Initial Study/ Proposed Mitigated Negative Declaration

for the

Green Valley Road 2 Bridge Replacement Project

February 2018

El Dorado County
Department of Transportation
2850 Fairlane Court
Placerville, CA 95667

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1. Project Information

1. Project Title:

Green Valley Road 2 Bridge Replacement Project

2. Lead Agency Name and Address:

El Dorado County, Department of Transportation
2850 Fairlane Court
Placerville, CA 95667

3. Contact Person and Phone Number:

Ms. Donna Keeler, Principal Planner
(530) 621-3829
donna.keeler@edcgov.us

4. Project Location:

The Indian Creek Bridge (25C0040) and the Mound Springs Creek Bridge (25C0041) are located approximately 1,050 feet from each other along Green Valley Road just west of the City of Placerville in unincorporated El Dorado County. The eastern end of the project is located about 0.8 miles west of the Green Valley Road intersection with Missouri Flat Road (Figure 1, Figure 2).

5. Description of Project:

The El Dorado County, Department of Transportation, in conjunction with the California Department of Transportation (Caltrans) and the Federal Highway Administration (FHWA) intend to replace the two existing Green Valley Road bridges over Indian Creek (25C0040) and Mound Springs Creek (25C0041). The proposed wider bridges with a continuous median turn-lane in the roadway center will improve driver safety and be consistent with American Association of State Highway and Transportation Officials (AASHTO) guidelines. A detailed project description is included in Section 3 of this Initial Study.

6. General Plan and Zoning Designations:

APN	2004 General Plan Designation	Zoning Designation
991-351-59 (County Road ROW)	Low-Density Residential (LDR)	Transportation Corridor (TC)
317-287-02	Low-Density Residential (LDR)	Residential Estate 5 acre minimum (RE-5)
317-260-02	Low-Density Residential (LDR)	Residential Estate 5 acre minimum (RE-5)
317-260-09	Low-Density Residential (LDR)	Residential Estate 5 acre minimum (RE-5)
317-285-19	Low-Density Residential (LDR)	Residential Estate 5 acre minimum (RE-5)
317-285-01	Low-Density Residential (LDR)	Residential Estate 5 acre minimum (RE-5)
317-260-03	Low-Density Residential (LDR)	Residential Estate 5 acre minimum (RE-5)
317-260-25	Low-Density Residential (LDR)	Residential Estate 5 acre minimum (RE-5)
317-285-02	Low-Density Residential (LDR)	Residential Estate 5 acre minimum (RE-5)
317-250-30	Low-Density Residential (LDR)	Residential Estate 5 acre minimum (RE-5)
317-250-44	Low-Density Residential (LDR)	Residential Estate 5 acre minimum (RE-5)
317-287-03	Low-Density Residential (LDR)	Residential Estate 5 acre minimum (RE-5)

7. Surrounding Land Uses and Setting:

The Project area is located in unincorporated El Dorado County along Green Valley Road, west of the City of Placerville in the western foothills of the Sierra Nevada Mountains. The Project is located in a rural residential area bounded by large and medium size residential parcels on all sides. Green Valley Road is classified as an off State Highway System, minor arterial road in El Dorado County.

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

The Project may require permits or approvals from the following:

- Caltrans — National Environmental Policy Act (NEPA) Categorical Exclusion
- U.S. Army Corps of Engineers — Section 404 Clean Water Act Nationwide Permit
- Central Valley Regional Water Quality Control Board — Section 401 Water Quality Certification
- California Department of Fish and Wildlife (CDFW) — Streambed Alteration Agreement
- El Dorado County Air Quality Management District (AQMD) — Fugitive Dust Plan Approval

2. Introduction

The El Dorado County, Department of Transportation, (County) intends to replace the two existing Green Valley Road bridges over Indian Creek (25C0040) and Mound Springs Creek (25C0041). The proposed wider bridges with a continuous median turn-lane in the roadway center will improve driver safety and be consistent with AASHTO guidelines.

The County is the local lead agency and prepared this Initial Study to consider the significance of potential project impacts pursuant to the California Environmental Quality Act (CEQA) of 1970, as amended (Public Resources Code, Section 21000, et seq.). This Initial Study was prepared in accordance with the State CEQA Guidelines (14 California Administrative Code, Section 14000 et seq.).

Based on the results of this Initial Study, the County has determined that the Project would have less than significant impacts on the environment with the incorporation of mitigation measures. The County may approve the Project with the certification of a Mitigated Negative Declaration (MND).

The remainder of this document is organized into the following sections:

- **Section 3, Project Description:** Provides a detailed description of the proposed Project;
- **Section 4, Initial Study Checklist and Supporting Documentation:** Provides CEQA Initial Study Resource impact checklists and supporting documentation. Identifies the thresholds of significance, evaluates potential impacts, and describes mitigation necessary to reduce impact significance;
- **Section 5, Determination:** Provides a determination of the County's CEQA findings;
- **Section 6, Report Preparation and References:** Identifies the personnel responsible for the preparation of this document and provides a list of the references cited throughout the document.
- **Appendix A, Mitigation Monitoring and Reporting Plan**: Contains the Mitigation Monitoring and Reporting Plan prepared for the proposed project. The Mitigation Monitoring and Reporting Plan includes a list of required mitigation measures and includes information regarding the County's policies and procedures for implementation and monitoring of the mitigation measures.

3. Project Description

The County in conjunction with the Caltrans and FHWA intend to replace the two existing Green Valley Road bridges over Indian Creek (25C0040) and Mound Springs Creek (25C0041). The proposed wider bridges with a continuous median turn-lane in the roadway center will improve driver safety and be consistent with AASHTO guidelines.

3.1 Location

The Project is located along Green Valley Road, west of the City of Placerville in the western foothills of the Sierra Nevada Mountains (Figures 1 and 2). The Project includes approximately one half mile of Green Valley Road from approximately 700 feet southwest of the bridge over Indian Creek to approximately 700 feet northeast of the bridge over Mound Springs Creek, and includes the road shoulders and adjacent right-of-way, and portions of adjacent private parcels. Indian Creek and Mound Springs Creek flow northwest and west respectively, through the Project area. The Project is located in a rural residential area and is bounded by large and medium size residential parcels on all sides.

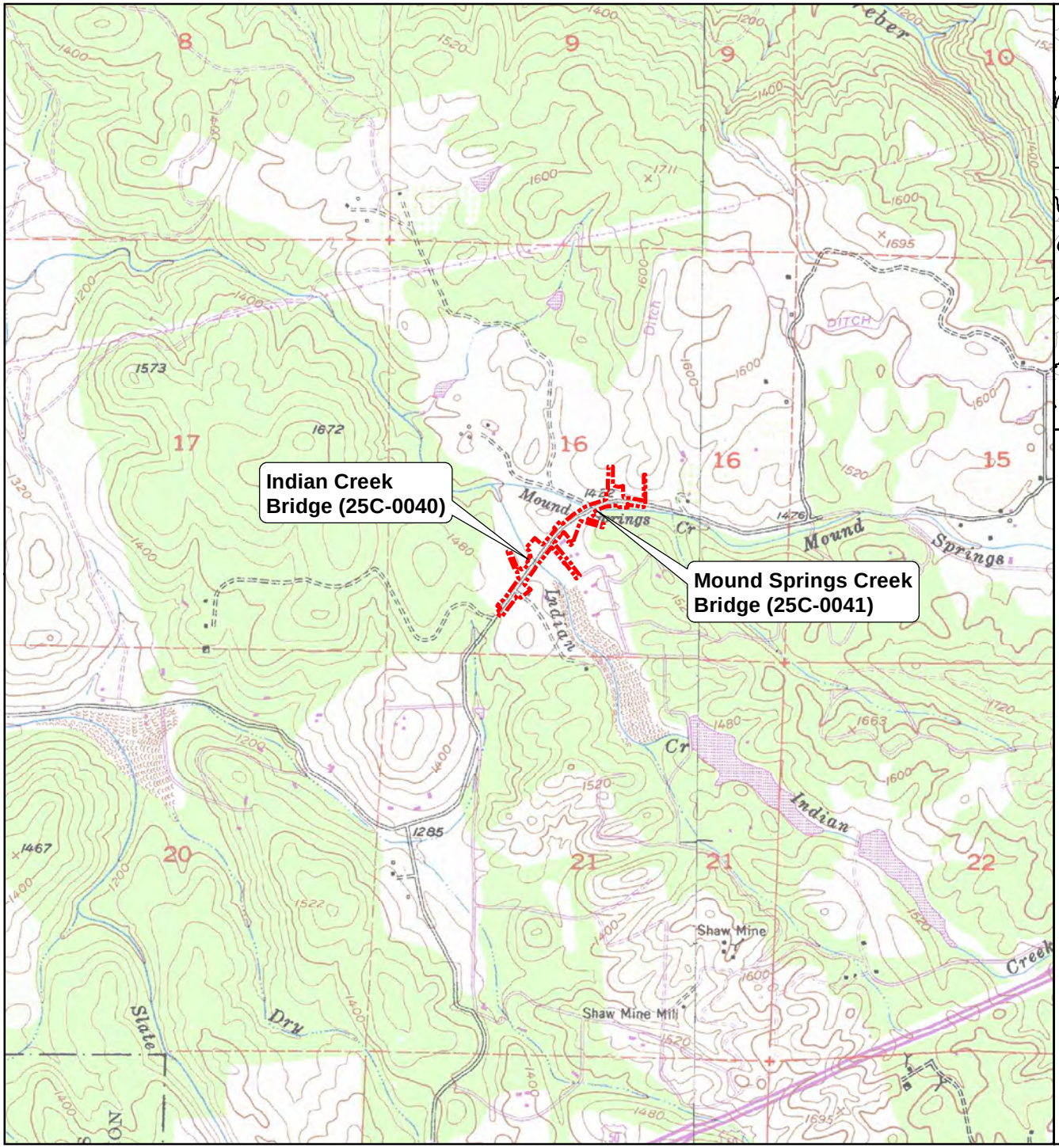
The Project is on the Shingle Springs USGS topographic quad (T10N, R10E, Section 16, Mt. Diablo Meridian) in the South Fork American Hydrologic Unit (hydrologic unit code 18020129). The centroid of the Project is located at 38.719364° north, 120.882456° west (WGS84), and its UTM coordinates (Zone 10N) are 684,070 m East; 4,287,730 m North. The Project is relatively flat and ranges in elevation from approximately 1,420 to 1,545 feet above sea level.

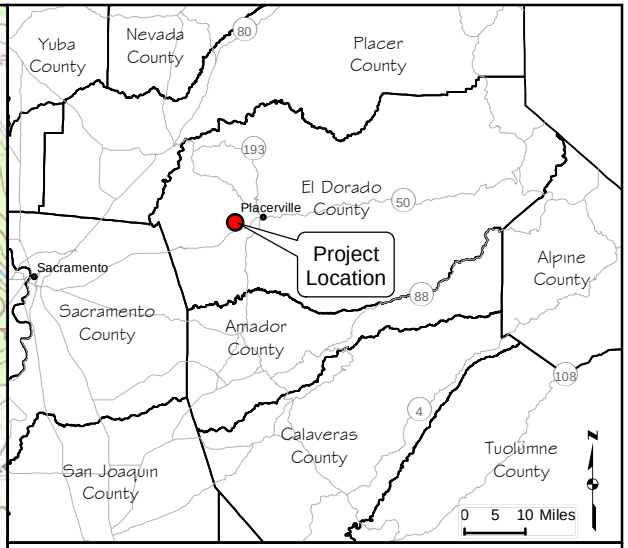
3.2 Project Purpose and Objectives

The purpose of the Project is to replace the existing Indian Creek and Mound Springs Creek bridges along Green Valley Road. Project objectives include improving roadway safety and compliance with AASHTO guidelines and County standards. These Projects are identified in the County Capital Improvement Program as project # 77127 (Green Valley Road at Indian Creek) and project # 77136 (Green Valley Road at Mound Springs Creek) (El Dorado County 2017a).

Replacement of the structures is necessary due to the following:

- Both bridges have deficient hydraulics.
- Both bridges also have poor site distance at adjacent roadways
- Both bridges have substandard approach roadways and geometrics and concrete spalling. Approximately 4,200 vehicles drive this section of Green Valley Road daily with speeds ranging from 40 to 55 mph.





Green Valley Road 2 Bridge
Replacement Project
El Dorado County, CA
31 January 2018

Figure 1. Project Location Map

Project Location

2,000 1,000 0 2,000 Feet

N

Scale: 1 inch = 2,000 feet

Federal Aid Project No(s).
Indian Creek: BRLO-5925(096)
Mound Springs Creek: BRLO-5925(112)

Shingle Springs, CA (Revised 1973)
CASIL California USGS Digital Raster Graphics (DRG),
7.5 Minute (C) Series, Albers Nad83 Mosaics (MrSID)
o_nw0102.sid & o_nw0202.sid

1506\GreenVlleyRd_Indian&MoundSpringsCks_ISMND\Fig1LocationMap.mxd

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Green Valley Road 2 Bridge
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Biological Study Area (BSA; 10.89 ac)

SYCAMORE
Environmental
Consultants, Inc.

