are not present, but isolated pools may be located upstream and downstream of the project site along Gallup Creek. The section of Gallup Creek within the project study was dry during the May 2013 and June 2020 site visits, and fish were not observed. The nearest California Natural Diversity Database (CNDDDB) record for San Joaquin roach is located approximately nine miles east of the project study area in tributaries of Don Pedro Reservoir. The project study area is located within the range of San Joaquin roach, and this species could occur at the project site when Gallup Creek is flowing. Proposed project construction is expected to occur when Gallup Creek is dry. However, storm events during the construction season could produce short-term flows within the creek.

Because project implementation would involve modification or alteration of the streambed and the streambank, it has the potential for limited, short-term impacts on San Joaquin roach. Project activities are expected to occur when Gallup Creek is dry. The low-flow crossing would be installed, vehicles and equipment would access the creek bed, and in-stream construction work would occur only when the creek is dry. For these reasons, the project is not expected to have a direct effect on this species. If storm events were to erode soil exposed by construction activities, siltation within

the creek could temporarily affect the quality of the habitat for San Joaquin roach. Inadvertent fuel and chemical spills could also affect the quality of the habitat for San Joaquin roach within the creek. *Conservation Measures #1 - Erosion and Sedimentation Control* and *#2 - Prevention of Accidental Spills* described in Section 2.5 shall be implemented to reduce the potential for erosion, siltation, and inadvertent chemical spills, thereby reducing the potential for impacts on San Joaquin roach to a less than significant level. No project-specific mitigation measures are required.

California Red-Legged Frog. California red-legged frog is a federally threatened species and state species of special concern. Stanislaus County is not considered part of the red-legged frog's current range but was part of the historic range. California red-legged frogs are presumed to be extirpated from the Central Valley floor (Stantec 2021), and most of Stanislaus County is located on the Valley floor.

The project study area is located approximately 0.5 mile west of the Stanislaus-Tuolumne County line and current known range of California red-legged frog, which includes Tuolumne but not Stanislaus County. The project study area is located approximately 40 miles southeast of the nearest designated critical habitat unit for California red-legged frog. The nearest record for this species, dated 1992, is located approximately 17 miles southeast of the project study area in Cuneo Creek, near the community of Coulterville, in Mariposa County. At this recorded site, 25 California red-legged frog tadpoles were observed in an instream impoundment with a depth of six feet (Stantec 2021). There are no known occurrences in the Gallup Creek watershed. No California red-legged frogs or other frog species were observed during reconnaissance visits on May 8, 2013, and June 2020.

In the project study area, Gallup Creek lacks the characteristics required to support breeding California red-legged frogs, including sufficient water depth, inundation period to support metamorphosis, and cover. Gallup Creek is the only aquatic feature in the project study area, and it was nearly dry during the reconnaissance visit on May 8, 2013. Gallup Creek flows intermittently during winter and spring months, and residual channel pools may hold water into the early part of the summer. Two isolated pools observed in Gallup Creek near the project study area in May 2013 were approximately one foot deep and lacked fresh emergent vegetation for egg attachment and cover for frogs. Based on the shallow depth of the pools, these features are likely typically dry by June, which, in an annual breeding cycle, would be an insufficient time period for frogs to metamorphose. Three stock ponds and three instream pools in Gallup Creek within one mile of the project study area were identified on aerial imagery and could provide potentially suitable breeding habitat. The stock pond closest to the project study area is approximately 0.3 mile to the northwest, and the nearest instream pool is approximately 0.3 mile northeast of the project study area. Based on aerial photo interpretation, the perimeter of these ponds may support emergent vegetation. Dominant substrate in the instream pools is bedrock, and the pools do not appear to support emergent vegetation. American bullfrogs were observed in Rydberg Creek approximately 1.5 miles northwest of the project study area. This observation suggests that bullfrogs may occur widely in other local aquatic features within the watershed, which would further reduce potential for occurrence of the red-legged frog. Although California red-legged frogs have been reported to co-occur with bullfrogs under specific conditions, such as in some aquatic habitats that are subject to seasonal drying, examination of Google Earth's historical time-series satellite imagery of the area suggests that the ponds within one mile of the project study area are relatively permanent stock ponds and retain water year-round. Although suitable breeding habitat is absent in the project study

area, a low probability exists that California red-legged frogs could disperse through the project site because of its proximity to perennial water bodies and the red-legged frog's current range when moving between suitable aquatic habitats. California red-legged frogs could disperse through the project site in Gallup Creek when the creek is wet or during wet periods (typically fall through spring).

Construction activities associated with the proposed project are expected to occur between late-spring and fall, when the creek channel and surrounding uplands at this location are typically dry and the probability of encountering dispersing California red-legged frogs is lowest. If work occurs when Gallup Creek is wet or during wet conditions, California red-legged frogs, if present in nearby aquatic breeding habitat, may move through the stream corridor or overland to disperse or seek other aquatic habitat. If California red-legged frogs are present in the project site during construction activities, direct impacts could include increased risk of injury, predation, and stress resulting from obstruction of movement corridors due to the presence of crews and equipment in the creek; the use of a temporary diversion structure in the creek; filling or crushing of crevices or other areas used for refuge; injuries resulting from direct contact with construction vehicles and equipment during construction activities; and silting, fill, or spill of oil or other chemicals into Gallup Creek resulting in reduced water quality and degradation of dispersal habitat. No designated critical habitat occurs in the project study area; therefore, there would be no effect on critical habitat.

Mitigation Measure BIO-2 (California Red-Legged Frog and California Tiger Salamander) described below shall be implemented to reduce any impacts on salamanders and frogs to a less-than-significant level. In addition, *Conservation Measure #1 – Erosion and Sedimentation Control*, *Conservation Measure #2 – Prevention of Accidental Spills*, and *Conservation Measure #4 – General Measures for Protection of Special-Status Wildlife Species* described in Section 2.5 shall be implemented to maintain water quality and provide additional protections to natural resources. Impacts to California red-legged frog would be mitigated to less than significant level with implementation of these measures.

California Tiger Salamander. California tiger salamander is a federally and state-listed threatened species. The California tiger salamander primarily inhabits annual grasslands but may also occur in hardwood forests and along streams in valley-foothill riparian habitat (Stantec 2021). The project study area is located within the current known range of the California tiger salamander, which extends from Sonoma County east to the Yolo-Colusa County line and south to Tulare County in the Central Valley. Along the Coast Range, California tiger salamander occurs from Sonoma County south to Santa Barbara County (Stantec 2021). The nearest CNDDDB record for this species occurs approximately four miles to the south of the project study area near La Grange in Stanislaus County. This population is considered to be extant, with surrounding habitat abundant, but threatened by agricultural expansion (Stantec 2021).

The project study area provides some limited habitat components for this species (e.g., seasonal water in Gallup Creek). Based on field observations and a review of recent aerial imagery (Google Earth aerial imagery 1993–2011), multiple ponds, perennial pools, and seasonal pools are located within one mile of the project study area. While suitable breeding habitat is not present in the project study area, suitable upland habitat is present that includes underground refugia, which is present in the form of ground squirrel burrows flanking Cooperstown Road in the project study area. If present, California tiger salamander activity would likely be limited to movement between

breeding habitat (outside of the project study area) and upland habitat through the project study area during wet conditions. By building the project during the drier time of the year (i.e., late spring through early fall), the potential for wet conditions and likelihood that California tiger salamander would move overland through the project study area, and therefore occur within the project study area, is reduced.

On May 8, 2013, during surveys for a separate project, biologists observed adult American bullfrog (*Lithobates catesbianus*) and tadpoles in Rydberg Creek at the Rydberg Creek Bridge on Cooperstown Road, approximately 1.25 miles northwest of the project site. Rydberg and Gallup Creeks are both tributaries to Dry Creek, and American bullfrog is a potential predator of California tiger salamander (Stantec 2021). California tiger salamander is typically not found to be associated in unvegetated breeding pools occupied by American bullfrog. The presence of American bullfrog in the vicinity of the project study area may diminish the quality of potential breeding habitat that occurs within one mile of the project study area and minimize the potential for this species to occur moving through the project study area.

Although the project study area is within the current known range for California tiger salamander, this species has a low likelihood of occurring within the project study area due to the presence of bullfrogs (a predatory species to California tiger salamander) in the local aquatic features, lack of suitable breeding habitat within the project study area, and the favorable timing of project construction (i.e., during the dry season). Breeding habitat for California tiger salamander is not present in the project study area but may occur within one mile of the project study area. If present in the project region, the species would likely be present in the project study area while they are in underground refugia or while moving between breeding sites and upland refugia during wet conditions. Although very unlikely, if California tiger salamander are present within the project site during project activities, direct effects could include crushing, dismemberment, and other injuries resulting from contact with vehicles and other construction equipment; a reduction of prey items caused by silting, fill placement, or spilling of oil or other chemicals; obstruction of movement corridors due to the presence of people, equipment, and topographic changes; displacement from the project study area due to the presence of people and equipment; and, an increased risk of predation by wildlife attracted by the project. Indirect impacts associated with short-term construction activity may occur. Because no breeding habitat is located within the project study area, and suitable upland habitat (grasslands supporting underground refugia) is abundant in the greater area around the project study, the project is not expected to alter habitat suitability for California tiger salamander from existing conditions. The project would not indirectly affect California tiger salamander.

Mitigation Measure BIO-2 (California Red-Legged Frog and California Tiger Salamander) described below shall be implemented to reduce any impacts on salamanders and frogs to a less-than-significant level. In addition, *Conservation Measure #1 – Erosion and Sedimentation Control*, *Conservation Measure #2 – Prevention of Accidental Spills*, and *Conservation Measure #4 – General Measures for Protection of Special-Status Wildlife Species* described in Section 2.5 shall be implemented to maintain water quality and provide additional protections to natural resources. Impacts to California tiger salamander would be mitigated to less than significant level with implementation of these measures.

Western Pond Turtle. Western pond turtle is designated as a Species of Special Concern by the CDFW. This species is found in a wide range of aquatic habitats with emergent structure for basking and feeding. Western pond turtles also use adjacent upland sites for nesting, often travelling up to 0.3 mile over land to reach suitable nesting sites (Stantec 2020b). Habitat for western pond turtles within the project study area is marginal. There is no perennial water source or emergent structures (e.g., emergent snags or rock structures) present in the project study area, and potential basking sites are limited to the banks of Gallup Creek. Western pond turtle was not observed during the site visits, although nesting habitat could be present above the banks of Gallup Creek. Within a 1-mile radius of the project study area, there are multiple ponds that could provide suitable habitat for western pond turtle. Downstream of the project study area, portions of Gallup Creek and Dry Creek may perennially hold water and may provide suitable habitat for western pond turtle. Western pond turtle could occur onsite when water is present but is more likely to occur in areas with permanent water or ponds. There are no CNDDDB-reported occurrences of western pond turtle within five miles of the project study area.

Because project implementation would involve modification or alteration of the streambed and the stream bank, it has the potential for limited short-term impacts on western pond turtle. Potential adverse impacts on western pond turtle include stress, injury, or mortality to individuals or their nests resulting from project vehicles and equipment accessing the site; heavy equipment operation; installation of RSP and temporary low-flow crossing; excavation activities; temporary loss of habitat and movement corridors during installation of RSP; sedimentation and turbidity resulting from work within the channel of Gallup Creek; and fuel and oil spills within the banks of Gallup Creek.

Mitigation Measure BIO-3 (Western Pond Turtle) shall be implemented to reduce any impacts on turtles to a less-than-significant level. In addition, *Conservation Measure #1 – Erosion and Sedimentation Control* and *Conservation Measure #2 – Prevention of Accidental Spills* shall be implemented to maintain water quality. Additional protective measures are provided with implementation of *Conservation Measure #4 – General Measures for Protection of Special-Status Wildlife Species*, as described in Section 2.5. Impacts to western pond turtle would be mitigated to less than significant level with implementation of these measures.

Swainson's Hawk/White-Tailed Kite/Loggerhead Shrike. Swainson's hawk is listed as Threatened by CDFW. In the Central Valley, this species generally nests in isolated stands of trees and along forested edges near open habitats, such as annual grasslands and row crops that provide foraging habitat. The nesting season (nest building to post-fledging) generally occurs between April 1 and July 30 (Stantec 2020b), but some active nesting activity may occur into August.

White-tailed kite is listed as Fully Protected by CDFW. It generally nests in tall shrubs or trees and is found in a variety of relatively open habitats such as ruderal agricultural settings, open scrub lands, and grasslands throughout the Central Valley. In the Central Valley, the nesting season for this species occurs between March and August (Stantec 2020b).

Loggerhead shrike is designated as a Species of Special Concern by the CDFW. This species is generally found in open grasslands, relatively open woodlands, and ruderal agricultural settings throughout the Central Valley. Loggerhead shrike nests in trees or shrubs and require barbed-wire fences, thorn bushes, or similar barbed structures nearby for impaling and storing prey items. In the

Central Valley, the nesting season for this species occurs between March and August (Stantec 2020b).

Potential habitat for the Swainson's hawk, white-tailed kite, and loggerhead shrike is present within and adjacent to the project study area. There are no CNDDDB records for these three species within five miles of the project study area. The project study area contains a few large trees that could be used for nesting by Swainson's hawk, white-tailed kite, or loggerhead shrike; however, no large stick nests indicative of these species were identified within the project study during the reconnaissance-level surveys conducted in 2013 and again in 2020. Several isolated stands of blue oak trees occur within 0.5 mile of the project study area that could also provide potential nesting habitat for this species. Annual grasslands in the immediate vicinity of the project study area provide potential foraging habitat. Loggerhead shrike was detected by sound along Cooperstown Road and is likely to occur within the BSA. Biologists observed prey impaled on fences during the June 2020 visit, which indicates that loggerhead shrike has used the project study area for foraging.

If Swainson's hawk is determined to be nesting within 0.25 mile of the project study area or white-tailed kite or loggerhead shrike is nesting within 500 feet of the project study area, construction disturbance during the breeding season could result in the loss of fertile eggs or nestlings or otherwise lead to nest abandonment or destruction. No foraging habitat would be converted to other uses; therefore, the project is not expected to result in permanent impacts on Swainson's hawk, white tailed kite, or loggerhead shrike foraging habitat.