Aerial Photograph: 7 August 2016
Vivid - USA DigitalGlobe Imagery
ESRI ArcGIS Basemap Layer

Figure 2. Aerial Photograph

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3.3 History

The existing Indian Creek Bridge is a narrow, two-lane, 28.2-ft wide, 21-ft long, single-span, reinforced concrete bridge that was constructed in 1935 and previously widened in 1975. The bridge has a Caltrans sufficiency rating of 68.1 and does not comply with several AASHTO standards due to its substandard clear width of 26 feet between barriers and non-standard railings. The April 2014 Caltrans Bridge Inspection Report (BIR) found that the Indian Creek Bridge has substandard barriers/railings, and the roadway approaches need railings as there are currently none in place. The north side of the bridge has no barrier/railing and the south side does not meet AASHTO standards.

The existing Mound Springs Creek Bridge is a narrow, two-lane, 22.3-ft wide, 29.9-ft long, two-span, reinforced concrete bridge that was constructed in 1935. The bridge has a Caltrans sufficiency rating of 68.1 and does not comply with several AASHTO standards due to its substandard clear width of 20 feet between barriers and non-standard railings. The Caltrans BIR (April 2014) found that the Mound Springs Creek Bridge has substandard barriers/railings, and the roadway approaches need railings as there are currently none in place. The bridge barriers on the Mound Springs Creek Bridge have been hit by vehicles due to the narrowness of the bridge and the approach roadway geometry.

Both bridges also have deficient hydraulics, poor site distance at adjacent roadways, substandard approach roadway and geometrics, and concrete spalling. Approximately 4,200 vehicles drive this section of Green Valley Road daily with speeds ranging from 40 to 55 mph. There are many accident report histories on this roadway. Per the Caltrans list of local agency bridges both bridges are identified as Category 5 '*Ineligible for National Register listing*' (Caltrans 2018). The bridges are over 80 years old and have exceeded their 75-year design life.

The County prepared feasibility studies for both Indian Creek and Mound Springs Creek bridges (El Dorado County 2015a and 2015b). The Feasibility Studies, which are incorporated herein by reference, evaluated rehabilitation versus replacement options based on many different replacement design concepts (i.e. 1-stage replacement (off alignment), 2-stage replacement (with a widened roadway), 3-stage replacement (on alignment), etc.). The finding of this study was ultimately that based on cost benefit analysis (and life cycle costs) for the bridges replacement with a 2-stage design concepts is preferred (or outperforms the other design concepts including rehabilitation).

The four design concepts discussed in this IS/MND represent some or a selected group of these options that were continued for evaluation after the Feasibility Study. The design concepts include: No Project, Bridge Rehabilitation, Bridge Replacement with Turn Lane Included, and Bridge Replacement per AASHTO Minimum Standards. Under the No Project option, the existing bridge would remain untouched and would not comply with current construction and safety codes. The Caltrans designation of Functionally Obsolete would remain unchanged.

After it was determined that bridge replacement was preferred over rehabilitation, three road configurations were evaluated: 2-Lane Hourglass, Left-Turn at Stagecoach (with tapers), and Continuous Median Turn Lane. The Hourglass and Left-Turn at Stagecoach configurations would not completely address the poor visibility safety concerns along the corridor. The studies recommended bridge replacements with a continuous median turn lane for improved constructability and increased driver safety.

2-Lane Hourglass

Under the 2-lane Hourglass configuration, the existing bridges would be replaced with wider bridge decks and updated bridge railings. The roadway would taper between the bridges creating an hourglass alignment. This configuration was rejected because it does not address the deficiency in sight distance and it would have increased maintenance costs and future costs.

Left-Turn at Stagecoach (with tapers)

Under the Bridge Replacement with Left-Turn at Stagecoach (with tapers) configuration, the existing bridges would be replaced with wider bridge decks and updated bridge railings. A left-turn pocket would be added at Stagecoach Road, west of Indian Creek Bridge. The roadway would taper between the bridges creating an hourglass configuration. This configuration was rejected because it does not address adjacent roadway geometrics or future needs.

Continuous Median Turn Lane

Under the Continuous Median Turn Lane configuration, a turn lane would be added through the project corridor. This configuration would improve driver safety by increasing line of sight; it provides a basis for future use, such as bike lanes; it reduces maintenance costs, and has public support.

These options were presented to the County's Board of Supervisors and the Board unanimously voted for the recommended alternative with a continuous median turn lane.

3.4 Project Description

Under the preferred Continuous Median Turn Lane configuration, a turn lane would be added through the Project corridor. This configuration would improve driver safety by increasing line of sight; it provides a basis for future use, such as bike lanes; it reduces maintenance costs, and has public support.

To enhance safety, the County proposes to improve the roadway approximately 700 feet southwest of the Indian Creek Bridge, the 1,050 feet between the two bridges, and 700 feet northeast of the Mound Springs Creek Bridge. The roadway will be widened to a pavement width of approximately 43 feet. The roadway and bridges will have the same lane and striping configuration. Road widening will primarily take place on the northwest side of the existing road within the County right-of-way. Minor widening will take place east of Mortara Circle on the south side of the road, requiring a small right-of-way acquisition. At Stagecoach Road, improvements will conform to existing near the intersection. It is anticipated that landscaping will be left in place as much as possible. The rock wall along Green Valley Road, just northeast of the intersection with Stagecoach Road, will likely be relocated to accommodate the Stagecoach Road improvements. Figure 3 shows the project design.

Funding for each bridge replacement was programmed under the Federal Statewide Transportation Improvement Program (FSTIP) 2010/11-2015/16 Local Highway Bridge Program (HBP) with additional local funding for the match from Traffic Impact Mitigation (TIM) fees. The federal bridge replacement funds are subject to certain limitations. Caltrans determined the work within the following limits was participating:

- Indian Creek Bridge, including the bridge replacement and approximately 350 feet of roadway improvements on either side of the bridge;

- Mound Springs Creek Bridge, including the bridge replacement and approximately 360 feet of roadway improvements on either side of the bridge.

3.5 Construction Methods

3.5.1 Bridge Replacement

The proposed replacement bridge over Indian Creek will be a reinforced simple span concrete bridge approximately 43 feet wide and 38 to 44 feet long, with two 12-ft wide traffic lanes, an 11-ft wide center lane, and two 4-ft wide paved shoulders. The proposed replacement Mound Springs Creek Bridge is anticipated to be a simple span concrete bridge. It will be approximately 43 feet wide and 32 to 44 feet long, with two 12-ft wide traffic lanes, an 11-ft wide center lane, and two 4-ft wide shoulders. The abutments of both bridges will be on either spread footings or piles depending of depth of bedrock and project logistics. The new bridges, which are wider and longer, will have new barriers and guard railing that is compliant with current design standards, and will have minor shifts of bridge realignment.

Demolition of the existing bridge will consist of clearing and grubbing, including tree removal, to accommodate the wider roadway and bridges. It is anticipated that the excavation for the abutments may not exceed (approximately) 20-ft below the existing ground surface.

Removal of the existing bridge foundations and construction of the new bridge foundations will involve work in the creek channel. Construction of Indian Creek Bridge will require excavation into weathered rock, likely below groundwater. The water in Indian Creek flows seasonally, so potential for seepage during the dry season (June through October) is low. The bottom of the footings are likely to be below the bottom of the channel grade. Seepage of groundwater may be transmitted through fractures in the rock. Construction may require diversion of surface water, sump pumping, and potentially the use of a seal course to control seepage within open excavations.

The replacement of the bridge over Mound Springs Creek will involve a portion of the creek channel being regraded and rock slope protection being added to the creek bank. Mound Springs Creek flows seasonally, so the potential for seepage during the dry season (June through October) is low.

Groundwater and seepage may be encountered during construction, especially in the excavations for the foundations and footings. For dewatering operations, the project will develop a dewatering plan in accordance with the Caltrans Construction Site Best Management Practices Manual's NS-02 Dewatering Operations. NS-02 requires that a dewatering plan will be included as part of the SWPPP. The dewatering plan will detail the location of dewatering activities, equipment, and discharge point(s). Sediment controls and other BMPs will be identified in the plan to ensure that discharges are consistent with the terms of the NPDES permit.

3.5.2 Roadway Improvements

The roadway will be widened to a pavement width of approximately 43 feet. The roadway and bridges will have the same lane and striping configuration. Road widening will primarily take place on the northwest side of the existing road within the County right-of-way. Minor widening will take place east of Mortara Circle on the south side of the road. At Stagecoach Road, improvements will conform to existing near the intersection. It is anticipated that landscaping will be left in place as much as possible. The rock wall along Green Valley Road, just northeast of the intersection with Stagecoach Road, will likely be relocated.

To improve safety between and within the limits of the two bridge replacements, the roadway width and geometry will be consistent the entire length of the project, and road approaches will be improved at each end. The County will complete the safety improvements that are not covered by federal funding with local funding sources (Regional Surface Transportation Program and possibly Traffic Impact Mitigation). The safety work includes approximately 344 feet of Green Valley Road southwest of Indian Creek; approximately 297 feet of road between the two bridges; and approximately 353 feet of road east of the Mound Springs Creek bridge.

To correct the substandard geometrics and address hydraulic considerations, the profile of Green Valley Road must be raised at each bridge to achieve acceptable vertical and horizontal curve lengths and associated site distances and to meet a 50-mph design speed requirement. The existing road surface at the Indian Creek Bridge will be raised approximately 1 foot higher than the existing condition. The existing road surface at the Mound Springs Bridge will be raised approximately 3 feet higher than the existing condition. Within the project limits, the road will be resurfaced with asphalt concrete.

Bridge soffit heights will be 2 feet above and water surface elevations of both creeks will pass both the 50-year and 100-year flood to comply with AASHTO freeboard requirements. Rock slope protection (RSP) will be placed in the creek channel at the base of Mound Springs Bridge to protect the abutments during typical hydraulic events. RSP will be placed in front of the abutments of the bridge over Indian Creek, but will not be placed within the ordinary high water mark.

Within the limits of the project, the existing road centerline will be slightly shifted, but maintain a 50-mph design speed. The wider road in the project corridor requires areas of cut and fill to minimize shifts to the road alignment. Throughout most of the Project area, cut and fill will be less than 2 feet deep except for locations described in Table 1. The Project will have a net import of fill material.

Table 1. Cut and Fill Depths and Locations for Road Improvements

Begin station	**End station**	**Location**	**Depth (ft)[1]**
11+20	11+70	South side of Green Valley Road	-2 to -4
9+00	12+10	North side of Green Valley Road	-2 to -4*
12+60	13+10	North side of Green Valley Road	-2 to -4*
16+00	19+00	Entire width of Green Valley Road	-2 to -4
17+00	18+90	North side of Green Valley Road	-2 to -6*
25+00	26+50	South side of Green Valley Road	-2 to -4*
29+25	31+10	North side of Green Valley Road	-2 to -6*
13+90	15+90	North side of Green Valley Road	+2 to +6
22+00	26+00	North side of Green Valley Road	+2 to +8

[1] Negative numbers represent cut depths. Positive numbers represent fill depths.
* Cut overlaps with existing hillside cut.

3.5.3 Construction Staging and Right of Way

The Project will adopt 2-stage construction so that Green Valley Road can remain open for all but short duration closures during construction. The plan is to maintain two-lane traffic throughout construction with minimal periods of one-lane traffic control. Materials and equipment that will be used for the construction of the bridge may be staged on the potential staging areas adjacent to Green Valley Road within the Project area. The first is along the south side of Green Valley Road east of a private driveway just east of Indian Creek Road. The second staging area is on the north side of Green Valley Road along the east side of Mortara Circle.

Some right-of-way acquisition will be required from adjacent privately-owned parcels on the south side of Green Valley Road from the western end of the Project to the end of the staging area south of Green Valley Road. Temporary construction easements or rights of entry will be needed for the staging areas.

The County and/or contractor will administer best management practices (BMPs) during construction to prevent concrete or other materials from entering Indian Creek and Mound Springs Creek. General bridge construction equipment expected to be used includes, but is not limited to: haul trucks, cranes, excavators, gradalls, backhoes, dump delivery trucks, concrete boom pump, and service vehicles.

3.5.4 Utilities

Based on preliminary design, there are approximately 14 joint utility poles, utility vaults, water valves and a water main that will require relocation due to construction. In December 2016 by means of a Board of Supervisor's resolution, El Dorado County formed the Green Valley Road Underground Utility District (GVRUUD). The GVRUUD will allow the undergrounding of all overhead utilities in the project corridor in a single construction season as part of the Green Valley Road 2 Bridges project. The County coordinated with PG&E and AT&T in the formation of the GVRUUD. The physical and visual impacts to the Public of undergrounding is less intrusive than pole relocation. The undergrounding will simplify construction sequencing and improve the aesthetics in the Project area by removing a heavy concentration of overhead utility lines.

The utility undergrounding may require a single 3-ft wide by 5-ft deep joint trench. The utility providers may install their own utility lines in separate trenches within the County right-of-way. The utility trench will extend along the northwest side of Green Valley Road, along the southwest side of Stagecoach Road, along the east side of Mortara Circle, along Indian Creek Road, and along 3 private driveways off Green Valley Road. The utility companies may use a trenchless construction method, like horizontal directional drill. Utility relocation to a residence southeast of the Mound Springs Creek Bridge will likely be installed using the trenchless method. No trenching will occur through the creeks or wetlands. The County proposes to place the lines within the bridge structures.

3.6 Construction Contract

The County would retain a construction contractor to construct the proposed improvements. The contractor would be responsible for compliance with all applicable rules, regulations, and ordinances associated with proposed Project activities and for implementing construction-related mitigation measures. The County would provide construction contractor oversight and management and would be responsible for verifying implementation of the mitigation measures. The contractor would construct the proposed Project in accordance with the Public Contract Code of the State of California, the Caltrans Standard Plans and

Standard Specifications, and the Contract, Project Plans, and Project Special Provisions under development by the County. The following are a combination of standard and project-specific procedures/requirements applicable to Project construction:

- Construction contract special provisions will require that a Traffic Management Plan (TMP) be prepared. The TMP will include construction staging and traffic control measures to be implemented during construction to maintain and minimize impacts to traffic during construction. The TMP will address the coordination issues for residential access during short-term road closures during the construction window as applicable;
- Contract special provisions will require compliance with El Dorado County Air Quality Management District (AQMD) Rules 223, 223-1, and 223-2 to minimize fugitive dust emissions;
- Contract provisions will require notification by the County and compliance with California Health and Safety Code Section 7050.5 and California Public Resources Code Sections 5097.5, 5097.9 et seq., regarding the discovery and disturbance of cultural materials or human remains should any be discovered during project construction;
- Contract provisions will require implementation of BMPs consistent with the Caltrans Stormwater Quality Handbooks to protect water quality and minimize the potential for siltation and downstream sedimentation.
- The County or its construction contractors will conduct early coordination with utility service providers, law enforcement and emergency service providers to ensure minimal disruption to service during construction;
- The County and its construction contractors will comply with the current State of California Standard Specifications written by the County, for public service provision; and
- The Project would comply with El Dorado County General Plan Policy 6.5.1.11 pertaining to construction noise.

3.7 Project Schedule

The bridge replacements and road work is planned to commence construction in 2019. Project duration is expected to be one to two seasons (18 months). The Project may include some night and/or weekend work to address safety considerations and avoid peak traffic along Green Valley Road. There is also a possibility of temporary side street closures during this time to avoid conflicts, which may include weekend shutdowns. Relocation of overhead utility lines may require the County, utility provider, or their contractors to trim or remove trees prior to construction. The in-water work period will be restricted to the dry season, generally defined as the time period between 15 April and the first qualifying rain event on or after 15 October (more than one half inch of precipitation in a 24-hour period), subject to the Streambed Alteration Agreement, unless CDFW provides approval of work outside that period.

MATCHLINE
SEE SHEET 2 OF 2

STAGECOACH RD

CAG

Potential Staging Area

Pasture

Driveway

ESA Fence

WR

SW 1

RSP

LAN

GREEN VALLEY RD

CAG

Pasture

Driveway

LAN

Potential Staging Area

SW 2

Seasonal Pond

ESA Fence

Simple Span Bridge

INDIAN CREEK

INDIAN CREEK RD

Pasture

CAG

Orchard

Irrigated Wetland

ESA Fence

POODLE LN

Begin Roadway Improvements

Green Valley Road 2 Bridge
Replacement Project
El Dorado County, CA
31 January 2018

Figure 3. Proposed Project Map
Sheet 1 of 2

- Biological Study Area (BSA; 10.89 ac)
- Biological Community Boundary
- Creek
- Seasonal Wetland (SW)
- Seasonal Pond
- Irrigated Wetland
- Permanent Impact
- Temporary Impact*
- Proposed Road and Bridge Improvements
- Proposed Grading Limits
- Rock Slope Protection (RSP)
- Proposed ESA Fence
- Potential Staging Area

* Temporary impacts are shown for planning purposes.

100 50 0 100 Feet

Scale: 1 inch = 100 feet

Proposed Road/Bridges and Topography:
MasterAlt5.dwg & XBase.dwg (File: 20 June 2016)
by El Dorado County Community Development Agency
Transportation Division (Downloaded: 5 July 2016)
ftp://dotftp.edcgov.us/SM06201 6/CAD%20Files/)
Aerial Photography: 19 May 2017
Google Earth Imagery

15061GreenVllyRd_Indian&MoundSpringsCks_ISMNDFig3ProjectImpactMap_Shts1-2_v3.mxd

MATCHLINE SEE SHEET 1 OF 2

Driveway

Driveway

Pasture

CAG

GREEN VALLEY RD

CAG

LAN

CAG

INDIAN CREEK RD

Potential Staging Area

WR

RSP

RSP

Proposed Culverts

Simple Span Bridge

Interior Live Oak Woodland

LAN

Paved Parking

MORTARA CIRCLE

CAG

Potential Staging Area

CAG

WR

MOUND SPRINGS CREEK

WR

CAG

Green Valley Road 2 Bridge
Replacement Project
El Dorado County, CA
31 January 2018

Figure 3. Proposed Project Map
Sheet 2 of 2

- Biological Study Area (BSA; 10.89 ac)
- Biological Community Boundary
- Creek
- Permanent Impact
- Temporary Impact*

* Temporary impacts are shown for planning purposes.

- Proposed Road and Bridge Improvements
- Proposed Grading Limits
- Proposed Culverts
- Rock Slope Protection (RSP)
- Proposed ESA Fence
- Potential Staging Area

100 50 0 100 Feet

Scale: 1 inch = 100 feet

Proposed Road/Bridges and Topography:
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ftp://dotftp.edcgov.us/SM06201G/CAD%20Files/)
Aerial Photography: 19 May 2017
Google Earth Imagery

15061GreenVllyRd_Indian&MoundSpringsCks_ISMNDFig3ProjectImpactMap_Shts1-2_v3.mxd

4. Initial Study Checklist and Supporting Documentation

4.1 Initial Study Checklist

This section of the Initial Study incorporates the Environmental Checklist contained in Appendix G of the CEQA Guidelines. Each resource topic section provides a determination of potential impact and an explanation for the checklist impact questions. The following 19 environmental categories are addressed in this section:

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

Each of the above listed environmental categories was fully evaluated and one of the following four determinations was made for each checklist question:

- **"No Impact"** means that no impact to the environment would occur as a result of implementing the Project.
- **"Less than Significant Impact"** means that implementation of the Project would not result in a substantial and/or adverse change to the environment and no mitigation is required.
- **"Potentially Significant Unless Mitigation is Incorporated"** means that the incorporation of one or more mitigation measures would reduce the impact from potentially significant to less than significant.
- **"Potentially Significant Impact"** means that there is either substantial evidence that a project-related effect would be significant or, due to a lack of existing information, could have the potential to be significant.

4.2 Setting, Impacts, and Mitigation Measures

4.2.1 Aesthetics

I. AESTHETICS—Would the project:	*Potentially Significant Impact*	*Potentially Significant Unless Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☒	☐
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☐	☒

Environmental Setting

The Project occurs in the foothills of the Sierra Nevada, at an elevation ranging from of approximately 1,420 to 1,545 feet above sea level. The Project is located in a rural residential setting west of Placerville in unincorporated El Dorado County. The project area includes existing right of way and portions of private parcels. The project vicinity includes the existing roads, disturbed areas along the road shoulders, driveways, homes and accessory structures, horticultural landscaping near homes, Interior Live Oak, California and Annual Grassland Woodland in upland areas, pasture, orchards, irrigated wetlands, and Willow Riparian adjacent to Indian Creek and Mound Springs Creek.

A Scenic Resource Evaluation and Visual Impact Assessment Memo was prepared to evaluate potential impacts to visual resources (Sycamore Environmental 2017e). Based on the following information the Project will not adversely affect any scenic resources:

- The Project is not located on a highway or route that is designated or eligible for designation as a scenic highway.
- El Dorado County's General Plan does not designate or identify any scenic resources in the project limits. Table 5.3-1 of the General Plan EIR identifies multiple scenic views and resources in the County. Green Valley Road is not identified in Table 5.3-1 of the General Plan EIR.
- The Project is consistent with the visual landscape of the surrounding area. The Project site is a rural road that runs primarily through rural residential land.
- There is a low potential for controversy in the community. The bridge replacements are necessary to improve public safety. The Greenstone Country Community housing development located north of Green Valley Road in the project area wrote a letter in support of the proposed Project.
- This Project will not result in an aggregate adverse change in overall visual quality. There are currently no plans for future improvements in the area of this Project.
- The HRER identified and evaluated five resources within the project area requiring evaluation under CEQA: two bridges, two trail segments, and an abandoned segment of Green Valley Road (Mead & Hunt 2016). Only the two bridges and abandoned segment of Green Valley Road required evaluation for the National Register. The five resources were evaluated to determine their

eligibility for listing on the California register. To qualify for listing in the California Register and to be considered a historical resource for the purposes of CEQA, a resource must meet one or more of the criteria set forth in PRC 5024.1 and the California Code of Regulations (CCR Title 14, Chapter 11.5, § 4850 et seq).

Each resource was evaluated for the California Register under Criteria 1, 2, 3, and 4 and determined to be not eligible for inclusion on the California Register. The resources were also evaluated collectively for a possible historic district. Collectively the resources do not possess adequate significance nor retain the physical integrity necessary to represent a cohesive collection that made important contributions to the history of El Dorado County or the region. The HRER also concluded that the five resources are not eligible for listing on the National Register.

- The Project Historic Resources Evaluation Report (HRER) prepared by Mead & Hunt Inc. (2016) Based on archival research, public involvement, and field investigation, three built environment resources within the area of potential impact (APE) were identified - an abandoned approximately 100-foot road segment of Green Valley Road, Indian Creek Bridge (No. 25C0040), and Mound Springs Creek Bridge (No. 25C0041). The HRER concludes that the Green Valley Road segment is not long enough to convey the road's historic context or potential significance and is exempt from evaluation.

  Both bridges are listed as Category 5 – Not Eligible for the National Register in Caltrans' Historic Bridge Inventory. The two bridges were reevaluated by Mead & Hunt and it was determined that both bridges continue to lack historical significance and are not eligible for the National Register. They are also not historical resources for the purposes of CEQA because they do not meet the California Register criteria outlined in PRC 5024.1.
- Visual simulations of the proposed Project were prepared as part of a presentation prepared by the County for the Board of Supervisors. ***Note:*** *Not all of the retained trees are shown in the simulations.* The Project will remove a total estimated 10 trees (6 red willows and 4 interior live oak). The simulations showed before and after images of the Project area and indicated that the project would not result in substantial adverse impacts to the visual environment.
- To correct the substandard geometrics, the profile of Green Valley Road must be raised at each bridge to achieve acceptable vertical and horizontal curve lengths and associated site distances and to meet a 50-mph design speed requirement. The existing road surface at the Indian Creek Bridge will be raised approximately 1 foot higher than the existing condition. The existing road surface at the Mound Springs Bridge will be raised approximately 3 feet higher than the existing condition. Following Project completion, the change in the road surface elevation is not anticipated to be perceived negatively by local residents or the traveling public.

Potential Environmental Effects

a) ***Less Than Significant Impact.*** A scenic vista refers to the view of an area that is visually or aesthetically pleasing. Aesthetic components of a scenic vista include: 1) scenic quality, 2) sensitivity level, and 3) view access.

Table 5.3-1 of the General Plan EIR identifies multiple scenic views and resources in the County. Green Valley Road is not identified in Table 5.3-1 of the General Plan EIR (El Dorado County 2004a).

The Project consists of the replacement of two bridge structures and roadway improvements. The new bridges will be visually consistent with other transportation infrastructure in the vicinity of the Project. Impacts to the scenic resource/ scenic view is considered less-than significant.

b) ***No Impact.*** The Project is not located on a state scenic highway (Caltrans 2017).

c) ***Less Than Significant Impact.*** See discussion of a) above.

d) ***No Impact.*** The Project does not introduce any new source of light or glare.

4.2.2 Agricultural and Forestry Resources

II. AGRICULTURE AND FORESTRY—In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:	*Potentially Significant Impact*	*Potentially Significant Unless Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☒	☐
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

Environmental Setting

The Project is located in a rural residential area in the Sierra Nevada. No Prime Farmland, Unique Farmland, Farmland of Statewide Importance, or lands under Williamson Act contracts occur in the project area (California Department of Conservation 2017c). The Project area is located outside of the area identified as 'Timber Production Zone' on Exhibit 5.2-4 (Timber Production Zones) of the County General Plan EIR (El Dorado County 2004a).

Potential Environmental Effects

a) ***No Impact.*** No Prime Farmland, Unique Farmland, Farmland of Statewide Importance, or lands under Williamson Act contracts occur in the project area.

b) ***No Impact.*** See response for item a).

c) ***No Impact.*** The proposed Project is consistent with the existing zoning and does not include any rezoning activities.

d) ***Less Than Significant Impact.*** The proposed Project is being constructed within the existing County right of way and will not result in a permanent loss of forest land or conversion of forest land.

e) ***No Impact.*** Excluding temporary impacts to vegetation, the Project is not anticipated to involve other changes in the existing environment that could result in conversion of Farmland or forest land.