Mitigation Measure BIO-4 (Swainson's Hawk/White-Tailed Kite/Loggerhead Shrike) described below shall be used to reduce any impacts on frogs to a less-than-significant level. In addition, *Conservation Measure #1 – Erosion and Sedimentation Control*, *Conservation Measure #2 – Prevention of Accidental Spills*, and *Conservation Measure #4 – General Measures for Protection of Special-Status Wildlife Species* described in Section 2.5 shall be used to maintain water quality and provide additional protections to natural resources. Impacts to Swainson's hawk, white tailed kite, or loggerhead shrike would be mitigated to less than significant level with implementation of these measures.

San Joaquin Kit Fox. San Joaquin kit fox is a federally endangered species and state threatened species. San Joaquin kit foxes are known to occur in semi-arid habitats of the San Joaquin Valley and arid grasslands of the adjacent foothills from as far north as La Grange in Stanislaus County on the east side of the valley to Kern County in the south (Stantec 2021). San Joaquin kit foxes occur in open valley and foothill grassland and chenopod scrub communities in relatively level terrain in valleys and adjacent foothills. San Joaquin kit foxes typically require abundant small mammal prey and friable soil for burrowing. Suitable soils are relatively stone-free and sandy to depths of 4.5 feet, and the kit fox may dig burrows up to six feet deep. San Joaquin kit foxes are absent in areas where soil is shallow due to an impenetrable layer, such as bedrock or high water table. San Joaquin kit foxes use dens for temperature regulation, shelter, reproduction and escape from predators. Kit foxes dig their own dens or modify dens constructed by other animals (e.g., ground squirrels, badgers, coyotes). They also use structures such as culverts, pipes, and other items that may provide cover.

The project study area occurs within the current geographic range of the San Joaquin kit fox and is located 4 to 5 miles northeast of the San Joaquin kit fox linkage corridor as shown in the current USFWS 5-Year Review. The nearest extant CNDDDB San Joaquin kit fox record is located approximately four miles southeast of the BSA (Stantec 2021). This record is dated from 1972 and 1973, with one San Joaquin kit fox observed in 1972 and two observed in 1973. No other recorded sightings occur within a 10-mile radius of the project study area. Critical habitat has not been designated for San Joaquin kit fox. No incidental sightings of San Joaquin kit fox were observed in the project study during the field reconnaissance on May 8, 2013, and June 2020.

Annual grasslands and blue oak savannah characterize the vegetation communities in the project study area. The annual grasslands are relatively short due to the shallow soils. Blue oaks (*Quercus douglasii*) are scattered and provide an open canopy. The habitat is fairly contiguous with other linkage habitats within ten miles, with only the Tuolumne River approximately three miles south of the project study area possibly presenting a barrier to north-south movement in the linkage corridor. However, based on a study that developed a habitat suitability model for the San Joaquin kit fox, medium suitable habitat occurs north and south of the project study area, but not within the project study area (Stantec 2020b).

No potential San Joaquin kit fox dens or other sign of fox habitation were observed in or within 100 feet of the project study area during a site visit on May 8, 2013, and in June 2020. Soils in the project study area are composed of cobblestone and loam with shallow bedrock (0-14 inches to bedrock) in the northern portion of the project study area. These soil conditions are not preferred for San Joaquin kit fox dens. Loamy soils are present south of the project study area; however, such soils are limited in the project study area, and no dens were observed. The presence of primarily shallow soils in the project study area inhibits opportunity for San Joaquin kit fox to dig dens of adequate depth to provide cover. Several small mammal burrows were observed in the project study area during the June 2020 site visit, suggesting that prey items for San Joaquin kit fox may be present.

The potential for kit foxes to occur in the project study area is unlikely due to a lack of suitable cover and lack of suitable soils for denning. Additionally, a linkage corridor mapped by USFWS occurs within 4 to 5 miles of the project study area, and the habitat suitability model depicts possible habitat north and south of the project study area. Therefore, a low probability exists that San Joaquin kit fox may move through the project study area or nearby areas.

San Joaquin kit fox is unlikely to occupy the project study area due to the lack of suitable denning habitat. However, due to the proximity of the linkage corridors, a low possibility exists that kit fox migrating along the linkage corridor may venture into the project study area or nearby areas. Direct impacts could occur in the remote chance that a San Joaquin kit fox were to use staged materials for temporary cover, and the materials are moved when occupied by San Joaquin kit fox.

Mitigation Measure BIO-5 (San Joaquin Kit Fox) described below shall be implemented to reduce any impacts on the species to a less-than-significant level. In addition, *Conservation Measure #1 – Erosion and Sedimentation Control*, *Conservation Measure #2 – Prevention of Accidental Spills*, and *Conservation Measure #4 – General Measures for Protection of Special-Status Wildlife Species* described in Section 2.5 shall be implemented to provide additional protections to natural

resources. Impacts to San Joaquin kit fox would be mitigated to less than significant level with implementation of these measures.

Migratory Birds and Raptors. Construction activities (e.g., vegetation removal and equipment noise) would occur during the avian breeding season (generally February through August, depending on the species) and could disturb nesting birds in or adjacent to the project area. Construction-related disturbance could result in the incidental loss of fertile eggs or nestlings or nest abandonment, which could affect local or regional populations of affected birds. Impacts on nesting birds could result from any of the following:

- Vegetation removal to accommodate the new bridge and road modifications
- Ground disturbing activities (e.g., grubbing and grading) that could affect ground-nesting birds
- Noise from construction activities

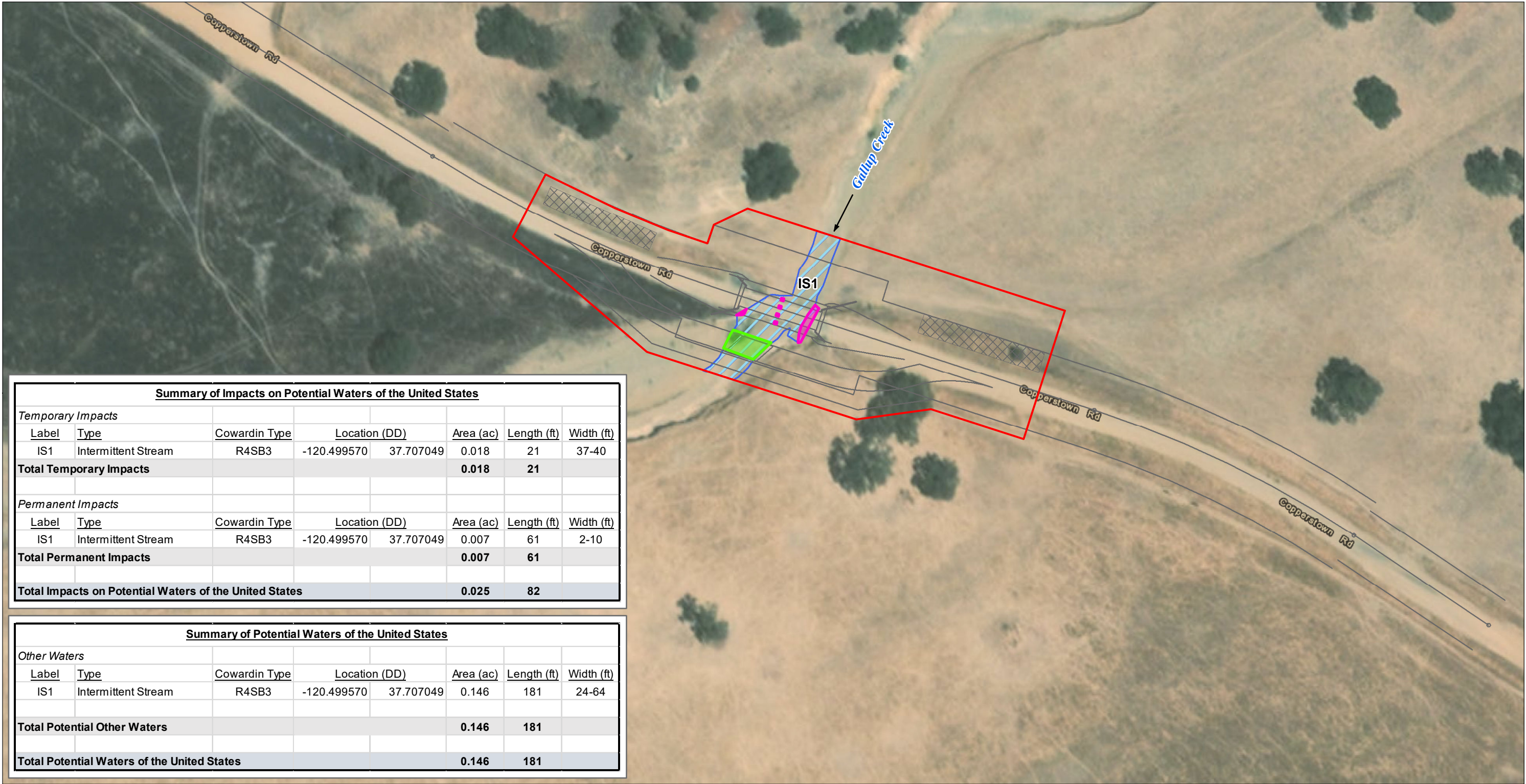
Foraging birds and birds present in or adjacent to the project study area outside of the avian breeding season would not be adversely impacted by construction activities due to their high mobility and available habitat outside of the project study area.

The project was designed to minimize removal of native vegetation to the greatest extent practicable. Mitigation Measure BIO-6 (Migratory Birds and Raptors) will be used to ensure that any impacts on migratory birds, including raptors, would be reduced to a less-than-significant level. Project operation would be consistent with existing conditions and would have no impact on migratory birds and raptors.

- b) **No Impact.** Riparian vegetation is considered a sensitive natural community. However, riparian habitat does not occur within the project area. No other sensitive natural communities occur in the project area. There would be no impact to riparian habitat or other designated sensitive natural communities as a result of the project.
- c) **Less-than-Significant Impact with Mitigation Incorporated.** Stantec conducted a delineation of potential waters of the United States in the project area on May 8, 2013, and updated on June 17, 2020 (Stantec 2020a). A total of 0.146 acre (181 linear feet) of potential waters of the United States were mapped within the project study area and only consist of Gallup Creek, which is classified as an intermittent stream. Wetlands and riparian vegetation are not present with the project study area. Based on the current level of project detail, the project would result in permanent impacts on approximately 0.007 acre (61 linear feet) of Gallup Creek, a water of the United States and State (Figure 4). These impacts would result from the placement of rock slope protection, bridge installation, and road improvements within the creek. The project would also result in temporary impacts on approximately 0.018 acre (21 linear feet) of Gallup Creek from construction of the temporary low water crossing and from equipment and construction access within the channel when it is dry. Mitigation Measure BIO-7 (Waters of the United States) will be used to reduce any potential impacts on waters to a less-than-significant level and to compensate for impacts to jurisdictional wetlands and waters. Under the USACE Nationwide Permit 14 for Linear Transportation Projects, notification to the USACE is not required for impacts on waters of the United States that total less than 0.10 acre. Since only 0.007 acre (61 linear feet) of intermittent stream will be impacted by the project, notification and compensatory mitigation will not be required. In addition, *Conservation Measure #1 – Erosion and Sedimentation Control* and

Conservation Measure #2 – Prevention of Accidental Spills will be implemented to reduce project-related impacts on waters of the United States to a less-than-significant level.

- d) **Less-than-Significant Impact.** No migratory fish are present in Gallup Creek given its intermittent nature. Construction activities and post-construction use of the proposed bridge replacement would not inhibit wildlife movement. The existing bridge and roadway have been present in the environment for over 50 years; allowing wildlife species to become accustomed its presence. The volume of traffic using the bridge would continue to remain low; consistent with typical use on other bridges in the immediate area. Additionally, the project area does not encompass any wildlife nursery sites and would have no impact on terrestrial wildlife movement due to the surrounding urban habitat. Operational impacts would be consistent with existing conditions. *Conservation Measure #4 – General Measures for Protection of Special-Status Species* will also be implemented to avoid and minimize impacts to resident wildlife. This impact would be less than significant.
- e) **No Impact.** There are three blue oak (*Quercus douglasii*) trees located within the project study area, but they would not need to be removed as they are not anticipated to conflict with the proposed new bridge structure and its approaches, staging areas, temporary detour, and in locations where access is necessary to facilitate the demolition and removal of the existing bridge structure. The project site does not support any riparian trees. Removal of any trees on private or County-owned land does not require any approval as Stanislaus County does not have a tree preservation ordinance.
- f) **No Impact.** Currently, there are no adopted Habitat Conservation Plans, Natural Community Conservation Plans, or other approved habitat conservation plans that cover the project area. The project would have no impact on local, regional, or state conservation plans.



Summary of Impacts on Potential Waters of the United States							
Temporary Impacts							
Label	Type	Cowardin Type	Location (DD)		Area (ac)	Length (ft)	Width (ft)
IS1	Intermittent Stream	R4SB3	-120.499570	37.707049	0.018	21	37-40
Total Temporary Impacts					0.018	21	
Permanent Impacts							
Label	Type	Cowardin Type	Location (DD)		Area (ac)	Length (ft)	Width (ft)
IS1	Intermittent Stream	R4SB3	-120.499570	37.707049	0.007	61	2-10
Total Permanent Impacts					0.007	61	
Total Impacts on Potential Waters of the United States					0.025	82	

Summary of Potential Waters of the United States							
Other Waters							
Label	Type	Cowardin Type	Location (DD)		Area (ac)	Length (ft)	Width (ft)
IS1	Intermittent Stream	R4SB3	-120.499570	37.707049	0.146	181	24-64
Total Potential Other Waters					0.146	181	
Total Potential Waters of the United States					0.146	181	



Project Study Area (1.76 acres)
Proposed Design Features

This delineation of waters of the United States is subject to verification by the U.S. Army Corps of Engineers (Corps). Stantec advises all parties that the delineation is preliminary until the Corps provides a written verification.

Impacts on Potential Waters of the United States

- Temporary (0.018 acres, 21 linear feet)
- Permanent (0.007 acres, 63 linear feet)

Potential Waters of the United States

Other Waters

- Intermittent Stream (0.146 acre, 181 linear feet)



- Notes
- Coordinate System: NAD 1983 StatePlane California III FIPS 0403 Feet
 - Base map: ESRI World Imagery Web Mapping Service, Vivid, Maxar, 8/29/2018
 - Delineators: Charis Femino and Jacqueline Phipps
 - Delineation Date: June 17, 2020



Project Location
Stanislaus County, California
2272009900
Prepared by TM on 2020-07-02

Client/Project
Stanislaus County Department of Public Works
Gallup Creek Bridge (38C0170) on Cooperstown Road
Replacement Project

Figure No.