4.2.3 Air Quality

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:	*Potentially Significant Impact*	*Potentially Significant Unless Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	☒
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☒	☐
c) 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 (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☐	☐	☒
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☒	☐

Environmental Setting

The project area is located in the Mountain Counties Air Basin (MCAB). The San Francisco Bay Area Air Basin and the Sacramento Valley Air Basin are located to the west, and the San Joaquin Valley Air Basin is located to the south. Climate in the MCAB relate to elevation and proximity to the Sierra Ridge. Precipitation is greater and temperatures are lower at higher elevations. Summer temperatures in the project area are in the mid- to upper nineties. Winter temperatures are in the upper thirties to lower forties.

The air quality of a region is determined by the air pollutant emissions (quantities and type of pollutants measured by weight) and by ambient air quality (the concentration of pollutants within a specified volume of air). Air pollutants are characterized as primary and secondary pollutants. Primary pollutants are those emitted directly into the air, for example carbon monoxide (CO), and can be traced to a single pollutant source. Secondary pollutants are those pollutants that form through chemical reactions in the atmosphere, for example reactive organic gasses (ROG) and nitrogen oxides (NO_X) combine to form ground level ozone, or smog.

Congress established much of the basic structure of the Clean Air Act in 1970, and made major revisions in 1977 and 1990. The Federal Clean Air Act established national ambient air quality standards (NAAQS). These standards are divided into primary and secondary standards. Primary standards are designed to protect public health and secondary standards are designed to protect other values. Because of the health-

based criteria identified in setting the NAAQS, the air pollutants are termed "criteria" pollutants. California has adopted its own, more stringent, ambient air quality standards (CAAQS). The attainment status of the Mountain Counties Air Basin portion of El Dorado County is listed in Table 2.

Table 2. Attainment Status for Mountain Counties Air Basin portion of El Dorado County

Pollutant	National Designation	State Designation
Ozone	Nonattainment (8 hr.)	Nonattainment
PM_{10}	Unclassified	Nonattainment
$PM_{2.5}$	Nonattainment	Unclassified
CO	Unclassified/ Attainment	Unclassified
NO_2	Unclassified/ Attainment	Attainment
SO_2	Unclassified	Attainment
Sulfates	NA	Attainment
Lead	Unclassified/ Attainment	Attainment
Hydrogen Sulfide	NA	Unclassified
Visibility Reducing Particles	NA	Unclassified

The AQMD administers the state and federal Clean Air Acts in accordance with state and federal guidelines. The AQMD regulates air quality through its district rules and permit authority. It also participates in planning review of discretionary project applications and provides recommendations. The following AQMD rules apply during the construction of the Project:

- **Rule 202 (Visible Emissions):** Prohibits discharge into the atmosphere from any single source of emission whatsoever any air contaminant for a period or periods aggregating more than three (3) minutes in any one (1) hour which is a) As dark or darker in shade as that designated as No. 1 on the Ringlemann chart, as published by the United States Bureau of Mines, or b) Of such opacity as to obscure an observer's view to a degree equal to or greater than does smoke described in subsection (A) of this section.
- **Rule 205 (Nuisance):** Prohibits the discharge of air contaminants which cause injury, detriment, nuisance, or annoyance.
- **Rule 207 (Particulate Matter):** Limits the quantity of PM through concentration limits.
- **Rule 215 (Architectural Coatings):** Defines the quantities of reactive organic compounds permitted for use in new construction.
- **Rule 223 (Fugitive Dust):** The purpose of this rule is to reduce the amount of particulate matter entrained in the ambient air as a result of anthropogenic (man-made) fugitive dust sources by requiring actions to prevent, reduce or mitigate fugitive dust emissions.
- **Rule 223-1 (Fugitive Dust – Construction):** Requires a Fugitive Dust Control Plan be prepared and submitted to the El Dorado County AQMD prior to ground disturbing activities. Pursuant to Rule 610, the El Dorado County AQMD charges a fee to review the Fugitive Dust Control Plan required by Rule 223-1.
- **Rule 223-2 (Fugitive Dust – Asbestos Hazard Mitigation):** The purpose of this Rule is to reduce the amount of asbestos particulate matter entrained in the ambient air as a result of any construction or construction related activities that disturbs or potentially disturbs

naturally occurring asbestos by requiring actions to prevent, reduce or mitigate asbestos emissions.

- **Rule 224 (Cutback and Emulsified Asphalt Paving Materials):** Limits emissions of ROGs from the use of cutback and emulsified asphalt paving materials, paving, and maintenance operations.
- **Rule 233 (Stationary Internal Combustion Engines):** Limits emissions of NOx and CO from stationary internal combustion engines. (This rule applies to any stationary internal combustion engine rated at more than 50 brake horsepower, operated on any gaseous fuel or liquid fuel, including liquid petroleum gas (LPG), gasoline, or diesel fuel.)

The El Dorado County AQMD Guide to Air Quality Assessment (2002) specifies specific daily emissions thresholds that can be used to determine the significance of project emissions. The AQMD considers a significant cumulative impact to occur if the project requires a change in the existing land use designation (i.e., general plan) and would individually exceed the project-level thresholds of significance. Thresholds of significance for specific pollutants of concern are as follows:

- ROG: 82 lbs/day
- NOx: 82 lbs/day
- PM10: AAQS

Potential Environmental Effects

As recommended in the El Dorado County AQMD Guide to Air Quality Assessment, construction emissions were estimated for the Project using the Sacramento Metropolitan Air Quality Management District's *Road Construction Emissions Model (*RCEM*), Version 8.1.0*. The RCEM was developed to estimate emissions from linear projects types including road and bridge construction. The RCEM divides the project into four 'Construction Periods':

- Grubbing/ Land Clearing
- Grading/Excavation
- Drainage/Utilities/Sub-Grade
- Paving

Based on similar County road and bridge projects, the assumptions presented in Table 3 regarding type of construction equipment and use duration were used in the RCEM. Other Project assumptions used in the RCEM include a total of approximately eighteen (18) month construction schedule starting in 2019, use of water trucks, and all equipment was assumed to run for eight (8) hours per day (with an anticipated lower level of equipment activities occurring during a six (6) month period of utility relocations). Results of the RCEM based on the Project assumptions are in Table 4.

Table 3. Construction Equipment and Quantity.

Construction Period	Equipment	
	Quantity	Type
Grubbing/ Land Clearing	2	Excavator
	1	Bulldozer
	2	Signal Board

Grading/Excavation	1	Crane
	2	Bulldozer
	2	Excavator
	1	Grader
	2	Roller
	2	Loader
	2	Scraper
	2	Backhoe
	2	Signal Board
Drainage/Utilities/Sub-Grade	1	Air Compressor
	1	Generator Set
	1	Grader
	1	Compactor
	1	Pump
	1	Forklift
	2	Scraper
	2	Backhoe
	2	Signal Board
Paving	1	Paver
	1	Paving Equipment Roller
	2	Signal Board
	1	Backhoe

Table 4. Estimated Construction Emissions

Project Phases	ROG lbs/day	CO lbs/day	NOx lbs/day	PM10 lbs/day	Exhaust PM10 lbs/day	Fugitive Dust PM10 lbs/day
Grubbing/land clearing	1.3	10.5	14.60	30.62	0.62	30.00
Grading/excavation	7.14	50.37	80.78	33.63	3.63	30.00
Drainage/utilities/sub-grade	4.80	39.45	48.61	32.41	2.41	30.00
Paving	1.28	13.37	12.65	0.72	0.72	-
Maximum lbs/day	7.14	50.37	80.78	33.63	3.63	30.00
Significance Threshold	82	AAQS	82	82	*N/A*	*N/A*
Significant?	No	No	No	No	*N/A*	*N/A*

Notes: Data entered to emissions model: Project Start Year: 2019; Project Length (months): 18; Total Project Area (acres): ±10. PM10 estimates assume 50% control of fugitive dust from watering and associated dust control measures. Total PM10 emissions are the sum of *exhaust* and *fugitive dust* emissions.

a) ***No Impact.*** The proposed Projects are identified as ELD19335 and ELD19353 in the Sacramento Council of Governments' (SACOG) 2016 *Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS)* (Sacramento Council of Governments 2016). Projects included

in the Metropolitan Transportation Plan have been determined to be consistent with the planning goals of the State Implementation Plan.

b) ***Less Than Significant Impact.*** The County is in nonattainment status for both federal and state ozone standards and the state PM10 standard. Construction activities would result in short-term increases in emissions from the use of heavy equipment that generate dust, exhaust, and tire-wear emissions and from paints and coatings. Project construction would create short-term increases in ROG, NOx, and PM10 emissions from vehicle and equipment operation. None of the estimated emissions exceed the County's significance thresholds. The Project would not generate additional traffic. No operational emissions will result from the Project.

c) ***No Impact.*** Cumulative net increases of criteria pollutants have been evaluated in the *2016 MTP/SCS* (SACOG 2016). This Project is referenced and evaluated in the *2016 MTP/SCS*. Also see the response for item b).

d) ***Less Than Significant Impact.*** Adjacent residences have the potential to be exposed to PM10, PM2.5, CO, ROG, and NOx during construction. These impacts are considered less than significant due to the limited nature of the Project and short-term construction period.

The Project is not located within an area known to contain naturally occurring asbestos (NOA) or an area "more likely to contain naturally occurring asbestos" (California Department of Conservation 2000, El Dorado County 2005).

e) ***Less Than Significant Impact.*** Construction activities would involve the use of construction equipment and asphalt paving, which have distinctive odors. Odors are considered less than significant because of the limited number of the public affected and the short-term nature of the emissions.

4.2.4 Biological Resources

IV. BIOLOGICAL RESOURCES—Would the project:	*Potentially Significant Impact*	*Potentially Significant Unless Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	☐	☒	☐	☐
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?	☐	☒	☐	☐
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☒	☐

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

Environmental Setting

Potential impacts to biological and wetlands resources were evaluated in the following Project technical reports:

- Wetland Study/ Jurisdictional Delineation Report (Sycamore Environmental 2017a)
- Natural Environment Study (NES, Sycamore Environmental 2017b)
- Biological Assessment (BA, Sycamore Environmental 2017c).
- Site Assessment Report for California Red-legged Frog (Sycamore Environmental 2017d)

The NES is a standard Caltrans report for documenting and evaluating the potential Project impacts to biological resources. The BA is prepared to support Endangered Species Act consultation with USFWS and National Marine Fisheries Service (NMFS). The NES and BA conclude the following regarding biological resources:

- Indian Creek and a seasonal pond in the Project area provide marginal breeding habitat for the federal-listed California red-legged frog (CRLF; *Rana draytonii*).
- Indian Creek and Mound Springs Creek are intermittent creeks. Within the project limits, they are not suitable habitat for foothill yellow-legged frog (FYLF; *Rana boylii*), which was designated a "Candidate" for listing under the California Endangered Species Act on June 27, 2017.
- The Project area does not provide habitat for any other federal-listed or federal-proposed wildlife or plants.
- The Project area provides suitable habitat for several other special-status species including western pond turtle (*Emys marmorata*), white-tailed kite (*Elanus leucurus*), and other birds-of-prey and migratory birds.
- The Project provides habitat for four special-status plants including Big-scale balsamroot, Sierra arching sedge, Sanford's arrowhead, and Oval-leaved viburnum ranked by the California Native Plant Society (CNPS).

Natural communities that occur in the Project area and estimated temporary and permanent impacts are shown in Table 5 (Sycamore Environmental 2017a). The Willow Riparian, Seasonal Wetland, Seasonal Pond, Indian Creek, and Mound Springs Creek are considered sensitive natural communities in the Project area.

Table 5. Natural Communities in the Project area

Biological Community	Acreage	Temporary Impact (ac.)	Permanent Impact (ac.)
California Annual Grassland	4.967	4.181	0.682
Interior Live Oak Woodland	0.209	0.209	0

Biological Community	Acreage	Temporary Impact (ac.)	Permanent Impact (ac.)
Landscaping	0.727	0.670	0.056
Orchard	0.265	0.256	0.009
Pasture	0.940	0.790	0
Willow Riparian	0.555	0.355	0.097
Indian Creek	0.067	0.056	0
Mound Springs Creek	0.069	0.055	0.014
Seasonal Wetlands	0.184	0.067	0.002
Irrigated Wetland	0.012	0	0
Seasonal Pond	0.047	0	0
Paved and Dirt Roads [1]	2.847	--	--
Total:	**10.889**	**6.639**	**0.860**

[1] Previously disturbed community, thus no impacts are calculated.

Potential Environmental Effects

a) ***Potentially Significant Unless Mitigation Incorporated.***

Special-Status Plant Species: The Project provides habitat for four special-status plants ranked by the CNPS. No special-status plants were observed during a botanical survey conducted in 2013 during the evident and identifiable period for special-status plants with potential to occur. Due to updates to the project limits and the addition of proposed staging areas, the botanical survey in 2013 no longer covers the entire Project area. With the exception of big-scale balsamroot, the 2016 biological surveys were conducted during the evident and identifiable period of special-status plants with potential to occur and covered the entire Project area. Implementation of BIO-1 will reduce potential impacts to big-scale balsamroot to less than significant.

Mitigation Measure BIO-1

- *A properly timed survey for big-scale balsamroot will be conducted in the expanded project limits prior to construction.*
- *If big-scale balsamroot is not detected during the survey, then no further avoidance and minimization measures will be required.*
- *If big-scale balsamroot is found during the survey, the plants will be avoided to the maximum extent practicable during project construction. Environmentally Sensitive Areas (ESAs) will be established by the County or its contractors around sensitive plant occurrences within the Project area to exclude project activities. Temporary exclusionary fencing will be installed to define the limits of the ESA.*
- *If avoidance is not feasible, the plants will be transplanted to a suitable location in the Project area.*
- *If avoidance and transplantation are not feasible, the County will acquire mitigation credits from an established mitigation bank presently supporting the species with suitable*

habitat for such species. Off-site compensatory mitigation credits will be acquired at a minimum acreage ratio of 1:1 (acquired: impacted).

California red-legged frog (CRLF; *Rana draytonii*): Indian Creek and a seasonal pond in the Project area provide marginal breeding habitat for the federal-listed California red-legged frog (CRLF; *Rana draytonii*). A CRLF Site Assessment was conducted to evaluate and identify potential CRLF habitat in and within one mile of the Project area in accordance with the USFWS guidelines (Sycamore Environmental 2017d). CRLF are not expected to occur in the Project area. A Biological Assessment was prepared to support informal section 7 Federal Endangered Species Act consultation with USFWS. In a letter dated 26 June 2017 the USFWS concurred that with the implementation of BIO-2 the proposed project may affect but is not likely to adversely affect CRLF. Implementation of BIO-2 will reduce potential project impacts to less than significant. BIO-4 and BIO-6 also contain measures that will reduce potential impacts to CRLF.

Mitigation Measure BIO-2

- *A Service-approved biologist shall conduct a preconstruction survey for CRLF within 48 hours prior to the onset of vegetation removal in the riparian habitat. If any CRLF are found, construction activities will stop in the riparian and aquatic habitats, and the USFWS will be contacted immediately for further guidance.*
- *Environmental awareness training will be conducted by a qualified biologist prior to the onset of project work for construction personnel to brief them on how to recognize CRLF, the importance of avoiding impacts to this species, and what to do if they are found. Education programs will be conducted for appropriate new personnel as they are brought on the job during the construction period. Upon completion of training, employees will sign a form stating that they attended the training and understand all the conservation and protection measures.*
- *All vegetation scheduled for removal in the willow riparian habitat, Indian Creek, Mound Springs Creek, and the seasonal pond will be removed by hand or with hand-held power tools. Mechanized vehicles will not be used to clear the brush.*
- *A qualified biologist will be present during clearing and grubbing activities in the riparian habitat to monitor for CRLF.*
- *ESA fencing will be established along the boundaries of the Project area to prevent encroachment by construction equipment and personnel. The fencing can be installed after initial clearing of vegetation, but shall be installed prior to any further work on the Project. Vehicles will not be allowed to park in, nor will equipment be stored in the ESA. No storage of oil, gasoline, or other substances will be permitted in the ESA. No vegetation removal or ground disturbing activities will be permitted in the ESA.*
- *If creek diversion is required, the contractor will prepare a creek diversion plan that complies with any applicable permit conditions. A qualified biologist will conduct a survey of the area to be diverted prior to diversion installation. The qualified biologist or qualified site personnel under the oversight of a qualified biologist will be present during installation and removal of the diversion structure and dewatering activities (as it applies to installation and removal of dewatering activities).*
- *Plastic mono-filament netting (erosion control matting) or similar material containing netting shall not be used at the project site because the CRLF or other animals may become*

entangled or trapped in it. Acceptable substitutes include coconut coir matting or tackified hydroseeding compounds.

- *If CRLF are found at any time during project work, construction will stop in the riparian and aquatic habitats, and the USFWS will be contacted immediately for further guidance.*
- *To ensure compliance with the project's avoidance and minimization measures, a County inspector will be on-site whenever in-water work occurs. The County construction inspector will make recommendations to the construction personnel, as needed, to comply with all project implementation restrictions and guidelines. The County construction inspector will be responsible for ensuring that the contractor maintains the staked and flagged perimeters of the construction area and staging areas adjacent to sensitive biological resources. A qualified biologist will be available during the construction period to assist the County construction inspector if CRLF are found and to answer questions and make recommendations regarding implementation of CRLF avoidance and minimization measures.*
- *Upon completion of construction activities, any barriers to flow shall be removed to allow flow to resume with the least disturbance to the substrate.*

Western pond turtle (WPT; *Emys marmorata*): When water is present, WPT could use Mound Springs Creek, Indian Creek, and the seasonal pond as seasonal habitat and movement corridors. WPT were not observed in the Project area during the biological surveys. None of the aquatic features in the Project area provide year-round habitat for WPT due to insufficient water throughout the dry season. Nearby ponds and impoundments along Indian Creek likely hold water for an appropriate duration to provide year-round, breeding habitat for WPT. Adjacent uplands provide potential nesting habitat for WPT. Implementation of BIO-2, BIO-4, and BIO-6 will reduce potential project impact to less than significant.

Migratory Birds and Birds of Prey Discussion: The Project area provides potential nesting habitat for birds of prey and birds listed by the Migratory Bird Treaty Act (MBTA). Black phoebe nests were identified under both bridges. Fish and Game Code Section 3503.5 protects all birds in the orders Falconiformes and Strigiformes (collectively known as birds of prey). Birds of prey include raptors, falcons, and owls. Migratory birds are protected under the federal MBTA of 1918 (16 U.S.C. 703-711). The MBTA makes it unlawful to take, possess, buy, sell, purchase, or barter any migratory bird listed in 50 CFR Part 10 including feathers or other parts, nests, eggs, or products, except as allowed by implementing regulations (50 CFR 21). All migratory bird species are protected by the MBTA. Implementation of BIO-3 will reduce potential impacts to less than significant.

Mitigation Measure BIO-3

Under the MBTA, nests that contain eggs or unfledged young are not to be disturbed during the breeding season. Nesting or attempted nesting by migratory birds and birds-of-prey is anticipated from February 15 to September 1.

Swallows

In California, bridge-nesting swallows typically arrive in mid-February, increase in numbers until late March, and remain until October. Nesting begins in April, peaks in June, and continues into August. Measures will be taken to prevent establishment of cliff swallow nests prior to

construction. Techniques to prevent nest establishment include using exclusion devices, removing and disposing of partially constructed and unoccupied nests of migratory or nongame birds on a regular basis to prevent their occupation, or perform any combination of these. The following measures will be implemented:

- *The contractor will visit the site weekly and remove partially completed nests using either hand tools or high pressure water; and/or*
- *Hang netting from the bridge before nesting begins. If this technique is used, netting should be in place from late February until project construction begins.*

Birds of Prey and Birds Protected by the Migratory Bird Treaty Act

- *If construction begins outside the 15 February to 1 September breeding season, there will be no need to conduct a preconstruction survey for active nests.*
- *Trees scheduled for removal should be removed during the non-breeding season from 2 September to 14 February. Vegetation removal includes trees and vegetation within the stream zone. Within the riparian community, vegetation will be removed using hand tools, including chain saws and mowers, and may be trimmed several inches above the ground with the roots left intact to prevent erosion.*
- *If construction or vegetation removal begins between 15 February and 1 September, a biologist shall conduct a survey for active bird of prey nests and rookeries within 500 ft of the project area and active nests of all other MBTA-protected birds within 100 ft of the project area from publicly accessible areas within two weeks prior to construction. The measures listed below shall be implemented based on the survey results.*
- *No Active Nests Found:*
- *If no active nest of a bird of prey, MBTA bird, or other CDFW protected bird is found, then no further avoidance and minimization measures are necessary unless one is subsequently found during construction, in which case the applicable measure below will be implemented.*

Active Nests Found:

- *If an active nest of a bird of prey, MBTA bird, or other CDFW protected bird is discovered that may be adversely affected by construction activities, or an injured or killed bird is found, immediately:*
    1. *Stop all work within a 100-foot radius of the discovery.*
    2. *Notify the Engineer.*
    3. *Do not resume work within the specified radius of the discovery until authorized.*
    4. *If the bird is injured or dead, determine the cause, if possible, and measures taken to prevent the same result in the future.*
- *The biologist shall establish a minimum 500-ft Environmentally Sensitive Area (ESA) around the nest if the nest is of a bird of prey or is a rookery, and a minimum 100-ft ESA around the nest if the nest is of an MBTA bird other than a bird of prey.*

Species Protection Areas

Identification	***Location***
Bird of Prey or Rookery	*500 ft no-disturbance buffer*
MBTA protected bird (not bird of prey)	*100 ft no-disturbance buffer*

- *Activity in the ESA will be restricted as follows:*
    1. *Do not enter the ESA unless authorized*
    2. *If the ESA is breached, immediately:*
        a. *Secure the area and stop all operations within 100 feet of the ESA boundary.*
        b. *Notify the Engineer.*
    3. *If the ESA is damaged, the County determines what efforts are necessary to remedy the damage and who performs the remedy.*
- *No construction activity shall be allowed in the ESA until the biologist determines that the nest is no longer active, or unless monitoring determines that a smaller ESA will protect the active nest.*
- *The ESA may be reduced if the biologist monitors the construction activities and determines that no disturbance to the active nest is occurring. Reduction of the ESA depends on the species of bird, the location of the nest relative to the project, project activities during the time the nest is active, and other project-specific conditions.*
- *Between 15 February and 1 September, if additional trees or shrubs need to be trimmed and/or removed after construction has started, a survey will be conducted for active nests in the area to be affected. If an active nest is found, the above measures will be implemented.*
- *If an active nest is identified in or adjacent to the construction zone after construction has started, the above measures will be implemented to ensure construction is not causing disturbance to the nest.*

White-Tailed Kite Discussion (*Elanus leucurus*): Trees in the project area provide potential nesting habitat for white-tailed kite. White-tailed kites were not observed during the biological surveys in the Project area. Implementation of BIO-3 will reduce potential impacts to less than significant.

b) ***Potentially Significant Unless Mitigation Incorporated.*** Indian Creek, Mound Springs, seasonal wetland, willow riparian, and interior live oak woodland are considered sensitive natural communities in the Project area and are listed in Table 5. Impacts to Indian Creek, Mound Springs, the seasonal pond, and seasonal wetlands are discussed under Item c below.

Willow Riparian: Willow riparian occurs along Indian Creek, Mound Springs Creek, and the seasonal pond in the Project area. There are approximately 31 native trees with a single main trunk of at least 4 inches diameter at breast height (dbh) that occur in or adjacent to the Project area within the willow riparian community. Willow riparian in the Project area is part of the stream zone protected by Fish and Game Code Section 1600. Willow riparian is considered a highly imperiled natural community (G3S3) by CDFW. The Project will remove an estimated 7 trees in the willow riparian community. Table 6 summarizes native trees in the Project area and the number to be removed. The final tree removal determination will be made by the County.

Table 6. Estimated Native Tree Impacts in the Project Area

Tree Species		**Total No. of Trees in Project Area**	**No. of Trees in Willow Riparian**	**No. of Trees to be Removed in Willow Riparian**	**Total No. of Trees to be Removed**
Common Name	**Scientific Name**				
Incense cedar	*Calocedrus decurrens*	4	0	0	0
Ponderosa pine	*Pinus ponderosa*	2	0	0	0
Blue oak	*Quercus douglasii*	9	0	0	0
Black oak	*Quercus kelloggii*	3	0	0	0
Valley oak	*Quercus lobata*	12	2	0	1
Interior live oak	*Quercus wislizeni*	35	6	1	3
Red willow	*Salix laevigata*	24	23	6	6
Total:		**89**	**31**	**7**	**10**

Implementation of BIO-4 will reduce potential impacts to willow riparian habitat in the Project area.

Mitigation Measure BIO-4

- *Tree removal will be minimized to the extent possible.*
- *Environmentally sensitive area (ESA) fencing will be placed along the limits of construction in the Project area to exclude construction activities from avoided habitat. The ESA fencing will be in place prior to commencement of construction.*
- *Trucks and other vehicles will not be allowed to park beyond, nor shall equipment be stored beyond, the fencing.*
- *No vegetation removal or ground disturbing activities will be permitted beyond the fencing.*
- *Temporarily impacted areas will be revegetated and reseeded in accordance with the Appendix F (Revegetation Planting and Erosion Control Specifications) of the Project NES.*

Interior Live Oak Woodland: A total of 0.209 ac of interior live oak woodland occur in the Project area. Project utility relocations could result in temporarily ground disturbance to

approximately 0.209 ac of interior live oak woodland. The Project is not expected to remove any native oak trees from the interior live oak woodland in the Project area. The Project will not result in permanent impacts to interior live oak woodland. Project impacts to interior live oak woodland are less than significant. The revegetation component of BIO-4 would further limit temporary impacts.

Native Oak Trees: There are 59 native oaks in or adjacent to the Project area with a single main trunk of at least 4 inches dbh. The Project will remove an estimated four (4) native oak trees. The removal of an estimated 4 native oak trees ranging in size from the willow riparian corridor and California annual grassland community's will not significantly alter the existing viewshed or overall visual setting of the Project site or vicinity. The Project will have no permanent impacts to oak woodland.