4

Impacts on Potential Waters of the
United States

Mitigation Measure BIO-2: California Red-Legged Frog and California Tiger Salamander

In the unlikely event that a California red-legged frog or California tiger salamander enters the project area during construction, conservation measures incorporated into the project (i.e., Erosion and Sediment Control, Prevention of Accidental Spills, Air Quality/Dust Control, Prevention of Spread of Invasive Species, and General Measures for Protection of Special-Status Wildlife) and project-specific mitigation measures described below would serve to avoid or minimize potential impacts on these two species.

- Ground-disturbing activities will be limited to daylight hours, and all clearing and grading activities in the action area will be restricted to the period of April 15 to October 15 in coordination with U.S. Fish and Wildlife Service (USFWS) and California Department of Fish and Wildlife (CDFW) and dependent on the level of rainfall and site conditions.
- A qualified biologist knowledgeable of California red-legged frog and California Tiger Salamander will also provide a discussion of these two species during the worker environmental awareness training. The discussion will include how to identify the species, relevant life history and taxonomic information, where the species would be likely to occur in the action area, what to do if the species is observed, and the state and federal laws pertaining to the species.
- No plastic, monofilament, jute, or similar erosion control matting that could entangle California red-legged frog or California Tiger Salamander will be used in the project study area. Possible substitutions include coconut coir matting, tackified hydroseeding compounds, or other materials approved by the USFWS.
- No canine or feline pets or firearms will be permitted in the project study area.
- During all initial ground-disturbing activities, a USFWS-approved biologist will be present to recover and relocate any California red-legged frog or California Tiger Salamander that may be excavated by construction equipment from an underground refuge. If live California red-legged frog or California Tiger Salamander are encountered, construction in the vicinity will stop at the direction of the qualified biologist, and the qualified biologist will immediately relocate the California red-legged frog or California Tiger Salamander to a suitable burrow outside the work area. Consultation with USFWS will need to be re-initiated.
- During rain events and within 24 hours following rain events, a qualified biologist familiar with California red-legged frog and California Tiger Salamander will visually check for federally listed amphibian species, such as California red-legged frog and California Tiger Salamander, in and around equipment and vehicles prior to resuming work. In addition, construction personnel will keep vehicle speeds within the work area to a minimum to avoid wildlife.
- If federally listed and/or state listed species are found during construction activities, a qualified biologist will be immediately notified. As warranted, the qualified biologist may notify the USFWS and/or CDFW about the species observed. All construction activities having the potential to injure or harass special-status species or habitat will be immediately stopped. The qualified biologist will evaluate the situation and will have authority to halt any construction activities until appropriate corrective measures have been implemented or it is determined that special status species will not be harmed. The qualified biologist will remain in the area for the remainder of the workday to make sure the special-status species are not harmed. Any federally listed species encountered

during construction activities will be allowed to move away from construction activities on their own. Capture and relocation are not permitted unless specifically approved in advance by the USFWS and/or CDFW. Any dead or injured federally listed species or state listed will be immediately reported to the qualified biologist and the USFWS or CDFW and consultation with USFWS and/or CDFW will need to be re-initiated.

- Stanislaus County shall retain a qualified biologist familiar with California red-legged frog and California Tiger Salamander biology and habitat requirements to implement mitigation measures for the project. Stanislaus County shall submit the name and credentials of the biologist(s) to the USFWS and CDFW for review and approval at least 15 days prior to the onset of construction activities.
- Work areas that are temporarily disturbed shall be revegetated with an assemblage of native vegetation suitable for the area.

Timing/Implementation:	Prior to a construction/during construction/post construction
Enforcement:	United States Fish and Wildlife Fisheries Service, California Department of Fish and Wildlife, California Department of Transportation
Monitoring:	County and/or its contractor

Mitigation Measure BIO-3: Western Pond Turtle

The following measures will be implemented to avoid or minimize the potential for adverse impacts on western pond turtle:

- Environmental Awareness Training: Construction personnel training would be conducted by a qualified biologist prior to onset of work to brief them on how to recognize western pond turtle and other special-status animals (e.g., California red-legged frog and California tiger salamander) that may occur in the project study area.
- Western Pond Turtle Relocation: If pond turtles are encountered in the project study area during construction and could be harmed by construction activities, work would stop in the area and the County would notify CDFW. Upon authorization from CDFW, a qualified biologist may relocate the individual(s) the shortest distance possible to a location containing habitat outside of the work area.

Timing/Implementation:	Prior to and during construction
Enforcement:	California Department of Fish and Wildlife, California Department of Transportation
Monitoring:	County and/or its contractor

Mitigation Measure BIO-4: Swainson's Hawk/White-Tailed Kite/Loggerhead Shrike

The following measures will be implemented to avoid or minimize the potential for significant impacts on Swainson's hawk, white tailed kite, and loggerhead shrike:

- If construction activities, including vegetation clearing, are conducted completely outside of the nesting season (i.e., after September 30 and before February 1), no further measures are

necessary. If construction activities must occur during the nesting season (i.e., from February 1 to September 30), the following measures shall be implemented.

- A minimum of one pre-construction survey for active Swainson's hawk nests within 0.25 mile and active white-tailed kite and loggerhead shrike nests within 500 feet of the project area (where accessible) shall be conducted by a qualified biologist within 15 days prior to the initiation of construction activities. The first survey will occur on the same day as the pre-construction nesting surveys for other migratory birds.
- If any Swainson's hawk nests are identified, appropriate conservation measures (as determined by a qualified biologist) shall be implemented. These measures may include but are not limited to establishing a construction-free buffer zone around the active nest site, biological monitoring of the active nest site, and delaying construction activities in the vicinity of the active nest site until the young have fledged.

Timing/Implementation: Prior to and during construction

Enforcement: California Department of Fish and Wildlife, California Department of Transportation

Monitoring: County and/or its contractor

Mitigation Measure BIO-5: San Joaquin Kit Fox

Although it is unlikely that San Joaquin kit fox would occupy habitat in the project study area, the following measures will be implemented to ensure avoidance of impacts on the species:

- A U.S. Fish and Wildlife Service (USFWS) and California Department of Fish & Wildlife (CDFW)-approved biologist will survey the project area (including a 200-foot buffer around proposed disturbance) for San Joaquin Kit Fox and potential dens within 30 days prior to start of construction. Surveys will follow the recommendations in the *San Joaquin Kit Fox Survey Protocol for the Northern Range* (USFWS 1999).
- Construction shall be stopped in the area where a trapped or injured San Joaquin Kit Fox is discovered until it leaves the area and consultation with USFWS and CDFW will need to be re-initiated.
- San Joaquin Kit Fox are attracted to den-like structures such as pipes and may enter stored pipes and become trapped or injured. All construction pipes, culverts, or similar structures with a diameter of four inches or greater that are stored on the construction site overnight will be thoroughly inspected for kit foxes before the pipe is subsequently buried, capped, or otherwise moved in any way. If a kit fox is discovered inside a pipe, that section of pipe shall not be moved until the kit fox has left on its own. If the kit fox remains in the pipe for more than one day, USFWS and CDFW shall be contacted for guidance.
- No pets or firearms will be permitted in the project area.
- No rodenticides or herbicides will be used in the project area. This is necessary to prevent primary or secondary poisoning of San Joaquin Kit Fox and the depletion of prey populations on which they depend.

- A representative shall be appointed by the county who will be the contact source for any employee or contractor who might inadvertently kill or injure a San Joaquin Kit Fox or who finds a dead, injured, or entrapped San Joaquin Kit Fox. The representative will be identified during the employee education program and their name and telephone number shall be provided to the USFWS and CDFW and consultation with USFWS and CDFW will need to be re-initiated, if required.
- In the case of trapped animal(s), escape ramps or structures should be installed immediately to allow the animal(s) to escape, or the USFWS and CDFW should be contacted for guidance.
- Any contractor, employee, or military or agency personnel who are responsible for inadvertently killing or injuring a San Joaquin Kit Fox shall immediately report the incident to their representative. This representative shall contact CDFW immediately in the case of a dead, injured, or entrapped San Joaquin Kit Fox. The USFWS Sacramento Office and CDFW shall be notified in writing within three working days of the accidental death or injury to a San Joaquin Kit Fox during project-related activities. Notification must include the date, time, and location of the incident or the finding of a dead or injured animal and any other pertinent information.
- New sightings of San Joaquin Kit Fox shall be reported to the California Natural Diversity Database.

Timing/Implementation:	Prior to a construction/during construction/post construction
Enforcement:	United States Fish and Wildlife Fisheries Service, California Department of Fish and Wildlife, California Department of Transportation
Monitoring:	County and/or its contractor

Mitigation Measure BIO-6: Migratory Birds and Raptors

The following measures will be implemented to avoid or minimize the potential for adverse impacts on nesting migratory birds and raptors:

- **Vegetation Removal Prior to Nesting Season:** If all necessary approvals have been obtained, potential nesting substrate (e.g., shrubs and trees) that would be removed by the project should be removed before the onset of the nesting season, which is March 1 through September 31, if practicable. This would help preclude nesting and substantially decrease the likelihood of direct impacts.
- **Vegetation Removal During the Nesting Season:** If vegetation removal and construction activities occur within nesting bird habitat between March 1 and September 31, a qualified biologist would conduct a preconstruction survey no more than two weeks before construction activities begin in that area. If an active nest is found, the biologist would determine a construction-free buffer zone to be established around the nest until the young have fledged. If a raptor nest is found that buffer would be 250 feet, unless a smaller buffer is approved by CDFW. The biologist would monitor the nest to ensure construction activity would not disturb the reproductive process, and to determine when the young have fledged.

Timing/Implementation:	Prior to and during construction
-------------------------------	----------------------------------

Enforcement:	California Department of Fish and Wildlife, California Department of Transportation
Monitoring:	County and/or its contractor

Mitigation Measure BIO-7: Waters of the United States

The following measures shall be implemented to reduce construction-related impacts on waters of the United States:

- Prior to any discharge of dredged or fill material into Gallup Creek, the required permits and authorizations shall be obtained from the U.S. Army Corps of Engineers and the Regional Water Quality Control Board. All terms and conditions of the required permits/authorizations shall be implemented.
- Prior to any activities that would obstruct the flow of, or alter the bed, channel, or bank of Gallup Creek, a notification of streambed alteration shall be submitted to the California Department of Fish and Wildlife (CDFW). If required, a streambed alteration agreement shall be obtained from CDFW, and all conditions of the agreement shall be implemented.
- All waters of the United States or State that are temporarily affected by project construction shall be restored as close as practicable to their original contour and conditions within 10 days of the completion of construction activities.

Timing/Implementation:	Prior to, during, and after construction
Enforcement:	U.S. Army Corps of Engineers, Central Valley Regional Water Quality Control Board, California Department of Fish and Wildlife
Monitoring:	County and/or its contractor

Cultural Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
V. CULTURAL RESOURCES — Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion of Impacts

- a) **Less than Significant with Mitigation Incorporated.** Cultural resources investigations (i.e., survey and excavation) covered the entire area of potential effect (APE)/Area of Direct Impact (ADI) for the proposed project and identified Bridge 38C0170 and sites CA-STA-390H and STA-394/H (Stantec 2021c).

The bridge (38C0170) is listed as a Category 5 bridge by Caltrans and as such does not meet the criteria for listing on the National Register of Historical Places.

Site CA-STA-390H is the alignment of Cooperstown Road, generally corresponds to historic maps. However, the original alignment of Cooperstown Road at Gallup Creek appears to have been located to the south of the current alignment of the road. A small section of the original roadbed was documented in this area in 1995 and was determined not eligible for inclusion on the NRHP. Consequently, the current route of Cooperstown Road at Bridge 38C0170 does not reflect the road's original alignment. In addition, the original segment of Cooperstown Road located south of the current alignment could not be relocated during the 2013 pedestrian survey and the 2016 Extended Phase I (XPI) investigation that were conducted for the project (North State Resources 2018). Therefore, the segment of site CA-STA-390H located in the APE south of the ADI and current alignment of Cooperstown Road meets the criteria of a Type 1 feature as identified in the Section 106 PA Attachment 4, Properties Exempt from Evaluation.

Site CA-STA-394/H is the Gallup Ranch. The pedestrian survey determined that the condition of the site is relatively unchanged since it was originally recorded in 1997. However, some features of the site exhibit a range of minor to major impacts. Features exhibiting minimal impacts include a few rock alignments that appear less distinct than originally documented, and the wood cover for a well has deteriorated. Features exhibiting significant impacts include features 9A and 9B (i.e., prehistoric artifacts consisting of several pieces of lithic debitage, a biface, and a pestle fragment) and the Gallup Ranch House. Features 9A and 9B could not be relocated during survey, and the condition of the Gallup Ranch House did not match the description and photographs included in the 1997 site record. The ranch house masonry work has degraded, backhoe or other types of excavations have disturbed the foundation, and the definable walls and other features of the house described in the 1997 site record are no longer visible. Site CA-STA-394/H is in the project APE

and ADI and pedestrian survey did not relocate features of the site. Consequently, an XPI Excavation Proposal was prepared and approved by Caltrans on April 28, 2016. XPI excavations were conducted at the site from October 4-6, 2016, and May 8-11, 2017. The results of the excavations are documented in the XPI Archaeological Report that was approved by Caltrans on December 20, 2018 (North State Resources, Inc. 2018). The XPI excavations did not identify any new features or recover any significant artifacts, but did determine that Features 9A, 9B, 10, and 11 no longer exist, and that Feature 5 no longer exists as described in the original 1997 site record. Consequently, there are no extant features associated with the site CA-STA-394/H in the project ADI. Regardless, to ensure that site CA-STA-394/H will not be affected by the proposed project, an Environmentally Sensitive Area (ESA) Action Plan shall be implemented to avoid impacts to the resources (Stantec 2021d) (Due to the confidential nature of cultural resources, specifics of the ESA are addressed in the confidential ESA Action Plan, available to qualified personnel upon request). Implementation of the ESA Action Plan and Mitigation Measure CR-1 (Cultural Resources) will reduce this impact to a less than significant level.

- b) ***Less than Significant with Mitigation Incorporated.*** As discussed in checklist item a) above, CA-STA-394/H was originally recorded as containing prehistoric materials (features 9A and 9B; prehistoric artifacts consisting of several pieces of lithic debitage, a biface, and a pestle fragment), but these resources were not found during both the initial pedestrian survey and subsequent Extended Phase I Investigation. The proposed project would not significantly impact the intact resources associated with CA-STA-394/H with the implementation of the ESA action plan. Should a request be made by a Native American tribe that the County have a Native American monitor present during ground disturbing activities, a monitor shall be invited to be present. Implementation of the ESA Action Plan and Mitigation Measure CR-1 (Cultural Resources) will reduce this impact to a less than significant level.
- c) ***No Impact.*** Human remains were not identified during the cultural study; however, the potential for encountering human remains during project construction can never be entirely ruled out. State law prescribes protective measure that must be taken in the event that any subsurface human remains are discovered. *Conservation Measure #5 – Cultural Resources and Human Remains* (described in Section 2.5) was incorporated into the project design to address any inadvertent discovery of human remains during project excavation.