Mitigation requirements for impacts to oak resources are defined in the 2017 El Dorado County Oak Resources Management Plan (ORMP, El Dorado County 2017c). In 2017, the County adopted the ORMP to define mitigation requirements for impacts to oak resources and to outline the County's strategy for oak woodland conservation. The ORMP functions as the oak resources component of the County's biological resources mitigation program identified in General Plan Policy 7.4.2.8 (El Dorado County 2004b). Under the ORMP, certain actions are exempt from mitigation requirements, including "County Road Projects: Road widening and alignment projects necessary to increase capacity, protect public health, and improve safe movement of people and goods in existing public rights-of-way, as well as acquired right-of-way necessary to complete the project, where the new alignment is dependent on the existing alignment are exempt from the mitigation requirements included in the ORMP." (El Dorado County 2017c).

Per Section 130.39.050 (Exemptions and Mitigation Reductions) of the ORMP implementing ordinance No. 5061, the various exemptions from mitigation requirements, including County Road Projects, do not apply to heritage trees, individual valley oak trees not in an oak woodland, and valley oak woodland (El Dorado County 2017b). All impacts to Heritage Trees, individual valley oak trees, and valley oak woodlands shall be subject to the provisions and mitigation requirements contained in the ORMP, regardless of whether or not the action requires a development permit.

The Project will remove an estimated four (4) native oak trees. Oaks to be removed include two (2) interior live oaks and one (1) valley oak located in the California Annual Grassland community and one (1) interior live oak located in the willow riparian corridor. No valley oak woodland occurs in the Project area. The valley oak to be removed is 12.5 inches diameter at breast height (DBH) and is not a heritage tree.

In accordance with the ORMP, the Project must mitigate for the one valley oak tree removed by the project. No mitigation is required for the three remaining oak trees as they are exempt from the requirement to mitigate per ORMP implementing ordinance No. 5061, Section 130.39.050 (El Dorado County 2017b).

The ORMP provides three options to mitigate impacts to in individual native oak tree/ heritage trees:

- In-lieu fee payment for individual oak tree removal

- Replacement planting on-site within an area subject to a Deed Restriction or Conservation Easement
- Replacement planting off-site within an area subject to a Conservation Easement or acquisition in fee title

Implementation of BIO-5 will address Project impacts to the one, 12.5 inch DBH valley oak tree and includes obtaining an Oak Tree and Oak Woodland Removal Permit (which requires submittal of an Oak Resource Technical Report) and payment of the individual oak tree in-lieu fee in accordance with ORMP implementing ordinance No. 5061, Section 130.39.070.C.2.a. Per Table 6 of the ORMP the individual native oak tree mitigation fee is $153.00 per inch of DBH. Implementation of BIO-5 will reduce project impact to oak resources to less than significant.

Mitigation Measure BIO-5

- *Prior to construction the County will obtain an Oak Tree Removal Permit in accordance with ORMP implementing ordinance No. 5061, Section 130.39.070. In accordance with ORMP implementing ordinance No. 5061, Sections 130.39.070(D) and (E) the Oak Tree Removal Permit application will be accompanied by an Oak Resources Technical Report and Code Compliance Certificate. The Oak Resources Technical Report must include all pertinent information, documents and recommended mitigation as specified in the ORMP. A Code Compliance Certificate will be submitted verifying that no Oak Resources have been impacted (in the Project area) within two years prior to application submittal.*
- *The County will pay the individual oak tree in-lieu fee for trees subject to the ORMP that removed by the Project. The individual oak tree in-lieu fee will be in accordance with Table 6 in section 3.2 (Oak Trees) of the September 2017, ORMP.*

c) ***Potentially Significant Unless Mitigation Incorporated.*** The Project has been designed to minimize impacts to potential waters of the U.S. including wetlands as defined by Section 404 of the Clean Water Act including Indian Creek, Mound Springs Creek, seasonal wetlands, and a seasonal pond. Approximate project impacts to potential waters of the U.S. are listed in Table 5. The Project avoids both temporary and permanent impacts to the seasonal pond.

Indian Creek: Indian Creek in the Project area is an intermittent channel that flows northwest under the Green Valley Road Bridge. Indian Creek in the Project area has an average width of 23 feet. Approximately 0.067 acre of Indian Creek occur in the Project area. The Project will result in 0.056 acre of temporary impacts to Indian Creek as a result of construction and placement of a temporary diversion, placement of falsework, demolition of the existing bridge and abutments, and construction of the new abutments. The Project is not anticipated to have permanent impacts to Indian Creek below the ordinary high water mark. The proposed simple span concrete bridge is wider and longer than the existing bridge. The bridge abutments will be further back from the low flow channel. RSP may be placed in front of the abutments of the bridge over Indian Creek, but is not anticipated to be placed below the ordinary high water mark. Implementation of measure BIO-6 and the revegetation component of BIO-4 will reduce potential impact to less than significant.

Mitigation Measure BIO-6

- *During construction, water quality will be protected by implementation of BMPs consistent with the Caltrans Stormwater Quality Handbooks (Caltrans 2011) to minimize the potential for siltation and downstream sedimentation of Indian Creek and/or Mound Springs Creek.*
- *In-water construction activities will be restricted to the period between 15 April and 15 October, subject to the Streambed Alteration Agreement, or before the onset of the rainy season, whichever occurs first. The onset of the rainy season is defined as arrival of a frontal system that deposits 0.25 inch or more of precipitation during one event in the area.*
- *If water diversion in Indian Creek and/or Mound Springs Creek becomes necessary, it will be conducted in accordance with the County of El Dorado Stormwater Management Plan (SWMP; August 2004b) and the El Dorado County grading, erosion, and sediment control ordinance (El Dorado County 2010). Minimization efforts will include marking the limits of construction with temporary fencing.*

Mound Springs Creek: Mound Springs Creek in the Project area has an average width of 10 feet. Approximately 0.069 acre and 290 linear feet of Mound Springs Creek occur in the Project area. The Project will result in 0.055 acre of temporary impacts to Mound Springs Creek as a result of construction and placement of a temporary diversion, placement of falsework, demolition of the existing bridge and abutments, construction of the new abutments, and regrading of the creek banks. The proposed simple span concrete bridge is wider and longer than the existing bridge. The bridge abutments will be further back from the low flow channel. Mound Springs Creek crosses under the road on a skew. Rock slope protection (RSP) is needed to prevent erosion and scour at the abutments and wingwalls. The placement of RSP to protect the new abutments will result in 0.014 acre (approximately 80 linear feet) of permanent impacts to Mound Springs Creek. Implementation of measure BIO-6 and the revegetation component of BIO-4 will reduce potential impact to less than significant.

Seasonal Wetlands: Two seasonal wetlands occur in the Project area and have a combined acreage of approximately 0.184 acre. SW 1 occurs north of the bridge over Indian Creek, in a horse pasture. SW 2 occurs between Green Valley Road and the northwest bank of the Seasonal Pond. The Project will result in 0.040 acre of temporary impacts and 0.002 acre of permanent impacts to SW1 and 0.027 acre of temporary impact to SW2 as a result of roadside grading. No permanent impacts to SW 2 are anticipated. Permanent impacts to 0.002 acre (±87 square feet) will not result in a substantial adverse effect on federally protected wetlands. Under its Clean Water Act authority the Army Corps of Engineers may require compensatory mitigation as a condition of a Nationwide Permit verification. The Corps does not automatically require mitigation for impacts under 0.10 acre. The Regional Water Quality Control Board may require compensatory mitigation under its federal Clean Water Act or state Porter-Cologne Water Quality Control Act authority. These requirements would be separate from and independent of the County CEQA finding. The County will adhere to and implement all applicable Clean Water Act permit conditions. Implementation of BIO 7 and the revegetation component of BIO-4 will reduce potential impact to less than significant.

Mitigation Measure BIO-7

- *ESA fencing will be placed between the limits of construction and the seasonal wetlands to prevent encroachment by construction equipment and personnel. The ESA fencing will be in place prior to commencement of construction. Trucks and other vehicles will not be allowed to park beyond, nor shall equipment be stored beyond the fencing. No vegetation removal or ground disturbing activities will be permitted beyond the fencing.*

d) ***Less Than Significant Impact.*** The parcels north of Green Valley Road in the Project area are located within a County-designated Important Biological Corridor (IBC, El Dorado County 2004b). Construction of the project could temporarily disrupt movement of native wildlife species that occur in or adjacent to the Project area. Daytime construction activities will result in minimal disruption of nocturnal wildlife movement. If nighttime construction activities would alleviate traffic congestion and safety hazards it would comply with the noise standards for construction activities in General Plan Policy 6.5.1.11. The low-density rural development in the area provides ample space for wildlife to easily avoid the construction site. Although construction disturbance may temporarily hinder wildlife movements within the project area, the impact is less than significant due to its short-term nature. The Project proposes to replace the existing bridges and would not significantly affect vegetation corridors designated by the IBC or conflict with the intent of the IBC overlay.

e) ***No Impact.*** See interior live oak woodland and native oak tree discussion under item b above and IBC discussion under item d. Tree removal will be minimized to the maximum extent possible. The final tree removal determination will be made by the County. The Project does not conflict with any local policies or ordinances protecting biological resources.

f) ***No Impact.*** The Project is not located in an area covered by a habitat or natural community conservation plan. In 2017, the County adopted updated biological resources policies and implementation measures within the General Plan and the ORMP. The project does not conflict the mitigation requirements of the ORMP.

4.2.5 Cultural Resources

V. CULTURAL RESOURCES—Would the project:	*Potentially Significant Impact*	*Potentially Significant Unless Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	☐	☐	☐	☒
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☒	☐	☐
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☐	☒
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☒	☐

Environmental Setting

The following cultural resource documents were prepared for the proposed Project:

- Archaeological Survey Report (ASR) prepared by Tremaine & Associates, Inc. (Tremaine) The ASR included a records search and literature review, an intensive pedestrian survey, and consultation with the Native American community and local preservation societies.
- Historic Resource Evaluation Report (HRER) prepared by Mead & Hunt. The HRER documents the identification and evaluation efforts for built environment resources that are 50 years or older within the APE and evaluate eligibility for listing in the National Register of Historic Places (National Register) and in the California Register of Historical Resources (California Register)
- Extended Phase I Archeological Report (XPI): Tremaine conducted the XPI study to establish the presence/absence of a subsurface archaeological deposit within the Project area.

To qualify for listing in the California Register and to be considered a historical resource for the purposes of CEQA, a resource must meet one or more of the criteria set forth in PRC 5024.1 and the California Code of Regulations (CCR Title 14, Chapter 11.5, § 4850 et seq). Criteria include:

- **Criteria 1:** Association with events that have made a significant contribution to broad patterns of local or regional history;
- **Criteria 2:** Association with the lives of persons important to local, California, or national history;
- **Criteria 3:** Embodies the distinctive characteristics of a type, period, or region, has high artistic value, or is the work of master;
- **Criteria 4:** Has potential to yield information important to prehistory or history

The criteria for the National Register are nearly identical to the California Register. If Project construction were to cause a substantial adverse change in the significance of an archaeological resource eligible for listing on the National or State Register then the Project would be considered to have a significant effect on the environment.

Potential Environmental Effects

a) ***No Impact.*** The HRER identified and evaluated five resources within the project area requiring evaluation under CEQA: two bridges, two trail segments, and an abandoned segment of Green Valley Road (Mead & Hunt 2016). Only the two bridges and abandoned segment of Green Valley Road required evaluation for the National Register. Each resource was evaluated for the California Register under Criteria 1, 2, 3, and 4 and determined to be not eligible for inclusion on the California Register. The resources were also evaluated collectively for a possible historic district. Collectively the resources do not possess adequate significance nor retain the physical integrity necessary to represent a cohesive collection that made important contributions to the history of El Dorado County or the region. The HRER also concluded that the five resources are not eligible for listing on the National Register.

b) ***Potentially Significant Unless Mitigation Incorporated.*** During a pedestrian archaeological survey in September 2016, a possible archeological resource was observed in a small portion of the Project area. Based on these results, Caltrans required an XPI to establish the presence/absence of subsurface archaeological resources in the Project area. In December 2017, an XPI was

conducted within an expanded Project area; additional possible archeological resources were observed. Four geoprobe bores and three shovel test pits were dug in the area. The XPI confirmed the shallow soil profile and the depth to bedrock. Based on the XPI results, the project limits were changed. The utility relocation planned for the area will now be installed within the fill for the new road prism.

The area where the archaeological resources were observed has been affected by prior grading and road construction along with subsurface utility installation; other impacts may have occurred from other land uses outside the Project area. The depth from ground surface to bedrock in the area where resources were found varies from one to two feet. It is unlikely that the possible archeological resources observed in the Project area satisfy criteria 1, 2, or 3. With the existing level of disturbance and the thin soil profile above bedrock, it does not appear that the potential archaeological resources meet criteria 4 (potential to yield information important to prehistory or history).

Nonetheless, even if the County assumes that the potential archeological resources meet criteria 4, implementation of mitigation measure CULT-1 will reduce potential project impact to less than significant.

Measure CULT-1

- *Prior to the initiation of construction the County will prepare and implement a Phase II Work Plan and Study (Phase II). Phase II includes a set of study goals and links the anticipated field and laboratory work to those goals. The Phase II findings provide the basis for determining whether a site is eligible for inclusion in the National Register of Historic Places (National Register) or is a historical resource under CEQA. The Phase II includes a phased approach of testing and data recovery excavations. Following the completion of testing and data recovery excavations, a technical report will be sent to the County. Technical report content, organization, and illustrative materials will conform to professional standards and follow the format specified in the Caltrans Environmental Handbook, Volume 2, Cultural Resources. All final cultural resources data will be submitted electronically to the County, and ultimately to Caltrans for entry into the Caltrans Cultural Resources Database, including Department of Parks and Recreation site forms and relevant GIS data.*
- *If the Phase II Study confirms that the site is not eligible for listing on the California or National Registers, no further mitigation would be needed.*
- *Based on the Phase II, the site may be assumed eligible for "the purposes of the project." This happens when there are circumstances, such as restricted access, large property size, or limited potential for effects that preclude a complete evaluation. In this case the measures below will be implemented.*
    - *In accordance with the January 2014 First Amended Programmatic Agreement Among the Federal Highway Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation Regarding Compliance with Section 106 of the National Historic Preservation Act, As It Pertains to the Administration of the Federal-Aid Highway Program in California a Native American and archeological monitor will be present during ground disturbing activities (i.e. grading and excavation).*

- *The County will prepare and implement a Post-Review Discovery and Monitoring Plan. The Discovery and Monitoring Plan is prepared to address the potential for discovery of cultural resources during construction. The Discovery and Monitoring Plan serves to outline the process that will be implemented by the County in order to resolve adverse effects to resources which may be encountered during construction activities. Post-Review Discovery and Monitoring Plan report content, organization, and illustrative materials will conform to professional standards and follow the format specified in the Caltrans Environmental Handbook, Volume 2, Cultural Resources and the January 2014 First Amended Programmatic Agreement Among the Federal Highway Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation Regarding Compliance with Section 106 of the National Historic Preservation Act, As It Pertains to the Administration of the Federal-Aid Highway Program in California.*

c) ***No Impact.*** Paleontological resources in County are associated with limestone cave deposits, occurrences of the Mehrten formation, and Pleistocene channel deposits (El Dorado County 2004a). Because these resources do not occur in the project area, no impact will occur. The site does not contain any other unique geologic features.

d) ***Less Than Significant Impact.*** The Project ASR documents that no known cemeteries or burials occur within the project study area. Should human remains be discovered during the excavation portion of the Project, the project description includes contract provisions that will require notification of Transportation and compliance with California Health and Safety Code Section 7050.5, California Public Resources Code Section 5097.9 et seq, and 5097.5 et seq.

4.2.6 Tribal Cultural Resources

VI. Tribal Cultural Resources:	*Potentially Significant Impact*	*Potentially Significant Unless Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
a) 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:	☐	☐	☒	☐
i) 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	☐	☐	☒	☐
ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☐	☒	☐

Environmental Setting

On 22 June 2016 the County sent out invitations to consult under AB52 to seven tribes who had previously requested notification regarding County Transportation projects and/or were on a contact list provided by the Native American Heritage Commission. The Shingle Springs Rancheria and United Auburn Indian Community (UAIC) requested consultation. No other responses were received within 30 days pursuant to PRC 21080.3.l(d).

The UAIC contacted the County's cultural consultant by email on October 17, 2016, indicating that Indian Creek is considered a Traditional Cultural Property (TCP) by the UAIC. The UAIC offered to conduct a record search of tribal literature for a fee of $500. The cost was to compensate the tribe for their time searching their records and literature files. The UAIC further recommended a Native American monitor be on site during ground disturbing activities. The Hon. Gene Whitehouse of the UAIC responded by letter on November 18, 2016, noting that the UAIC preservation committee had identified cultural resources in and around the project area.

The County, in response to UAIC's offer of services emailed Mr. Guerrero on December 16th, 2016 explaining that there was no federal or state mandated reimbursement for consultations. Instead, the County requested the Tribe provide the information needed to evaluate the resource for eligibility for listing on the National Register of Historic Places. Minimally, the information requested included specific locational information, a detailed description of the resource, and the time frame for past use of the resource. Mr. Guerrero, responded that same day, December 16th, 2016, indicating that the Tribe was not obligated to release confidential information as it relates to the location, character, and significance of a resource.

On January 3rd, 2017 the Cultural Branch Chief for Caltrans North Region, District 3, responded to UAIC's email of December 16th, 2016 making the following points: First, Caltrans reiterated that it does not pay for consultation, including the release of cultural resource information related to a specific project and that there is no requirement in Section 106 or CEQA that requires payment for consultation. Secondly, Caltrans understands the Tribe's right to disclose information at their own discretion as well as Caltrans' obligation to safeguard the confidentiality of any information shared. Nevertheless, the Project proponent, the County, cannot take into consideration resources that are not revealed through good faith and reasonable consultation.

Sycamore Environmental Consultants, on December 13th, 2016, made an independent request, asking the UAIC to provide the ethnographic information so it could summarize it in the cultural resources report and assist the County with development of appropriate CEQA mitigation measures. No information was provided.

A tribal site visit was initially arranged for September 9th, 2016. Both UAIC and Shingle Springs Rancheria had accepted invitations. Neither party, however, was able to attend due to last minute scheduling issues. The visit was rescheduled for January 9th, 2017. The Shingle Springs Rancheria attended this meeting. The UAIC did not attend. No documentation regarding tribal cultural resources was identified or received at the meeting that would facilitate an eligibility determination pursuant to PRC Section 21074, 5020.1(k) or 5024.1.

As described in the cultural resources section above, an Extended Phase I Study was conducted for the Project. The Phase I effort was coordinated with the Shingle Springs Band of Miwok Indians (SSBMI). Prior to the Phase I field effort the County coordinated with the SSBMI regarding the proposed process. A monitor from SSBMI was present during some or all of the Phase I excavations. The County further coordinated with the SSBMI during the Phase I work and also provided a summary of the results.

Potential Environmental Effects

a) ***Less Than Significant Impact (applies to items i and ii).*** Despite numerous request no documentation regarding tribal cultural resources was identified or received that would facilitate an eligibility determination pursuant to PRC Section 21074, 5020.1(k), or 5024.1. No archaeological resources were identified that are eligible for listing on the National Register of Historic Places. Impacts to tribal cultural resources are less than significant.

4.2.7 Geology and Soils

VII. GEOLOGY AND SOILS—Would the project:	*Potentially Significant Impact*	*Potentially Significant Unless Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
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?	☐	☐	☐	☒
ii) Strong seismic ground shaking?	☐	☐	☐	☒
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☐	☒
iv) Landslides?	☐	☐	☐	☒
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☐	☒
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☐	☒	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒

Environmental Setting

Regional Geology: The County is located in the Sierra Nevada geomorphic province of California, east of the Great Valley province and west of the Range and Basin provinces. Steep-sided hills and narrow rocky stream channels characterize the Sierra Nevada province. This province consists of Pliocene and older deposits that have been uplifted as a result of plate tectonics, granitic intrusion, and volcanic activity. Subsequent glaciations and additional volcanic activity are factors that led to the east-west orientation of stream channels (El Dorado County 2004a).

The southwestern foothills of the County are composed of rocks of the Mariposa Formation that include amphibolite, serpentine, and pyroxenite. The northwestern areas of the county consist of the Calaveras Formation, which includes metamorphic rock such as chert, slate, quartzite, and mica schist. The higher peaks in the County consist primarily of igneous and metamorphic rocks with granite intrusions, a main soil parent material at the higher elevations (El Dorado County 2004a).

Seismicity: Seismicity is defined as the geographic and historical distribution of earthquake activity. Seismic activity may result in geologic and seismic hazards including seismically induced fault displacement and rupture, ground shaking, liquefaction, lateral spreading, landslides and avalanches, and structural hazards. Based on historical seismic activity and fault and seismic hazards mapping, the County is considered to have relatively low potential for seismic activity, and is located beyond the highly active fault zones of the coastal areas of California. The County's fault systems and associated seismic hazards are described below (El Dorado County 2004a).

Fault Systems: Earthquakes are associated with the fault systems in a particular area. The distribution of known faults in the County is concentrated in the western portion of the county, with several isolated faults in the central county area and the Lake Tahoe Basin. On 10 June 2016 the California Geological Survey published two new Alquist-Priolo Earthquake Fault Zones in the Tahoe area for the Emerald Bay Quadrangle and Echo Lake USGS quadrangles.

Fault systems mapped in the western parts of the County include the West Bear Mountains Fault; the East Bear Mountains Fault; the Maidu Fault Zone; the El Dorado Fault; the Melones Fault Zone of the Clark, Gillis Hill Fault; and the Calaveras–Shoo Fly Thrust.

No active faults have been identified in the western portion of El Dorado County. One western El Dorado County fault, part of the Rescue Lineament–Bear Mountains fault zone, is classified as a well located late-Quaternary fault; therefore, it represents the only potentially active fault in western El Dorado County.

Soils: Soils on the west slope of the County consist of well-drained silt and gravelly loams divided into two physiographic regions, the Lower and Middle Foothills and the Mountainous Uplands. There are a total of eight soil associations in the western parts of the County.

Mapped soil units in the Project area include Auburn Silt Loam, 2 to 30% slopes, Auburn Very Rocky Silt Loam, 2 to 30% slopes, Auburn Very Rocky Silt Loam, 30 to 50% slopes, Mixed Alluvial Land, and Placer Diggings.

Potential Environmental Effects

a) ***a-i) No Impact.*** No active faults have been identified in the western portion of the County. On 10 June 2016 the California Geological Survey published two new Alquist-Priolo Earthquake Fault Zones in the Tahoe area for the Emerald Bay Quadrangle and Echo Lake USGS quadrangles. The Project is located in western El Dorado County and will not rupture a fault mapped on the most recent Alquist-Priolo Earthquake Fault Zoning Map. No impacts are anticipated.

a-ii) No Impact. The Project is not in a seismic hazard zone (California Department of Conservation 2017b). No impacts are anticipated.

a-iii) No Impact. No portion of western El Dorado County occurs in a Seismic Hazard Zone (i.e., regulatory zones that encompass areas prone to liquefaction and earthquake-induced landslides)

based on the Seismic Hazards Mapping Program administered by the California Geologic Survey (CGS). Consequently, the Project site is not considered to be at risk from liquefaction hazards.

a-iv) No Impact. No portion of western El Dorado County occurs in a Seismic Hazard Zone (i.e., regulatory zones that encompass areas prone to liquefaction and earthquake-induced landslides) based on the Seismic Hazards Mapping Program administered by the California Geologic Survey (CGS). Consequently, the Project site is not considered to be at risk from earthquake-induced landslides.

b) ***Less Than Significant Impact.*** Measure BIO-6 requires implementation of BMPs consistent with the Caltrans Stormwater Quality Handbooks to protect water quality and minimize the potential for siltation and downstream sedimentation. Construction activities will include implementation of stormwater runoff BMPs. Application of these requirements and measures would prevent substantial erosion or topsoil loss. Areas temporarily disturbed will be revegetated and reseeded with native grasses and other native herbaceous annual and perennial species. No seed of nonnative species will be used unless certified to be sterile.

c) ***No Impact.*** The project area is underlain by decomposed metamorphic bedrock at a depth of approximately 4-5 ft. Soils on site are not susceptible to landslide, lateral spreading, subsidence, liquefaction, or collapse. No impacts are anticipated from unstable soil.

d) ***Less Than Significant Impact.*** Expansive soils that may swell enough to cause problems with paved surfaces are generally clays falling into the AASHTO A-6 or A-7 groups, or classified as CH, MH, or OH by the Unified Soil Classification System (USCS), and with a Plasticity Index greater than about 25 as determined by ASTM D4318. Chapter 610 of the Caltrans Highway Design Manual (2012) defines expansive subgrade to include soils with a Plasticity Index greater than 12 (Caltrans 2012).

AASHTO group classification is a system that classifies soils specifically for geotechnical engineering purposes that are related to highway and airfield construction. It is based on particle-size distribution and Atterberg limits, such as liquid limit and plasticity index.

AASHTO and USCS classification for the soils in the Project area are listed in Table 7 (NRCS 2017). The NRCS Web Soil Survey indicates the maximum plasticity index of soils in the Project area is 7.5 (NRCS 2017). Soils in the Project area have a low expansion potential based on the Caltrans definition.