Mitigation Measures

In addition to the use of *Conservation Measure #5–Human Remains* (described in Section 2.5), the following mitigation measures will be implemented:

Mitigation Measure CR-1: Cultural Resources

- Per Caltrans Exhibit 5.1 in Volume 2 of the Standard Environmental Reference, “it is Caltrans’ policy to avoid cultural resources whenever possible. If buried cultural materials are encountered during construction, it is Caltrans’ policy that work stop in that area until a qualified archaeologist can evaluate the nature and significance of the find. Additional survey will be required if the undertaking changes to include areas not previously surveyed.” Per Attachment 4 of the Section 106 Programmatic Agreement, isolated prehistoric or historic finds of fewer than three items per 100 square meters are properties exempt from evaluation.

- A Native American monitor shall be present during all project ground disturbance.

Timing/Implementation: During construction

Enforcement: Native American Heritage Commission and County

Monitoring: County and/or its contractor and the Native American Heritage Commission

Energy

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
VI. ENERGY — Would the project:				
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion of Impacts

- a, b) **No Impact.** It would be necessary to use diesel-powered equipment during project construction. This would not be considered wasteful, inefficient, or unnecessary consumption of energy resources. The bridge replacement project will comply with state and Stanislaus County plans for energy efficiency.

Mitigation Measures

No project-specific mitigation is required under this subject.

Geology and Soils

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
VII. GEOLOGY AND SOILS — Would the project:				
a) Expose people or structures to 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Be located on strata or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code, creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Discussion of Impacts

- a, i-ii) **Less-than-Significant Impact.** The project area is not located within an Alquist-Priolo Earthquake Fault Zone (California Geological Survey 2012). Even though the project area is distant from known, active faults, very infrequent earthquakes could still cause strong ground shaking (California Geological Survey 2008). To ensure that potential seismically induced hazards do not affect the replacement bridge, the project would be engineered to account for the seismic activity known to occur in the area. The project would have a less-than-significant impact with respect to exposing people or structures to potential substantial adverse effects from seismic ground shaking.
- iii) **Less-than-Significant Impact.** Soils found in the project area are moderately susceptible to liquefaction when saturated. However, groundwater levels in the area are fairly low and the soils

are well drained, greatly reducing the project area's susceptibility to liquefaction (Crawford & Associates, Inc./Taber 2020). The project will be engineered to account for the possibility of liquefaction. Thus, the potential impacts related to exposing people or structures to potential substantial adverse effects from liquefaction are considered to be less than significant.

- iv) **Less-than-Significant Impact.** The topography of the project area is relatively flat, with the exception of the banks of Gallup Creek. Therefore, the project area has low susceptibility to landslides. The project would have a less-than-significant impact with respect to exposing people or structures to potential substantial adverse effects from landslides.
- b) **Less-than-Significant Impact.** Project construction would be necessary within Gallup Creek. Vegetation clearing, construction equipment access, and re-contouring of the creek bed and banks would expose soils. Erosion and sedimentation into downstream waters could result if runoff were to occur during construction. Also, grading activities could increase the potential for erosion during rain or wind events, which would be a significant impact. Pursuant to the Clean Water Act, the County is required to obtain a National Pollution Discharge Elimination System (NPDES) Phase II permit from the California Regional Water Quality Control Board (Central Valley Region). To obtain a NPDES Phase II permit, the County would prepare a Stormwater Pollution Prevention Plan (SWPPP). The SWPPP will include Best Management Practices (BMPs) to reduce erosion during project construction and minimizes sedimentation down gradient from the project. Implementation of these BMPs and Erosion and sediment control measures described in *Conservation Measure #1 – Erosion and Sedimentation Control* will be used during construction to minimize the potential for erosion pre- and post-construction. The potential for soil erosion and loss of topsoil as a result of project implementation would be less than significant.
- c) **Less-than-Significant Impact.** The project is underlain by gravel, sand, silt, and clay (Crawford & Associates, Inc./ Taber 2020). Soils in the project area are stable and would not become unstable as a result of the project. The project would be engineered to account for the possibility of on- or off-site landslides, lateral spreading, subsidence, liquefaction, or collapse. The project area does not have a significant potential for landslides according to the California Department of Conservation (California Geological Survey 2016) or by the Stanislaus County General Plan. The potential for site instability would be less than significant.
- d) **No Impact.** Expansive soils are defined as those soils with a plasticity index of 15 percent or greater; soil unit types within the project area do not exceed a plasticity index of 0 percent. The project area is underlain by non-expansive soils with a low shrink/swell potential (Natural Resources Conservation Service 2021). Furthermore, work outside of the existing road corridor would be temporary and the project constructed within the existing road corridor would be consistent with Caltrans Design Specifications. As such, there is no potential for expansive soils that would be substantial risks to life or property.
- e) **No Impact.** The project does not involve septic or wastewater systems.
- f) **Less than Significant with Mitigation Incorporated.** The geology of the project area consists largely of the Modesto formation with a minor amount of the lone formation present (Marchand et.al 1981). Both formations are known to contain fossils in Stanislaus County or nearby Merced, Mariposa, and Tuolumne counties. The lone formation is known to contain marine invertebrate fossils, but occurrence is rare in the region (Allen 1929, Bartow 1992). The Modesto formation is

known to contain terrestrial vertebrate fossils from the Pleistocene age within the region. A records search of the University of California's Museum of Paleontology collections database revealed several vertebrate fossil localities present in the Modesto formation found in Stanislaus and Merced counties. Specimens found at these localities included Giant Bison (*Bison latifrons*) and several specimens of Camel (*Camelops*).

While no known paleontological resources occur within the project area, the regional occurrence of Pleistocene vertebrate fossils within the Modesto formation suggests that there is potential for uncovering fossil remains during project-related earth-moving activities. Substantial damage to, or degradation of unique paleontological resources would represent a significant impact.

Implementation of Mitigation Measure GEO-1 (Paleontological Resources) would address potential direct or indirect impacts to unique paleontological resources and reduce those impacts to a less-than-significant level.

Mitigation Measures

In addition to the use of *Conservation Measure #1 – Erosion and Sedimentation Control* (described in Section 2.5), the following mitigation measures will be implemented:

Mitigation Measure GEO-1: Paleontological Resources

- If paleontological resources are discovered during project construction, all work within 100 feet of the discovery site will stop until a qualified paleontologist can assess the significance of the find and recommend appropriate treatment. Stanislaus County will be responsible for ensuring that recommendations regarding treatment are implemented.

Timing/Implementation:	During construction
Enforcement:	County
Monitoring:	County and/or its contractor

Greenhouse Gas Emissions

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
VIII. GREENHOUSE GAS EMISSIONS — Would the Project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion of Impacts

- a) **Less-than-Significant Impact.** GHGs are recognized by wide consensus among the scientific community to contribute to global warming/climate change and associated environmental impacts because of their ability to trap heat in the atmosphere and affect climate. The major GHGs that are released from human activity include carbon dioxide, methane, and nitrous oxide (Governor's Office of Planning and Research 2008, 2018). The primary sources of GHGs are vehicles (including planes and trains), energy plants, and industrial and agricultural activities (such as dairies and hog farms).

Long-Term Operational Emissions. The proposed project would replace the existing bridge with a new two-lane bridge that meets AASHTO standards. Since the project would not increase the travel lane capacity or alter the speed limits along Cooperstown Road, long-term GHS emissions are not expected to increase as a result of the proposed project.

Short-Term Construction Emissions. Emissions of GHGs from the proposed project would be generated offsite from the production of materials used for the bridge, as well as onsite construction-related equipment emissions. Emissions of GHGs resulting from off-road heavy-duty diesel engines during construction activities would be short-term and minor. Implementing Mitigation Measure AQ-1 (Air Quality/Dust Control) and *Conservation Measure #6 – Greenhouse Gas Emissions* (described in Section 2.5) would reduce GHG emissions. These measures will be incorporated into the project design and would be used during construction to ensure that project related impacts would remain less than significant.

- b) **Less-than-Significant Impact.** The State of California has adopted several regulations related to GHG emissions reduction. These include efforts to reduce tailpipe emissions and diesel exhaust produced by fuel-combustion engines. Operation of the project will not generate increased traffic levels as it is not increasing capacity. Additionally, project construction would adhere to statewide efforts aimed at minimizing GHG emissions and, therefore, would not conflict with any applicable plans, policies, or regulations adopted for reducing the emission of GHGs. The project would have a less-than-significant impact.

Mitigation Measures

Mitigation Measure AQ-1 (Air Quality/Fugitive Dust), and *Conservation Measure #6 – Greenhouse Gas Emissions* (described in Section 2.5) will be implemented, if necessary. No project-specific mitigation is required under this subject.

Hazards and Hazardous Materials

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
IX. HAZARDS AND HAZARDOUS MATERIALS — Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) For a project located within an airport land use compatibility 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 for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion of Impacts

- a, b) **Less-than-Significant Impact with Mitigation Incorporated.** Project construction and operation would not routinely generate any hazardous materials. Project operation would not involve the use or storage of any hazardous materials. Although construction would not generate any hazardous materials, a potential hazard to the public and the environment would be posed by the use of diesel or gasoline powered construction equipment (e.g., trucks, excavators) and lubricants such as oil and hydraulic fluids. The potential for such hazards would be temporary since equipment will be routinely maintained and inspected to avoid leaks, and this is similar to the impacts associated with the vehicles operating daily on nearby roads. BMPs described in *Conservation Measure #2 – Prevention of Accidental Spills* (described in Section 2.5) will further reduce the potential impacts associated with the accidental spills of pollutants (e.g., fuel, oil, grease) during construction and operation. The potential for the accidental spill of pollutants would be less than significant.

Naturally Occurring Asbestos. Taber Consultants (now Crawford & Associates, Inc) conducted an Initial Site Assessment (ISA) for the proposed project (Taber 2013). Geologic mapping was reviewed, and a site reconnaissance conducted to determine the likelihood of naturally occurring asbestos (NOA) in the study area. No ultramafic rock units have been identified in the published mapping and no outcrops likely to contain NOA or rock fragments were observed in the study area. No indications of a recognized environmental condition (REC) with respect to NOA were observed at the project site.

Aerially Deposited Lead. The project site history was reviewed to determine likelihood of aerially deposited lead (ADL) in the study area. Due to the low traffic history of Cooperstown Road, a REC with respect to ADL in the study area was not identified.

Asbestos Containing Materials. No clear uses of asbestos in construction materials, such as bridge pads or shims, were observed in the study area; however, samples were not collected to verify the absence of asbestos. Authority to enforce the federal asbestos National Emissions Standards for Hazardous Air Pollutants regulations (NESHAP, 40 CFR Part 61, Subpart M) in Stanislaus County has been delegated to the SJVUAPCD. Federal regulations require a Certified Asbestos Consultant (CAC) assess the presence of asbestos in building materials. The V SJVUAPCD requires the CAC assessment be included in the written notification of demolition of structures or renovation operations at least 10 business days prior to commencing work, regardless of the presence or absence of asbestos in building materials. Therefore, the County will conduct testing for the presence of asbestos in the bearing pad prior to construction. If asbestos is found in the bearing pad of the bridge structure, then implementation of Mitigation Measure HAZ-1 (Asbestos-containing Building Material) will be used during construction to reduce impacts to a less than significant level.

Lead-Based Paint. As part of the ISA, a REC was identified with respect to lead-based paint on the bridge through site reconnaissance and laboratory analysis. Weathered layers of silver and red paint were observed on the metal portions of the bridge and paint samples were collected. Analytical concentrations of lead in the paint samples ranged from 750 mg/kg to 1,100 mg/kg. Concentrations in the bridge paint samples exceeded 1,000 mg/kg lead, exceeding the regulatory threshold for lead as hazardous waste as defined in California Title 22 §§66261.24(B) and 66261.24(a)(2). The existing bridge will be dismantled in a manner that would minimize the potential for the creation of small debris fragments. Protective sheeting will be used in the channel, below the existing bridge, to catch incidental debris during demolition and to contain any lead paint shards or painted structural materials. Upon completion of bridge demolition, the sheeting will be removed and disposed of appropriately. If lead-based paint is found in soil beneath the bridge, the affected areas will be treated as hazardous waste and removed accordingly for disposal at a suitable location. Mitigation Measure HAZ-2 (Lead-based Paint) will be used to reduce the potential for lead paint contamination in and adjacent to the project area resulting from demolition of the existing bridge.

Other Potential Contaminants. No other materials that may require special handling were observed within the study area (e.g., road paint striping, which may contain lead or chromium, or treated wood, which may require disposal according to California Department of Toxic Substances guidelines).

- c) **No Impact.** The nearest school (La Grange Elementary School) is located approximately 3.8 miles southeast of the project area. There are also no new schools proposed within 0.25-mile of the project site. The project would have no impact relating to release of hazardous materials near a school.
- d) **No Impact.** Review of the California Department of Toxic Substances Control EnviroStor database (California Department of Toxic Substances Control 2020) and the State Regional Water Quality Control Board's GeoTracker database (State Water Resources Control Board 2022) did not identify any known hazardous waste sites within the project area. There is no record of any known contaminated sites, regulated landfill sites, or hazardous-waste generators in the project vicinity on file with the County Environmental Health Department. The project area is not included on the list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. No potential hazardous materials or waste sites are listed in the project vicinity.
- e) **No Impact.** The project is not located near any public or private airport or airstrip. No impact related to proximity to an airport or airstrip would occur.
- f) **Less-than-Significant Impact.** During construction of the replacement bridge, the existing bridge would be closed to vehicular access through the project area. Due to the low average daily traffic (approximately 50 vehicles per day) and long detour on County roads (approximately 20 miles), traffic would utilize a temporary detour adjacent to the existing Cooperstown Road. The project is not anticipated to impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan because vehicular access would be maintained through the temporary detour during construction. The project would have a less-than-significant impact with respect to this issue.
- g) **Less-than-Significant Impact.** Natural land cover in the undeveloped areas is primarily annual grassland, dominated by weedy species. Based on current mapping, the fire hazard potential of lands in the project area is mapped as having "high" fire hazard potential by the U.S. Department of Agriculture (2022) and is not mapped as a fire risk according to the California Public Utilities Commission Fire-Threat Map (California Public Utilities Commission 2020). The project activities, including a bridge replacement, would not exacerbate fire risks or result in ongoing impacts to the environment. Therefore, the project would have no impact. The use of construction equipment in and around vegetated areas increases the potential for wildfire ignition. However, *Conservation Measure #7– Wildfire Potential* (described in Section 2.5) will further reduce the risk of wildfire associated with project construction. The potential for accidental wildfire ignition during construction would be less than significant. Project operation would be consistent with existing conditions and would not increase the potential for wildfire ignition.

Mitigation Measures

In addition to the use of Conservation Measure #2 – Prevention of Accidental Spills and Conservation Measure #7 – Wildfire Potential (described in Section 2.5), the following mitigation measures will be implemented.

Mitigation Measure HAZ-1: Lead-based Paint

- The County shall include provisions in the construction bid documents to ensure the proper removal and disposal of lead-based paint coated surfaces found on the existing bridge or in soils beneath the bridge. The following measure shall be implemented to reduce construction-related environmental impacts that could result from lead-based paint removal:
- A limited assessment for lead in the soil under the bridge will be performed for the project area. Samples shall be collected from the soils underneath the bridge and painted surfaces. In order for hazardous waste management requirements of Health and Safety Code, Chapter 6.5 and California Code of Regulations, Title 22 to be waived, lead-contaminated soils must not exceed the contaminant concentrations discussed in Section 9 of the variance and must meet all the conditions contained within the same section. Required handling of lead contaminated soils is outlined in Table 3 and will depend on the level of lead contamination in the soils at the site.

Table 3. Lead Soil Management

Soluble Lead (mg/l)	Total Lead (mg/kg)	Soil Type	Handling
California Testing			
STLC <5.0	TTLCL <1000	X	Non-hazardous Waste. Notify and require Lead Compliance Plan for worker safety.
	1000 – 1411 and DI WET < 1.5 mg/l	Y1	Hazardous Waste. Variance applies – cover with minimum 1 foot of clean soil. *
	1411 – 3397 and DI WET < 150 mg/l	Y2	Hazardous Waste. Variance applies – cover with pavement structure. *
	1000 – 3397 but Surplus	Z2	Hazardous Waste. Surplus. Dispose at Class 1 disposal site.
	> 3397 or 1000 – 3397 and DI WET > 150 mg/l	Z2	Hazardous Waste. Not reusable under Variance. Dispose at Class 1 disposal site.
TLC >5.0	TTLCL < 1411 and DI WET < 1.5 mg/l	Y1	Hazardous Waste. Variance applies – cover with minimum 1 foot of clean soil. *
	1411 – 3397 and DI WET < 150 mg/l	Y2	Hazardous Waste. Variance applies – cover with pavement structure. *
	< 3397 and DI WET < 150 mg/l but Surplus	Z2	Hazardous Waste. Surplus. Dispose at Class 1 disposal site.
	> 3397 or DI WET > 150 mg/l	Z2	Hazardous Waste. Variance applies – cover with pavement structure.

Soluble Lead (mg/l)	Total Lead (mg/kg)	Soil Type	Handling
Federal Testing			
TCLP > 5.0 mg/l	N/A	Z3	RCRA Hazardous Waste. Dispose at Class 1 disposal site as a RCRA waste regardless of TTLC and STLC results.

* Note: For hazardous waste levels of lead – if pH is less than 5.5 soil must be placed under a pavement structure. If pH is less than 5.0 variance cannot be used and the soil must be disposed as Z-2 material.
(Source: Caltrans Website: http://www.dot.ca.gov/hq/env/haz/hw_adl.htm)

Lead-based paint will be removed using one of several methods approved by the Federal EPA, at the contractor's discretion. Acceptable methods include wet scraping, or the use of a dustless needle gun connected to a vacuum unit with a high efficiency particulate air filter that empties directly into a waste container. The waste container will be properly documented and disposed of at a Class I landfill, such as the Clean Harbors Buttonwillow LLC facility in Buttonwillow, California (CAD980675276) or the Chemical Waste Management Inc. Kettleman facility in Kettleman, CA (CAT000646117).

Timing/Implementation: During construction
Enforcement: County, EPA
Monitoring: County and/or its contractor

Mitigation Measure HAZ-2: Asbestos-Containing Building Material

The County shall include provisions in the construction bid documents to ensure the proper removal and disposal of asbestos-containing building material found on the existing bridge. The following measure shall be implemented to reduce construction-related environmental impacts that could result from asbestos removal:

- Prior to the start of construction, the existing bridge's building material will be assessed for asbestos by a Certified Asbestos Consultant at least 10 business days prior to commencing work. If present, the following measure will be used:
- Asbestos-containing building material will be removed using one of several methods approved by the Federal EPA and California Occupational and Safety Hazard Administration (Cal OSHA), at the contractor's discretion. Acceptable methods include wet scraping or the use of a dustless needle gun connected to a vacuum unit with a HEPA filter that empties directly into a waste container. The waste container will be properly documented and disposed of at a Class I landfill, such as the Clean Harbors Buttonwillow LLC facility in Buttonwillow, CA (CAD980675276) or the Chemical Waste Management Inc. Kettleman facility in Kettleman, CA (CAT000646117).

Timing/Implementation: During construction
Enforcement: County, San Joaquin Valley Unified Air Pollution Control District, EPA, Cal OSHA
Monitoring: County and/or its contractor

Hydrology and Water Quality

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
X. HYDROLOGY AND WATER QUALITY — Would the project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality??	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
i) result in substantial erosion or siltation on- or off-site;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv) impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion of Impacts

- a) **Less-than-Significant Impact.** A Water Quality Technical Memorandum, which details the existing hydrological and water quality related characteristics of the project area, has been prepared for the project (North State Resources 2013). The project falls under the several laws and regulations that relate to water quality and discharge requirements. These include the Clean Water Act (CWA), the Porter-Cologne Water Quality Control Act, and regulations under the State Water Resources Control Board and the Regional Water Quality Control Board. At this time there are no known water quality assessments of Gallup Creek (North State Resources 2013). There is also no gauge data available regarding pathogens, nutrients, or sediment. As such, Gallup Creek is not considered impaired under CWA Section 303(d). Project construction associated with the new bridge, road improvements, and the demolition of the old bridge would require ground-disturbing activities in and adjacent to Gallup Creek. Construction and staging areas would be disturbed by vehicles and

various construction related activities that would make these areas susceptible to erosion by stormwater runoff. Additionally, the project would include the use of fuels and lubricants to operate construction equipment, and other machinery, as well as solvents, paints, or other hazardous materials. Accidental spills or leaks of construction related hazardous materials could discharge into the creek, resulting in adverse water quality impacts. However, adverse effects from stormwater runoff or hazardous material spills are not expected to occur. Water quality objectives would be met through adherence to construction provisions, precautions, and stipulations as described in the National Pollutant Discharge Elimination System permit, Section 404 CWA permit, Section 401 CWA Water Quality Certification, and 1602 Streambed Alteration Agreement. The County would require the contractor to prepare and implement a SWPPP to reduce or minimize discharge of pollutants from construction activities. These measures, along with the implementation of *Conservation Measure #1 – Erosions and Sedimentation Control* and *Conservation Measure #2 – Prevention of Accidental Spills*, would reduce potential impacts relating to quality standards or waste discharge requirements to a level considered less than significant.

- b) **No Impact.** Construction and operation of the project would have no effect on groundwater supplies. There would be no net change in local aquifers or the local groundwater table as a result of the project.
- c i-iv) **Less-than-Significant Impact.** Construction activities associated with the project are not anticipated to permanently alter the existing drainage pattern of the site or area in a way that would result in downstream erosion or sedimentation. Ground-disturbing activities that would occur during project construction would result in temporary alteration to local drainage patterns in the project area and may temporarily alter erosion rates. A SWPPP would be implemented as part of the project and would include BMPs which would ensure that there are no significant impacts resulting from erosion. Construction of the bridge would only occur when Gallup Creek is dry, negating any need for stream diversion during project construction. This would result in a less-than-significant impact.

The project would not substantially alter the existing surface or instream drainage patterns of the project area. The larger, wider new bridge structure and roadway approaches would slightly increase the amount of impervious surface in the project area but would not require any new storm water or drainage facilities, as the runoff would continue to flow into Gallup Creek. The amount of additional storm water runoff created from the project would not generate flooding in Gallup Creek or nearby areas, resulting in a less-than-significant impact on drainage patterns or flooding.

The larger, wider new bridge structure and roadway approaches would increase the amount of impervious surface in the project area resulting in a slight, but less-than-significant increase in storm water runoff and the potential for polluted runoff (e.g., lubricants), but would not exceed existing or proposed drainage facility capacities routed to Gallup Creek. All areas of project construction disturbance will be restored to natural conditions.

Avila & Associates completed a Preliminary Hydraulic Study for the proposed project (Avila & Associates 2020). The project is not located within a regulatory floodway or within a base floodplain (FEMA 2008). This study used hydraulic modeling based on a HEC-RAS1 model version 5.0.7 to estimate the water surface elevation (WSE) for the existing and proposed bridge. Results indicate that after construction of the new bridge, the water surface elevation will be lowered upstream from

the bridge, slightly increased just downstream from the bridge (for approximately 15 feet), then unchanged farther downstream from the bridge. With a proposed minimum soffit elevation of 306.6, there will be approximately 3.1 feet of freeboard over the 50-yr WSE of 303.5 and approximately 2.6 feet of freeboard over the 100-yr WSE of 304.0. The proposed bridge will improve the hydraulics because it will be approximately 22 feet longer than the existing. The existing channel will be widened with the removal of the existing abutments and fill and the proposed abutments will be aligned with the flow. The project would have no impact with respect to these issues.

- d) **No Impact.** Because the project area is not near any large bodies of water, there is no risk of inundation from seiches or tsunamis. Because the project area is not located in a mountainous region, there is no risk of inundation from mudflows. The project would have no impact with respect to these issues.
- e) **No Impact.** Construction and operation of the project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. This includes the Water Quality Control Plan for the Central Valley Region (Central Valley RWQCB 2019).

Mitigation Measures

Conservation Measure #1 – Erosion and Sedimentation Control and Conservation Measure #2 – Prevention of Accidental Spills (described in Section 2.5) will be used if necessary. No project-specific mitigation is required under this subject.

Land Use and Planning

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
XI. LAND USE AND PLANNING — Would the project:				
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion of Impacts

- a) **No Impact.** The proposed bridge would replace the existing bridge over Gallup Creek. Cooperstown Road is used primarily by residents to access properties. The project would not divide a community. While there may be minor delays to traffic passing along Cooperstown Road during construction, the temporary detour would allow access through the project area. For these reasons, the project would have no impact with respect to physically dividing an established community.
- b) **No Impact.** The project would not require any changes to land uses or zoning and would not conflict with the Stanislaus County General Plan or Zoning Ordinances. The project would not conflict with any applicable conservation plans.

Mitigation Measures

No project-specific mitigation is required under this subject.

Mineral Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
XII. MINERAL RESOURCES — Would the project:				
a) Result in the loss of availability of a known mineral resource classified MRZ-2 by the State Geologist that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion of Impacts

- a, b) **No Impact.** According to the Stanislaus County General Plan (1994), which relies upon the State Division of Mines and Geology report, Mineral Land Classification of Stanislaus County, California (Special Report 173), sand and gravel deposits constitute the only commercially significant extractive mineral resources in the region. No such deposits exist at or near the project area and therefore, the project would have no impact to mineral resources. No locally important mineral resource recovery sites are located within the project site. Project implementation would not result in the loss of availability of a valuable mineral resource.

Mitigation Measures

No project-specific mitigation is required under this subject.

Noise

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
XIII. NOISE — Would the project result in:				
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion of Impacts

- a) **Less-than-Significant Impact.** Stanislaus County Code 10.46.060 (Specific noise source standards) states that for construction equipment:

“No person shall operate any construction equipment so as to cause at or beyond the property line of any property upon which a dwelling unit is located an average sound level greater than seventy-five decibels between the hours of seven p.m. and seven a.m.”

Equipment used during construction activities is expected to temporarily generate noise at and near the project area, causing a temporary increase in ambient noise levels immediately adjacent to the project area. Table 4 shows typical noise emission levels from common construction equipment (Federal Transit Administration 2006). The three loudest pieces of equipment that are likely to operate at the same time include a jackhammer, a grader, and a truck. The combined maximum noise level for this equipment is 92 dBA at a distance of 50 feet. The nearest residence is approximately 0.5 mile (~2,640 feet) to the southeast of the project area; this distance would substantially reduce the level of construction noise reaching the residence. Noise generated from a point source, such as construction equipment, typically attenuates at a rate of 6 dBA per doubling of distance over hard surfaces (Federal Highway Administration 2011). The maximum noise level reaching the nearest residence would be approximately 56 dBA. This is well below the noise level restriction set in the Stanislaus County Code for construction equipment operation.

In addition, the Noise Element of the Stanislaus County General Plan contains records of average daily noise levels for two locations near the project area. Average daily noise levels were recorded to be 68 dBA (~30 feet to center of State Route 132) and 75 dBA (~50 from centerline of State Route 120) at the two long-term monitoring locations closest to the project area (Stanislaus County 1994). The maximum noise level reaching the nearest residence would be well below both of these average daily noise levels.

Because the noise levels reaching the nearest residence is both well below both the noise level restriction set in the Stanislaus County Code for construction equipment operation and the known average daily noise levels in the general location of the project, the project would have a temporary less-than-significant impact with respect to construction noise.

After construction, the project would not increase noise levels because it would not include any new noise sources or new land uses that would generate additional vehicle trips, nor would the project change the volume or type of vehicles using Cooperstown Road. Therefore, the project would have no impact with respect to permanent noise increases.

Table 4. Construction Equipment Noise Emission Levels

Equipment	Typical Noise Level (dBA) 50 feet from Source
Air Compressor	81
Backhoe	80
Ballast Equalizer	82
Ballast Tamper	83
Compactor	82
Concrete Mixer	85
Concrete Pump	82
Concrete Vibrator	76
Crane Derrick	88
Crane Mobile	83
Dozer	85
Generator	81
Grader	85
Impact Wrench	85
Jack Hammer	88
Loader	85
Paver	89
Pile Driver (Impact)	101
Pile Driver (Sonic)	96
Pneumatic Tool	85
Pump	76
Rail Saw	90
Rock Drill	98
Roller	74
Saw	76
Scarifier	83
Scraper	89
Shovel	82
Spike Driver	77

Equipment	Typical Noise Level (dBA) 50 feet from Source
Tie Cutter	84
Tie Handler	80
Tie Insertter	85
Truck	88

Source: Federal Transit Administration 2006

- b) **Less-than-Significant Impact.** Construction activities associated with the operation of heavy equipment may generate localized groundborne vibration. Vibration from non-impact construction is generally below the threshold of perception when the activity is more than 50 feet from the receptor. Additionally, vibration from these activities would be temporary, ending when construction is completed. Because construction activity is not anticipated to involve high-impact activities (e.g., pile driving) and because the nearest residence is well over 50 feet from onsite construction activity, the vibration impact of construction activities is considered less than significant.
- c) **No Impact.** The project is not located in the vicinity of an airport or landing strip. No impact related to an airport or landing strip would occur as a result of the project.

Mitigation Measures

No project-specific mitigation is required under this subject.

Population and Housing

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
XIV. POPULATION AND HOUSING — Would the project:				
a) Induce substantial 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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion of Impacts

- a) **No Impact.** Replacement of the existing Gallup Creek bridge structure would have no effect on population or housing in the vicinity of the project area. It would improve traffic safety on Cooperstown Road where it crosses Gallup Creek and would not increase traffic capacity or extend road access beyond what is available without the project. Therefore, the project would have no impact related to inducing population growth.
- b) **No Impact.** Existing housing in the vicinity of Cooperstown Road near Gallup Creek would not be displaced by the project and no replacement housing would be required.

Mitigation Measures

No project-specific mitigation is required under this subject.

Public Services

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
XV. PUBLIC SERVICES — Would the project:				
a) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion of Impacts

- a) **No Impact.** The project would not cause substantial adverse physical impacts on government facilities or negatively affect fire/police protection, schools, parks, or public facilities. The proposed bridge would also provide an improved, safer road and bridge across Gallup Creek. Therefore, the project would have a no impact on public resources. No significant adverse impacts on service ratios, response times, or service objectives for any of the public services are anticipated.

Mitigation Measures

No project-specific mitigation is required under this subject.

Recreation

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
XVI. RECREATION — Would the project:				
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion of Impacts

- a) **Less-than-Significant Impact.** The project would replace an existing bridge and would not result in increased use of existing local or regional parks, or other recreational facilities as there are no such facilities located near the project site.
- b) **No Impact.** The project would not construct or expand recreational facilities; therefore, no impact would occur.

Mitigation Measures

No project-specific mitigation is required under this subject.

Transportation/Traffic

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
XVII. TRANSPORTATION/TRAFFIC — Would the project:				
a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion of Impacts

- a) **Less-than-Significant Impact.** The project is not anticipated to substantially increase either the number of vehicle trips, volume-to-capacity ratio, or congestion at intersections along Cooperstown Road. The project is consistent with the goals and policies of the County's General Plan.
- b) **No Impact.** The project consists of a bridge replacement, with the new bridge being slightly wider and longer than the existing bridge. Cooperstown Road at the bridge site would remain open for the duration of construction via the temporary detour adjacent to the existing bridge that will be installed. Therefore, the project would not conflict with Section 15064.3, subdivision (b).
- c) **No Impact.** The project would not result in the creation of sharp curves, dangerous intersections, or incompatible uses. The project is designed to provide a slightly wider, safer bridge crossing across Gallup Creek.
- d) **Less-than-Significant Impact.** During construction of the replacement bridge, traffic would be routed through the temporary detour. Although temporary, short-duration disruptions to normal traffic operation may occasionally occur during project construction. However, Cooperstown Road would remain open to traffic during construction and the County would notify emergency service providers of the project and the detour prior to construction. The project would have a less-than-significant impact on emergency vehicle access.

Mitigation Measures

No project-specific mitigation is required under this subject.

Tribal Cultural Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
XVIII. TRIBAL CULTURAL RESOURCES — Would the project: cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
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	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion of Impacts

- a) **No Impact.** There are no tribal cultural resources listed or eligible for listing on the California Register of Historical Resources or in a local register of historical resources as defined in Public Resources Code section 5020.1(k).
- b) **No Impact.** In accordance with Public Resources Code sections 5024.1, 5097.94, 21074, and 21080.3, commonly known as Assembly Bill 52, the County sent notification letters and a map via mail and email to the Native American tribes who may have knowledge of cultural resources in the area of potential effect on three separate occasions: April 15, 2013; May 27, 2020; and September 14, 2021. The following tribes were contacted based on a list of tribes provided by the Native American Heritage Commission (NAHC): Calaveras Band of Mi-Wuk Indians, California Valley Miwok Tribe, North Valley Yokuts Tribe, Southern Sierra Valley Miwok Nation, and Tuolumne Band of Me-Wuk. Follow-up phone calls were made to tribal representatives. One tribe requested that local Native American monitors participate in the construction phase of the project and requested to be kept informed of the project through continued consultation.

Additionally, NAHC conducted a review of its Sacred Lands database for culturally significant properties and responded by email on May 20, 2020, indicating that the Sacred Lands File contained no records of Native American cultural resources in the immediate area, and no tribal cultural resources were identified in the project area. Project construction and operation would have no impact on tribal cultural resources.

Mitigation Measures

No project-specific mitigation is required under this subject.

Utilities and Service Systems

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
XIX. UTILITIES AND SERVICE SYSTEMS — Would the project:				
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion of Impacts

- a) **No Impact.** Since there are no existing utilities within the project area of impact, .
- b) **No Impact.** No new or expanded water entitlements would be required for the project.
- c) **No Impact.** The project does not in involve any actions that would generate wastewater.
- d) **Less-than-Significant Impact.** Construction activities associated with the project could generate solid waste in the form of demolished materials, metal pilings, and other trash. Non-hazardous solid waste generated at the project site would be disposed of at a suitable facility such as the Fink Road Sanitary Landfill located in Crows Landing, approximately 50 miles southwest of the project area. The project is not likely to generate solid waste in amounts that would adversely affect the existing capacity of the local landfill. The contractor would be responsible for removing the existing bridge from the site. This impact is expected to be less than significant.
- e) **Less-than-Significant Impact.** Any solid waste generated by the project would be disposed of at an approved landfill in compliance with local, state, and federal regulations pertaining to solid waste disposal. This impact is expected to be less than significant.

Mitigation Measures

No project-specific mitigation is required under this subject.

Wildfire

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
XX. WILDFIRE — Would the project result in:				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion of Impacts

- a) **No Impact.** During project activities, Cooperstown Road at the bridge site would remain open for the duration of construction via an adjacent temporary detour. The project would not impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan. Project operation would be consistent with existing conditions.
- b, c) **Less-than-Significant Impact.** Based on current mapping, the fire hazard potential of lands in the project area is mapped as having “high” fire hazard potential by the U.S. Department of Agriculture (2020) and not mapped as a fire risk according to the California Public Utilities Commission Fire-Threat Map (California Public Utilities Commission 2020). The project activities, including a bridge replacement, would not exacerbate fire risks or result in ongoing impacts to the environment. Implementation of *Conservation Measure #7 – Wildfire Potential* (described in Section 2.5) will further reduce the potential for wildfire. The project’s wildfire risk potential would be less than significant.
- d) **No Impact.** The project profile would provide sufficient gradient for drainage of roadway surfaces, and as such, the project would not expose people or structures to significant risks as a result in drainage changes, runoff, or slope instability.

Mitigation Measures

Conservation Measure #7 – Wildfire Potential (described in Section 2.5) will be used if necessary. No project-specific mitigation is required under this subject.

Mandatory Findings of Significance

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
XXI. MANDATORY FINDINGS OF SIGNIFICANCE (To be filled out by Lead Agency if required)				
a) Does the project have the potential to 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, 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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Discussion of Impacts

- a) **Less than Significant with Mitigation Incorporated.** As discussed in the preceding sections, the proposed project has a potential to impact biological and cultural resources. Special-status plant species that could be affected by the project are Hoover's calycadenia, beaked clarkia, Hoover's cryptantha, spiny-sepaed button-celery, forked hare-leaf, and Merced monardella. Special-status wildlife species that could be affected by the project are San Joaquin roach, California tiger salamander, California red-legged frog, western pond turtle, Swainson's hawk, white-tailed kite, loggerhead shrike, and San Joaquin kit fox. The project would also have minor impacts on wetlands and riverine habitat. Potential impacts on resources and the specified species are discussed in detail in the corresponding sections above. Conservation and mitigation measures required to reduce the significance of project impacts are summarized in Chapter 5. With implementation of the required mitigation measures, potential impacts would be reduced to a less-than-significant level. The project would not significantly impact cultural resources CA-STA-394/H through the implementation of an ESA action plan. Although cultural resources are not likely to be affected, there is the potential for previously undetected cultural resources or human remains to be affected by project activities. Therefore, conservation measures (see Chapter 5) have been incorporated into the proposed project to ensure protection of any such resources in the event of inadvertent discovery. The project is consistent with the existing land uses, and the relevant plans and policies that govern such projects.
- b) **Less-than-Significant Impact.** The project would include improvements to an existing transportation system by replacing an existing bridge structure with a new bridge. The project

would not introduce new development into a previously undeveloped area. The project would mainly be constructed in the existing County ROW, with minor permanent takes of additional ROW to accommodate the bridge and approach roadway from both adjacent properties. For the most part, impacts associated with the project would be limited to the construction phase and can be fully mitigated for at the project level. As a result, cumulative impacts are considered to be less than significant.

- c) **Less than Significant with Mitigation Incorporated.** The project could result in a variety of impacts on human beings; however, only during the construction phase. Potential adverse effects on nearby residential areas along Cooperstown Road are related to minor temporary decreases in air quality, hazards and hazardous materials, temporary minor increases in noise levels during construction, and minor hazards related to vehicle use of the temporary detour. Conservation and mitigation measures, as described in the corresponding sections above, would be implemented to avoid or minimize potentially adverse effects to humans resulting from the construction of the project. The project would not involve any actions that would have a substantial direct or indirect impact on the human environment that cannot be mitigated to a less-than-significant level.

4. DETERMINATION

Based on this initial evaluation:

- ☐ I find that the proposed project COULD NOT have a significant effect on the environment and a NEGATIVE DECLARATION will be prepared.
- ☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- ☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- ☐ I find that the proposed project MAY have a "Potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- ☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.



Chuck Covolo, P.E., Project Manager
Stanislaus County Public Works Department

8/16/2022

Date

5. MITIGATION MONITORING AND REPORTING PROGRAM

This chapter presents the Mitigation Monitoring and Reporting Program (MMRP) for the Gallup Creek Bridge (No. 38C0170) on Cooperstown Road Replacement Project (project). The purpose of this MMRP is to memorialize the mitigation responsibilities of the Stanislaus County Public Works Department (County) in implementing the proposed project. The mitigation measures listed herein are required by law or regulation and will be adopted by the County as part of the overall project approval. Mitigation is defined by CEQA Section 15370 as a measure that:

- Avoids the impact altogether by not taking a certain action or parts of an action,
- Minimizes impacts by limiting the degree or magnitude of the action and its implementation,
- Rectifies the impact by repairing, rehabilitating, or restoring the impacted environment,
- Reduces or eliminates the impact over time by preservation and maintenance operations during the life of the project, or
- Compensates for the impacts by replacing or providing substitute resources or environments.

Mitigation measures provided in this MMRP have been identified in Chapter 3, Environmental Setting, Impacts, and Mitigation Measures of the IS/MND and are considered feasible and effective in mitigating Project-related environmental impacts.

This MMRP includes discussions of the following: legal requirements, intent of the MMRP; development and approval process for the MMRP; the authorities and responsibilities associated with implementation of the MMRP; a method of resolution of noncompliance complaints; and a summary of monitoring requirements.

5.1 Legal Requirements

The legal basis for the development and implementation of the MMRP lies within CEQA (including the California Public Resources Code). Sections 21002 and 21002.1 of the California Public Resources Code state:

- Public agencies are not to approve projects as proposed if there are feasible alternatives or feasible mitigation measures available that would substantially lessen the significant environmental effects of such projects.
- Each public agency shall mitigate or avoid the significant effects on the environment of projects that it implements or approves whenever it is feasible to do so.

Section 21081.6 of the California Public Resources Code further requires that:

- The public agency shall adopt a reporting or monitoring program for the changes made to the project or conditions of project approval, adopted in order to mitigate or avoid significant effects on the environment. The reporting or monitoring program shall be designed to ensure compliance during project implementation.

- The monitoring program must be adopted when a public agency makes its findings under CEQA so that the program can be made a condition of project approval in order to mitigate significant effects on the environment. The program must be designed to ensure compliance with mitigation measures during project implementation to mitigate or avoid significant environmental effects.

5.2 Intent of the Mitigation Monitoring and Reporting Program

The MMRP is intended to satisfy the requirements of CEQA as they relate to the project. It will be used by County staff, participating agencies, project contractors, and mitigation monitoring personnel during implementation of the project. The primary objective of the MMRP is to ensure the effective implementation and enforcement of adopted mitigation measures and permit conditions. The MMRP will provide for monitoring of construction activities as needed, onsite identification and resolution of environmental problems, and proper reporting to lead agency staff.

5.3 Development and Approval Process

The timing elements for implementing mitigation measures and the definition of the approval process are provided in detail throughout this MMRP to assist the County by providing the most usable monitoring document possible.

5.4 Authorities and Responsibilities

The County, functioning as the CEQA Lead Agency, will have the primary responsibility for overseeing the implementation of the MMRP and will be responsible for the following activities:

- coordination of monitoring activities
- reviewing and approving status reports
- maintenance of records concerning the status of all approved mitigation measures

The County, also the implementing agency, will be responsible for implementing the mitigation measures by incorporating them into the project specifications (i.e., the contract documents) and enforcing the conditions of the contract in the field during construction. Some pre- and post-construction activities may be implemented directly by the County.

5.5 Resolution of Noncompliance Complaints

Any person or agency may file a complaint that alleges noncompliance with the mitigation measure(s) adopted as part of the approval process for the proposed project. The complaint will be directed to the County's Project Manager in written form describing the purported violation in detail. The County will investigate and determine the validity of the complaint. If noncompliance with a mitigation measure is verified, the County will take the necessary action(s) to remedy the violation. Complaints will be responded to in writing including descriptions of the County's investigation findings and the corrective action(s) taken, if applicable.

5.6 Summary of Monitoring Requirements

Following this discussion are the conservation measures, mitigation measures and associated monitoring requirements for the proposed project. Conservation measures include standard BMPs that will be used during construction. Mitigation measures are organized by environmental issue area (e.g., Biological Resources).

- **Conservation Measures:** describes the schedules of activities, prohibitions of practices, maintenance procedures, and structural or managerial practices, which will be used either singly or in combination to prevent or reduce the release of pollutants, or otherwise minimize the potential for adverse effects on environmental resources. The same conservation numbering system used in the IS/MND is carried forward in this MMRP.
- **Mitigation Measure(s):** lists the mitigation measure(s) identified for each potentially significant impact discussed in the IS/MND. The same mitigation numbering system used in the IS/MND is carried forward in this MMRP.
- **Timing/Implementation:** Indicates at what point in time or project phase the mitigation measure will need to be implemented.
- **Enforcement:** Indicates which agency or entity is responsible for enforcement of the mitigation measure(s).
- **Monitoring:** Indicates which agency or entity is responsible for implementing and monitoring each mitigation measure.
- **Verification:** Provides a space to be signed and dated by the individual responsible for verifying compliance with each mitigation measure.

5.7 Conservation Measures

The following conservation measures and BMPs will be followed during project construction to avoid or minimize potential environmental impacts:

Conservation Measure #1: Erosion and Sedimentation Control

Erosion control measures shall be implemented during construction of the project. These measures shall conform to the provisions in Section 21 of the Caltrans Standard Specifications (Caltrans 2018) and the special provisions included in the contract for the project. Such provisions include the preparation of a Storm Water Pollution Prevention Plan or Water Pollution Control Program depending on size of the area of disturbance, these plans would describe and illustrate the use of BMPs to be implemented at the project site.

Erosion control measures to be included in the Storm Water Pollution Prevention Plan, Water Pollution Control Program, or to be implemented by the County include the following:

- To the extent practicable, activities that increase the erosion potential will be restricted to the relatively dry summer and early fall period to minimize the potential for rainfall events to transport sediment to surface water features. If these activities must take place during the late fall, winter,

or spring, then temporary erosion and sediment control structures will be in place and operational at the end of each construction day and will be maintained until permanent erosion control structures are in place.

- Vegetation clearing and ground disturbing activity will be limited to the minimum area necessary for project implementation.
- Areas where woody vegetation needs to be removed will be identified in advance of ground disturbance and will be limited to only those areas that have been approved by the County DPW. Within 10 days of completion of construction in those areas, weed-free mulch will be applied to disturbed areas to reduce the potential for short-term erosion. Prior to a rain event, or when weather forecasts by the National Weather Service indicate a greater than 50 percent possibility of rain within the next 24 hours, weed-free mulch will be applied to all exposed areas at the completion of the day's activities. Soils will not be left exposed during the rainy season.
- Suitable best management practices, such as silt fences, straw wattles, or catch basins, will be placed below all construction activities at the edge of surface water features to intercept sediment before it reaches the waterway. These structures will be installed prior to any clearing or grading activities. Erosion control measures that employ monofilament netting will be prohibited within the work area.
- If spoil sites are used, they will be sited such that they do not drain directly into a surface water feature, if possible. If a spoil site drains into a surface water feature, catch basins will be constructed to intercept sediment before it reaches the feature. Spoil sites will be graded and vegetated to reduce the potential for erosion.
- Sediment control measures will be in place prior to the onset of the rainy season and will be monitored and maintained in good working condition until disturbed areas have been revegetated.
- All disturbed areas will be restored to pre-construction contours and revegetated, either through hydroseeding or other means, with native or approved non-invasive exotic species.

Conservation Measure #2: Prevention of Accidental Spills

Construction specifications will include the following measures to minimize the potential for adverse effects resulting from accidental spills of pollutants (e.g., fuel, oil, grease):

- A site-specific spill prevention plan would be completed and implemented for all potentially hazardous materials. This would include containment methods for any use of concrete or other hazardous materials according to Caltrans Standard Specifications (2018) Section 14-11.03. The plan would include the proper handling and storage of all potentially hazardous materials including concrete, as well as the proper procedures for cleaning up and reporting any spills. If necessary, containment berms would be constructed to prevent spilled materials from reaching surface water features.
- Equipment and hazardous materials would be stored at least 50 feet away from all waterways.
- Vehicles and equipment used during construction would receive proper and timely maintenance to reduce the potential for mechanical breakdowns leading to a spill of materials. Maintenance

and fueling would be conducted in an area at least 50 feet away from waterways or within an adequate fueling containment area.

- For removal of the existing bridge, it would be required to submit a debris containment and collection plan per Caltrans Standard Specifications (2018) section 14-11.13B (2). The plan must include shop drawings of containment systems complying with section 59-2.01C (2) and include the name and location of the disposal facility that would accept any hazardous waste if determined to be present.

Conservation Measure #3: Prevention of Spread of Invasive Species

Construction specifications will include a requirement to prevent the spread of invasive plants in the work area. The contractor will implement the following measures:

- All equipment used for off-road construction activities will be weed-free prior to entering the project area.
- If project implementation calls for mulches or fill, they will be weed free.
- Any seed mixes or other vegetative material used for revegetation of disturbed sites will consist of locally adapted native plant materials to the extent practicable.

Conservation Measure #4: General Measures for Protection of Special-Status Wildlife Species

The County will implement the following general conservation measures to avoid or minimize the potential for adverse effects on special-status wildlife species:

- Prior to initiation of construction activities, workers will participate in environmental awareness training provided by a qualified biologist. The training will instruct workers: 1) how to identify special-status species, their various life forms, their habitat components; 2) the potential for these species to be discovered and/or affected during construction activities; 3) how to identify sensitive habitats (e.g., wetlands, riparian); and 4) what to do if special-status species are encountered during construction activities.
- Construction access and equipment will be located on existing roads or previously disturbed parking areas.
- Vehicle speeds within off-road portions of the work area shall not exceed 15 mph to avoid collisions with wildlife.
- Disturbance of soil, vegetation, naturally occurring debris piles (including fallen trees, woodrat nests, or dead tree snags), rocky outcrops, and existing burrows or crevices will be avoided or minimized to the extent possible.
- To the extent practicable, all holes or trenches will be covered at the end of each workday to prevent wildlife from becoming trapped. All holes and trenches will be inspected before each workday to facilitate the release of any trapped wildlife. A qualified biologist will be consulted if work crews are unable to safely assist in the release of trapped wildlife.

- To minimize attractants to wildlife, trash will be stored in containers that can be closed and latched or locked to prevent access by wildlife. All loose trash will be cleaned up daily.

Conservation Measure #5: Human Remains

Surface surveys are not infallible and buried resources may be overlooked. Implementation of the following conservation measures will avoid or minimize the potential for significant effects to newly discovered resources:

- If human remains are discovered during project activities, all activities near the find will be suspended and the Stanislaus County Sheriff–Coroner will be notified. If the coroner determines that the remains may be those of a Native American, the coroner will contact the Native American Heritage Commission (NAHC). Treatment of the remains will be conducted in accordance with the direction of the County Coroner and/or NAHC as appropriate.

Conservation Measure #6: Greenhouse Gas Emissions

Construction contract documents include provisions to minimize project-related greenhouse gas (GHG) emissions. The following measures will be implemented to reduce construction-related GHG emissions:

- Reuse and recycle construction and demolition waste including, but not limited to, soil, vegetation, concrete, lumber, metal, and cardboard.
- Ensure that the project enhances, and does not disrupt or create barriers to, non-motorized transportation (e.g., bicycles, pedestrians) through proper pre-construction planning.
- Protect existing trees to the extent possible and encourage the planting of new trees.

Conservation Measure #7: Wildfire Potential

Construction contract documents include measures to minimize project-related potential for wildfire ignition:

- Per the requirements of Public Resources Code Section 4442, the County will include a note on all construction plans that internal combustion engines will be equipped with an operational spark arrester, or the engine must be equipped for the prevention of fire.

5.8 Mitigation Measures

This MMRP includes the following mitigation measures to be implemented during construction of the Gallup Creek Bridge (No. 38C0170) on Cooperstown Road Replacement Project:

Air Quality

Mitigation Measure AQ-1: Air Quality/Dust Control

In the construction bid documents, the County shall include provisions that the contractor shall implement a dust control program to limit fugitive dust emissions. The dust control program shall include, but not be limited to, the following elements, as appropriate:

- The construction contractor shall comply with the SJVAPCD Regulation VIII as it pertains to fugitive dust (PM10).
- To control dust, apply water to inactive portions of the construction site and exposed stockpiles at least twice daily or until soils are sufficiently stable to prevent being carried away by winds.
- Water shall be applied on disturbed open soil by means of pressure-type distributors or pipelines equipped with a spray system or hoses and nozzles that will ensure even distribution of water.
- All distribution equipment shall be equipped with a positive means of shutoff.
- If reclaimed water is used, the sources and discharge must meet California Department of Health Services water reclamation criteria and the Central Valley Regional Water Quality Control Board requirements. Non-potable water shall not be conveyed in tanks or drain pipes that will be used to convey potable water and there shall be no connection between potable and non-potable supplied. Non-potable tanks, pipes and other conveyances shall be marked "NON-POTABLE WATER – DO NOT DRINK."
- Equipment or manual watering will be conducted on all stockpiles, dirt/gravel roads, and exposed or disturbed soil surfaces (inactive construction sites), as necessary, to reduce airborne dust.
- Pursuant to California Vehicle Code, all trucks hauling soil and other loose material to and from the construction site shall be covered or should maintain at least 6 inches of freeboard (i.e., minimum vertical distance between the top of the load and the trailer).
- Any topsoil removed during construction shall be stored on-site in piles no higher than four feet to allow development of microorganisms prior to replacing the soil in the construction area. The topsoil piles shall be clearly marked and flagged. Topsoil piles that will not immediately be used in the construction area shall be revegetated with a non-persistent erosion control mixture.
- Soil piles for backfill shall be marked and flagged separately from native topsoil stockpiles. These soil piles shall also be surrounded by silt fencing, straw wattles, or other sediment barriers or covered unless they are to be used immediately.
- All stockpiles, dirt/gravel roads, and exposed or disturbed soil surfaces shall be watered by hand or with watering equipment, as necessary, to reduce airborne dust.
- All on-site unpaved roads and off-site unpaved access roads shall be effectively stabilized of dust emissions using water or chemical stabilizer/suppressant.
- All land clearing, grubbing, scraping, excavation, land leveling, grading, cut & fill, and demolition activities shall be effectively controlled of fugitive dust emissions utilizing application of water or by presoaking.
- Following the addition of materials to, or the removal of materials from, the surface of outdoor storage piles, said piles shall be effectively stabilized of fugitive dust emissions utilizing sufficient water or chemical stabilizer/suppressant. Materials applied as temporary stabilizers will also provide wind erosion control benefits.

- If the project generates 150 or more vehicle trips per day, the construction contractor shall prevent carryout and trackout.

Timing/Implementation: Prior to a construction/during construction/post construction

Enforcement: SJVAPCD

Monitoring: County and/or its contractor

Completed (y/n)	Date	Initials	Notes (Optional)

Biological Resources

Mitigation Measure BR-1: Special-Status Plants

- A protocol-level botanical survey will be conducted in 2023 during the blooming periods for potential special-status plant species within the project study area. If no special-status plant species are observed, then no further mitigation is required. If any special-status plant species are located in the project study area, then the following measures shall be implemented.
- Any topsoil removed during construction shall be stored onsite in piles no higher than four feet to preserve the seed bank and allow development of microorganisms prior to replacing the soil in the construction area. The topsoil piles shall be clearly marked and flagged. Topsoil piles that will not immediately be used in the construction area shall be revegetated with a non-persistent erosion control mixture.

Timing/Implementation: Prior to a construction/during construction/post construction

Enforcement: United States Fish and Wildlife Fisheries Service, California Department of Fish and Wildlife, California Department of Transportation

Monitoring: County and/or its contractor

Completed (y/n)	Date	Initials	Notes (Optional)

Mitigation Measure BR-2: California Red-Legged Frog and California Tiger Salamander

In the unlikely event that a California red-legged frog or California tiger salamander enters the project area during construction, conservation measures incorporated into the project (i.e., Erosion and Sediment Control, Prevention of Accidental Spills, Air Quality/Dust Control, Prevention of Spread of Invasive Species, and General Measures for Protection of Special-Status Wildlife) and project-specific mitigation measures described below would serve to avoid or minimize potential impacts on these two species.

- Ground-disturbing activities will be limited to daylight hours, and all clearing and grading activities in the action area will be restricted to the period of April 15 to October 15 in coordination with U.S. Fish and Wildlife Service (USFWS) and California Department of Fish and Wildlife (CDFW) and dependent on the level of rainfall and site conditions.
- A qualified biologist knowledgeable of California red-legged frog and California Tiger Salamander will also provide a discussion of these two species during the worker environmental awareness training. The discussion will include how to identify the species, relevant life history and taxonomic information, where the species would be likely to occur in the action area, what to do if the species is observed, and the state and federal laws pertaining to the species.
- No plastic, monofilament, jute, or similar erosion control matting that could entangle California red-legged frog or California Tiger Salamander will be used in the project study area. Possible substitutions include coconut coir matting, tackified hydroseeding compounds, or other materials approved by the USFWS.
- No canine or feline pets or firearms will be permitted in the project study area.
- During all initial ground-disturbing activities, a USFWS-approved biologist will be present to recover and relocate any California red-legged frog or California Tiger Salamander that may be excavated by construction equipment from an underground refuge. If live California red-legged frog or California Tiger Salamander are encountered, construction in the vicinity will stop at the direction of the qualified biologist, and the qualified biologist will immediately relocate the California red-legged frog or California Tiger Salamander to a suitable burrow outside the work area. Consultation with USFWS will need to be re-initiated.
- During rain events and within 24 hours following rain events, a qualified biologist familiar with California red-legged frog and California Tiger Salamander will visually check for federally listed amphibian species, such as California red-legged frog and California Tiger Salamander, in and around equipment and vehicles prior to resuming work. In addition, construction personnel will keep vehicle speeds within the work area to a minimum to avoid wildlife.
- If federally listed and/or state listed species are found during construction activities, a qualified biologist will be immediately notified. As warranted, the qualified biologist may notify the USFWS and/or CDFW about the species observed. All construction activities having the potential to injure or harass special-status species or habitat will be immediately stopped. The qualified biologist will evaluate the situation and will have authority to halt any construction activities until appropriate corrective measures have been implemented or it is determined that special status species will not be harmed. The qualified biologist will remain in the area for the remainder of the workday to make sure the special-status species are not harmed. Any federally listed species encountered during construction activities will be allowed to move away from construction activities on their own. Capture and relocation are not permitted unless specifically approved in advance by the USFWS and/or CDFW. Any dead or injured federally listed species or state listed will be immediately reported to the qualified biologist and the USFWS or CDFW and consultation with USFWS and/or CDFW will need to be re-initiated.
- Stanislaus County shall retain a qualified biologist familiar with California red-legged frog and California Tiger Salamander biology and habitat requirements to implement mitigation measures

for the project. Stanislaus County shall submit the name and credentials of the biologist(s) to the USFWS and CDFW for review and approval at least 15 days prior to the onset of construction activities.

- Work areas that are temporarily disturbed shall be revegetated with an assemblage of native vegetation suitable for the area.

Timing/Implementation: Prior to a construction/during construction/post construction
Enforcement: United States Fish and Wildlife Fisheries Service, California Department of Fish and Wildlife, California Department of Transportation
Monitoring: County and/or its contractor

Completed (y/n)	Date	Initials	Notes (Optional)

Mitigation Measure BR-3: Western Pond Turtle

The following measures will be implemented to avoid or minimize the potential for adverse impacts on western pond turtle:

- Environmental Awareness Training: Construction personnel training would be conducted by a qualified biologist prior to onset of work to brief them on how to recognize western pond turtle and other special-status animals (e.g., California red-legged frog and California tiger salamander) that may occur in the project study area.
- Western Pond Turtle Relocation: If pond turtles are encountered in the project study area during construction and could be harmed by construction activities, work would stop in the area and the County would notify CDFW. Upon authorization from CDFW, a qualified biologist may relocate the individual(s) the shortest distance possible to a location containing habitat outside of the work area.

Timing/Implementation: Prior to and during construction
Enforcement: California Department of Fish and Wildlife, California Department of Transportation
Monitoring: County and/or its contractor

Completed (y/n)	Date	Initials	Notes (Optional)

Mitigation Measure BR-4: Swainson's Hawk/White-Tailed Kite/Loggerhead Shrike

The following measures will be implemented to avoid or minimize the potential for significant impacts on Swainson's hawk, white tailed kite, and loggerhead shrike:

- If construction activities, including vegetation clearing, are conducted completely outside of the nesting season (i.e., after September 30 and before February 1), no further measures are necessary. If construction activities must occur during the nesting season (i.e., from February 1 to September 30), the following measures shall be implemented.
- A minimum of one pre-construction survey for active Swainson's hawk nests within 0.25 mile and active white-tailed kite and loggerhead shrike nests within 500 feet of the project area (where accessible) shall be conducted by a qualified biologist within 15 days prior to the initiation of construction activities. The first survey will occur on the same day as the pre-construction nesting surveys for other migratory birds.
- If any Swainson's hawk nests are identified, appropriate conservation measures (as determined by a qualified biologist) shall be implemented. These measures may include but are not limited to establishing a construction-free buffer zone around the active nest site, biological monitoring of the active nest site, and delaying construction activities in the vicinity of the active nest site until the young have fledged.

Timing/Implementation: Prior to and during construction

Enforcement: California Department of Fish and Wildlife, California Department of Transportation

Monitoring: County and/or its contractor

Completed (y/n)	Date	Initials	Notes (Optional)

Mitigation Measure BR-5: San Joaquin Kit Fox

Although it is unlikely that San Joaquin kit fox would occupy habitat in the project study area, the following measures will be implemented to ensure avoidance of impacts on the species:

- A U.S. Fish and Wildlife Service (USFWS) and California Department of Fish & Wildlife (CDFW)-approved biologist will survey the project area (including a 200-foot buffer around proposed disturbance) for San Joaquin Kit Fox and potential dens within 30 days prior to start of construction. Surveys will follow the recommendations in the *San Joaquin Kit Fox Survey Protocol for the Northern Range* (USFWS 1999).
- Construction shall be stopped in the area where a trapped or injured San Joaquin Kit Fox is discovered until it leaves the area and consultation with USFWS and CDFW will need to be re-initiated.

- San Joaquin Kit Fox are attracted to den-like structures such as pipes and may enter stored pipes and become trapped or injured. All construction pipes, culverts, or similar structures with a diameter of four inches or greater that are stored on the construction site overnight will be thoroughly inspected for kit foxes before the pipe is subsequently buried, capped, or otherwise moved in any way. If a kit fox is discovered inside a pipe, that section of pipe shall not be moved until the kit fox has left on its own. If the kit fox remains in the pipe for more than one day, USFWS and CDFW shall be contacted for guidance.
- No pets or firearms will be permitted in the project area.
- No rodenticides or herbicides will be used in the project area. This is necessary to prevent primary or secondary poisoning of San Joaquin Kit Fox and the depletion of prey populations on which they depend.
- A representative shall be appointed by the county who will be the contact source for any employee or contractor who might inadvertently kill or injure a San Joaquin Kit Fox or who finds a dead, injured, or entrapped San Joaquin Kit Fox. The representative will be identified during the employee education program and their name and telephone number shall be provided to the USFWS and CDFW and consultation with USFWS and CDFW will need to be re-initiated, if required.
- In the case of trapped animal(s), escape ramps or structures should be installed immediately to allow the animal(s) to escape, or the USFWS and CDFW should be contacted for guidance.
- Any contractor, employee, or military or agency personnel who are responsible for inadvertently killing or injuring a San Joaquin Kit Fox shall immediately report the incident to their representative. This representative shall contact CDFW immediately in the case of a dead, injured, or entrapped San Joaquin Kit Fox. The USFWS Sacramento Office and CDFW shall be notified in writing within three working days of the accidental death or injury to a San Joaquin Kit Fox during project-related activities. Notification must include the date, time, and location of the incident or the finding of a dead or injured animal and any other pertinent information.
- New sightings of San Joaquin Kit Fox shall be reported to the California Natural Diversity Database.

Timing/Implementation: Prior to a construction/during construction/post construction
Enforcement: United States Fish and Wildlife Fisheries Service, California
 Department of Fish and Wildlife, California Department of
 Transportation
Monitoring: County and/or its contractor

Completed (y/n)	Date	Initials	Notes (Optional)

Mitigation Measure BR-6: Migratory Birds and Raptors

The following measures will be implemented to avoid or minimize the potential for adverse impacts on nesting migratory birds and raptors:

- **Vegetation Removal Prior to Nesting Season:** If all necessary approvals have been obtained, potential nesting substrate (e.g., shrubs and trees) that would be removed by the project should be removed before the onset of the nesting season, which is March 1 through September 31, if practicable. This would help preclude nesting and substantially decrease the likelihood of direct impacts.
- **Vegetation Removal During the Nesting Season:** If vegetation removal and construction activities occur within nesting bird habitat between March 1 and September 31, a qualified biologist would conduct a preconstruction survey no more than two weeks before construction activities begin in that area. If an active nest is found, the biologist would determine a construction-free buffer zone to be established around the nest until the young have fledged. If a raptor nest is found that buffer would be 250 feet, unless a smaller buffer is approved by CDFW. The biologist would monitor the nest to ensure construction activity would not disturb the reproductive process, and to determine when the young have fledged.

Timing/Implementation: Prior to and during construction

Enforcement: California Department of Fish and Wildlife, California Department of Transportation

Monitoring: County and/or its contractor

Completed (y/n)	Date	Initials	Notes (Optional)

Mitigation Measure BR-7: Waters of the United States

The following measures shall be implemented to reduce construction-related impacts on waters of the United States:

- Prior to any discharge of dredged or fill material into Gallup Creek, the required permits and authorizations shall be obtained from the U.S. Army Corps of Engineers and the Regional Water Quality Control Board. All terms and conditions of the required permits/authorizations shall be implemented.
- Prior to any activities that would obstruct the flow of, or alter the bed, channel, or bank of Gallup Creek, a notification of streambed alteration shall be submitted to the California Department of Fish and Wildlife (CDFW). If required, a streambed alteration agreement shall be obtained from CDFW, and all conditions of the agreement shall be implemented.

- All waters of the United States or State that are temporarily affected by project construction shall be restored as close as practicable to their original contour and conditions within 10 days of the completion of construction activities.

Timing/Implementation: Prior to, during, and after construction
Enforcement: U.S. Army Corps of Engineers, Central Valley Regional Water Quality Control Board, California Department of Fish and Wildlife
Monitoring: County and/or its contractor

Completed (y/n)	Date	Initials	Notes (Optional)

Cultural Resources

Mitigation Measure CR-1: Cultural Resources

- Per Caltrans Exhibit 5.1 in Volume 2 of the Standard Environmental Reference, “it is Caltrans’ policy to avoid cultural resources whenever possible. If buried cultural materials are encountered during construction, it is Caltrans’ policy that work stop in that area until a qualified archaeologist can evaluate the nature and significance of the find. Additional survey will be required if the undertaking changes to include areas not previously surveyed.” Per Attachment 4 of the Section 106 Programmatic Agreement, isolated prehistoric or historic finds of fewer than three items per 100 square meters are properties exempt from evaluation.
- A Native American monitor shall be present during all project ground disturbance.

Timing/Implementation: During construction
Enforcement: Native American Heritage Commission and County
Monitoring: County and/or its contractor and the Native American Heritage Commission

Completed (y/n)	Date	Initials	Notes (Optional)

Geology and Soils

Mitigation Measure GEO-1: Paleontological Resources

- If paleontological resources are discovered during project construction, all work within 100 feet of the discovery site will stop until a qualified paleontologist can assess the significance of the find

and recommend appropriate treatment. Stanislaus County will be responsible for ensuring that recommendations regarding treatment are implemented.

Timing/Implementation: During construction
Enforcement: County
Monitoring: County and/or its contractor

Completed (y/n)	Date	Initials	Notes (Optional)

Hazards and Hazardous Materials

HAZ-1: Lead-based Paint

- The County shall include provisions in the construction bid documents to ensure the proper removal and disposal of lead-based paint coated surfaces found on the existing bridge or in soils beneath the bridge. The following measure shall be implemented to reduce construction-related environmental impacts that could result from lead-based paint removal:
- A limited assessment for lead in the soil under the bridge will be performed for the project area. Samples shall be collected from the soils underneath the bridge and painted surfaces. In order for hazardous waste management requirements of Health and Safety Code, Chapter 6.5 and California Code of Regulations, Title 22 to be waived, lead-contaminated soils must not exceed the contaminant concentrations discussed in Section 9 of the variance and must meet all the conditions contained within the same section. Required handling of lead contaminated soils is outlined in Table 1 and will depend on the level of lead contamination in the soils at the site.

Table 1. Lead Soil Management

Soluble Lead (mg/l)	Total Lead (mg/kg)	Soil Type	Handling
California Testing			
STLC <5.0	TTL <1000	X	Non-hazardous Waste. Notify and require Lead Compliance Plan for worker safety.
	1000 – 1411 and DI WET < 1.5 mg/l	Y1	Hazardous Waste. Variance applies – cover with minimum 1 foot of clean soil. *
	1411 – 3397 and DI WET < 150 mg/l	Y2	Hazardous Waste. Variance applies – cover with pavement structure. *
	1000 – 3397 but Surplus	Z2	Hazardous Waste. Surplus. Dispose at Class 1 disposal site.

Table 1. Lead Soil Management

Soluble Lead (mg/l)	Total Lead (mg/kg)	Soil Type	Handling
	> 3397 or 1000 – 3397 and DI WET > 150 mg/l	Z2	Hazardous Waste. Not reusable under Variance. Dispose at Class 1 disposal site.
TLC >5.0	TTLC < 1411 and DI WET < 1.5 mg/l	Y1	Hazardous Waste. Variance applies – cover with minimum 1 foot of clean soil. *
	1411 – 3397 and DI WET < 150 mg/l	Y2	Hazardous Waste. Variance applies – cover with pavement structure. *
	< 3397 and DI WET < 150 mg/l but Surplus	Z2	Hazardous Waste. Surplus. Dispose at Class 1 disposal site.
	> 3397 or DI WET > 150 mg/l	Z2	Hazardous Waste. Variance applies – cover with pavement structure.
Federal Testing			
TCLP > 5.0 mg/l	N/A	Z3	RCRA Hazardous Waste. Dispose at Class 1 disposal site as a RCRA waste regardless of TTLC and STLC results.

* Note: For hazardous waste levels of lead – if pH is less than 5.5 soil must be placed under a pavement structure. If pH is less than 5.0 variance cannot be used and the soil must be disposed as Z-2 material. (Source: Caltrans Website: http://www.dot.ca.gov/hq/env/haz/hw_adl.htm)

- Lead-based paint will be removed using one of several methods approved by the Federal EPA, at the contractor's discretion. Acceptable methods include wet scraping, or the use of a dustless needle gun connected to a vacuum unit with a high efficiency particulate air filter that empties directly into a waste container. The waste container will be properly documented and disposed of at a Class I landfill, such as the Clean Harbors Buttonwillow LLC facility in Buttonwillow, California (CAD980675276) or the Chemical Waste Management Inc. Kettleman facility in Kettleman, CA (CAT000646117).

Timing/Implementation: During construction
Enforcement: County, EPA
Monitoring: County and/or its contractor

Completed (y/n)	Date	Initials	Notes (Optional)

Mitigation Measure HAZ-2: Asbestos-Containing Building Material

The County shall include provisions in the construction bid documents to ensure the proper removal and disposal of asbestos-containing building material found on the existing bridge. The following measure shall be implemented to reduce construction-related environmental impacts that could result from asbestos removal:

- Prior to the start of construction, the existing bridge's building material will be assessed for asbestos by a Certified Asbestos Consultant at least 10 business days prior to commencing work. If present, the following measure will be used:
- Asbestos-containing building material will be removed using one of several methods approved by the Federal EPA and California Occupational and Safety Hazard Administration (Cal OSHA), at the contractor's discretion. Acceptable methods include wet scraping or the use of a dustless needle gun connected to a vacuum unit with a HEPA filter that empties directly into a waste container. The waste container will be properly documented and disposed of at a Class I landfill, such as the Clean Harbors Buttonwillow LLC facility in Buttonwillow, CA (CAD980675276) or the Chemical Waste Management Inc. Kettleman facility in Kettleman, CA (CAT000646117).

Timing/Implementation: During construction
Enforcement: County, San Joaquin Valley Unified Air Pollution Control District, EPA, Cal OSHA
Monitoring: County and/or its contractor

Completed (y/n)	Date	Initials	Notes (Optional)

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