Table 7. AASHTO and USCS soil classes for Project area

Soil Unit In Project Area	Classification	
	AASHTO	**USDS**
Auburn silt loam, 2 to 30 percent slopes; Auburn very rocky silt loam, 2 to 30 percent slopes; and Auburn very rocky	A-4	CL-ML (CL - inorganic clays of low to medium plasticity, gravelly clays, sandy clays, and leans clays, ML-inorganic slits and very fine sands, rock flour, silty or clayey fine sands or clayey silts with slight plasticity)

silt loam, 30 to 50 percent slopes		
Mixed alluvial land	A-4	SC-SM (SC-Clayey sands, sand-clay mixtures, Plastic fines and SM-Silty sands, sand-silt mixtures. Non-plastic fines or fines with low plasticity)
Placer diggings	A-1	GP (Poorly graded gravels, gravel-sand mixtures, little to no fines)

The Project is being designed in accordance with the special engineering or construction considerations outlined in Chapter 610 *"Engineering Considerations"* of the Highway Design Manual, California Transportation Department. Because the project is being designed in accordance with the Caltrans Highway Design Manual and will consider and address expansive soils, impacts are considered less than significant.

e) ***No Impact.*** The proposed Project is a surface transportation project. Septic tanks and alternative wastewater disposal systems are not part of the Project.

4.2.8 Greenhouse Gas Emissions

VIII.GREENHOUSE GAS EMISSIONS—Would the project:	*Potentially Significant Impact*	*Potentially Significant Unless Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

Environmental Setting

Greenhouse gases (GHGs) are recognized by wide consensus among the scientific community to contribute to global warming/climate change and associated environmental impacts. The major GHGs that are released from human activity include carbon dioxide, methane, and nitrous oxide (OPR 2008). The primary sources of GHGs are vehicles (including planes and trains), energy plants, and industrial and agricultural activities (such as dairies and hog farms).

Greenhouse gas emissions for transportation projects can be divided into those produced during operations and those produced during construction. The proposed Project does not increase the capacity of Green Valley Road and would not increase operational GHG levels. The discussion below therefore focuses on construction related GHG emissions of the Project.

The El Dorado County AQMD has not adopted GHG emissions significance thresholds for development projects. On October 13, 2016, the Placer County Air Pollution Control District (Placer APCD) Board of Directors adopted the Review of Land Use Projects under CEQA Policy (Policy). The Policy establishes the thresholds of significance for criteria pollutants as well as greenhouse gases and the review principles

which serve as guidelines for the Placer APCD staff when the Placer APCD acts as a commenting agency to review and comment on the environmental documents prepared by the lead agencies. In developing the thresholds, the Placer APCD took into account health-based air quality standards and the strategies to attain air quality standards, historical CEQA project review data in Placer County, statewide regulations to achieve emission reduction targets for GHG, and the special geographic and land use features in Placer County.

The Placer APCD approach to developing significance thresholds for GHG emissions is to identify the emissions level for which a project would be expected to substantially contribute a mass amount of emissions and would conflict with existing statewide GHG emission reduction goal adopted by California legislation. The Placer APCD has developed a 3-step process for determining significance which includes 1) a bright-line threshold, 2) a De Minimis level, and 3) an efficiency matrix for projects that fall between the Bright-line and the De Minimis level. The Placer APCD District also proposes using the bright-line threshold of 10,000 MT CO2e/yr for determining the level of significance for the land use construction phase of a Project. The State of California set the goal to reduce GHG emissions without limiting population and economic growth. The Placer APCD concept is to look for a reasonable threshold which would capture larger–scale projects with significant GHG emission contributions which should implement mitigation.

Given there are no locally adopted GHG emissions significance thresholds, the Placer APCD thresholds are being used here. Placer APCD GHG Emissions Significance Thresholds are listed in Table 8.

Table 8. Placer APCD 2016 Approved GHG Emissions Significance Thresholds.

Greenhouse Gas Thresholds			
Bright line threshold 10,000 Metric Tons (MT) CO2e/yr			
Efficiency Matrix			
Residential		**Non-Residential**	
Urban	**Rural**	**Urban**	**Rural**
(MT CO2e/capita)		(MT/CO2e/1,000 sf)	
4.5	**5.5**	**26.5**	**27.3**
De Minimis Level 1,110 (MT) CO2e/yr			

Potential Environmental Effects

a) ***Less Than Significant Impact.*** The proposed Project does not increase the capacity of Green Valley Road and would not increase operational GHG levels. Construction of the proposed Project would generate short-term emissions of greenhouse gases. The Sacramento Metropolitan Air Quality Management District (SMAQMD's) *Roadway Construction Emissions Model Version 8.1.0* was used to estimate Project CO2e (carbon dioxide equivalent) emissions. Based on the Roadway Construction Emissions Model Project construction is estimated to produce approximately 1,330.83 MT CO2e during the 18 month (1.5 yr) construction period. The modeled Project GHG emissions are well below the bright line threshold of 10,000 (MT) CO2e/yr threshold in Table 8. Project impacts area less than significant.

b) ***Less Than Significant Impact.*** The Project is identified and evaluated in the 2016 MTP/SCS as project ELD19335 and ELD19353 (SACOG 2016). The 2016 MTP/SCS is the applicable GHG emissions reduction plan for the Project. The Project will not conflict with the applicable GHG reduction plan as it was included in the 2016 MTP/SCS analysis.

4.2.9 Hazards and Hazardous Materials

IX. HAZARDS AND HAZARDOUS MATERIALS—Would the project:	*Potentially Significant Impact*	*Potentially Significant Unless Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
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?	☐	☐	☐	☒
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
h) 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?	☐	☐	☒	☐

Environmental Setting

A regulatory agency database review for locations included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 (The "Cortese" list) was conducted as part of the Project scoping process. No listed hazardous materials or waste sites were reported within or near the project site.

Potential Environmental Effects

a) ***Less Than Significant Impact.*** Small amounts of hazardous materials would be transported and used during construction activities (i.e., equipment maintenance, fuel, solvents, roadway resurfacing, and re-striping materials). Hazardous materials would only be used during construction of the Project, and any hazardous material uses would be required to comply with all applicable local, state, and federal standards associated with the handling, transport, and storage of hazardous materials. Use of hazardous materials in accordance with applicable standards

ensures that any exposure of the public to hazard materials would have a less-than-significant impact.

b) ***Less Than Significant Impact.*** See response to item a above.

c) ***No Impact.*** The closest school is the Indian Creek Elementary School located at 6701 Green Valley Rd., approximately 0.55 mile east of the Project. As noted above, the Project would involve the short- term handling of hazardous materials during construction. Handling and storage of hazardous materials during construction would comply with all applicable local, state, and federal standards.

d) ***No Impact.*** No listed hazardous materials or waste sites occur within or near the project site.

e) ***No Impact.*** The Project is not located within two miles of a public airport or public use airport and no private air strips occur in close proximity to the Project.

f) ***No Impact.*** See response of item e) above.

g) ***Less Than Significant Impact.*** The Project will adopt 2-stage construction so that Green Valley Road can remain open for all but short duration closures during construction. The plan is to maintain two-lane traffic throughout construction with minimal periods of one-lane traffic control. The County will prepare a traffic control plan in conjunction with the engineering plans. The Project will not require a long term detour (Note: temporary closures of side streets, including Stagecoach over a weekend, etc. may be needed). Project construction activities would be coordinated with local law enforcement and emergency services providers.

h) ***Less Than Significant Impact.*** The completed Project will not expose people or structures to a new or increased significant risk of loss, injury, or death involving wildland fires. The use of one controlled lane for both directions of traffic during the 2-stage construction process could potentially result in a minor increase in risk from wildland fires. The construction contract will require that construction activities would be coordinated with local law enforcement and emergency services providers. Project impacts are less than significant and no mitigation is needed.

4.2.10 Hydrology and Water Quality

X. HYDROLOGY AND WATER QUALITY—Would the project:	*Potentially Significant Impact*	*Potentially Significant Unless Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
a) Violate any water quality standards or waste discharge requirements?	☐	☐	☒	☐
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☐	☒
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	☐	☐	☒	☐
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially	☐	☐	☒	☐

increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?				
e) 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?	☐	☐	☒	☐
f) Otherwise substantially degrade water quality?	☐	☐	☐	☒
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☒
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	☐	☐	☒	☐
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☐	☒
j) Inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒

Environmental Setting

The Project is located in the in the South Fork American Hydrologic Unit (hydrologic unit code 18020129). The American River has been extensively dammed and diverted for hydroelectricity production as part of the Sacramento Municipal Utility District's (SMUD) Upper American River Project.

Mound Springs Creek and Indian Creek are not 303(d) listed water bodies per the Final California 2010 Integrated Report (303(d) List/305(b) Report) (SWRCB 2017).

Potential Environmental Effects

a) ***Less Than Significant Impact.*** Measures BIO-4 and BIO-6 contain actions that reduce potential impacts to water quality as well as biological resources. Water quality objectives will be met through adherence to BIO-4 and BIO-6, other construction provisions, precautions, and stipulations as described in the National Pollution Discharge Elimination System (NPDES) permit, Section 404 CWA permit, Section 401 CWA Water Quality Certification, and 1602 Streambed Alteration Agreement.

Coverage under the Statewide General Permit for Discharges of Storm Water Associated with Construction Activity (Construction General Permit, 2009-0009-DWQ, as amended by 2010-0014-DWQ and 2012-006-DWQ) will be obtained. The County will require the contractor to prepare and implement a Storm Water Pollution Prevention Plan (SWPPP) to reduce or minimize discharge of pollutants from construction activities.

Implementation of the revegetation measures and water quality BMPs in BIO-4 and BIO-6 as well as adherence to Project permit requirements will ensure long-term soil stabilization and protect of water quality during construction.

b) ***No Impact.*** The Project would not involve any withdrawals from an aquifer or groundwater table.

c) ***Less Than Significant Impact.*** The Project is the replacement of two existing bridge structures and will not alter the course of either Mound Springs Creek or Indian Creek and will not substantially change rate or amount of surface runoff present.

d) ***Less Than Significant Impact.*** See response to item c) above.

e) ***Less Than Significant Impact.*** The Project would not provide additional sources of runoff compared with the existing bridges. The minor increase of impervious surface area resulting from construction of the approaches is not expected to contribute to a substantial increase in water runoff from the site.

f) ***No Impact.*** No additional impacts other than those discussed above are anticipated.

g) ***No Impact.*** The Project is a roadway improvement project, and no housing development is associated with the Project.

h) ***Less Than Significant.*** According to the FEMA/FIRM community panel (06017C0750E) for the County the Project site is in Zone X (area of minimal flood hazard). Bridge soffit heights will be 2 feet above and water surface elevations of both creeks will pass both the 50-year and 100-year flood to comply with AASHTO freeboard requirements.

i) ***No Impact.*** The Project will not expose people to higher levels of risk involving flooding. General Plan Policy 6.4.2.2 protects the life and property of County residents below dams by not allowing new critical or high occupancy structures (e.g., schools, hospitals) to be located within the inundation area resulting from failure of dams. The bridges are not a critical or high occupancy structures.

j) ***No Impact.*** The Project is not in an area subject to seiche or tsunami.

4.2.11 Land Use and Planning

XI. LAND USE AND PLANNING—Would the project:	*Potentially Significant Impact*	*Potentially Significant Unless Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
a) Physically divide an established community?	☐	☐	☐	☒
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒

Environmental Setting

The 2004 County General Plan is the relevant land use plan for the project area. The General Plan designation of the parcels in the Project area is Low-Density Residential (LDR) with a Residential Estate 5-acre minimum (RE-5) and Transportation Corridor (TC) zoning designation (El Dorado County 2004b).

Potential Environmental Effects

a) ***No Impact.*** The Project is the replacement of two bridges and would not physically divide an established community.

b) ***No Impact.*** The Project would not conflict with the goals, objectives, or policies intended to mitigate environmental impacts adopted in the 2004 County General Plan. The County's 2017 Adopted Capital Improvement Program identifies the replacement of both bridges as needed improvements (project numbers # 77127 [Indian Creek] and project # 77136 [Mound Springs Creek]) (El Dorado County 2017).

c) ***No Impact.*** The Project does not occur in an area covered by a habitat or natural community conservation plan.

4.2.12 Mineral Resources

XII. MINERAL RESOURCES—Would the project:	*Potentially Significant Impact*	*Potentially Significant Unless Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
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?	☐	☐	☐	☒

Environmental Setting

The County is considered a mining region capable of producing a wide variety of mineral resources. Metallic mineral deposits, gold in particular, are considered the most significant extractive mineral resource. Other metallic minerals found in the county include silver, copper, nickel, chromite, zinc, tungsten, mercury, titanium, platinum, and iron. Nonmetallic mineral resources include building stone, limestone, slate, clay, marble, soapstone, sand, and gravel (El Dorado County 2004a). The Project area is not located in an area mapped as an "Important Mineral Resource Area" (El Dorado County 2004b).

Potential Environmental Effects

a) ***No Impact.*** The Project area is not located in an area mapped as an "Important Mineral Resource Area" (El Dorado County 2004b). The Project would not impact the availability of mineral resources that are locally important or would be of value to the state.

b) ***No Impact.*** See response to item a).

4.2.13 Noise

XIII.NOISE—Would the project:	*Potentially Significant Impact*	*Potentially Significant Unless Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☒	☐

b) Exposure of persons to or generation of excessive ground-borne vibration or ground-borne noise levels?	☐	☐	☒	☐
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☐	☒
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

Environmental Setting

The July 2004 El Dorado County General Plan Public Health, Safety, and Noise Element establishes policies and standards for noise exposures at noise sensitive land uses. The relevant policies are listed below:

Policy 6.5.1.9 Noise created by new transportation noise sources, excluding airport expansion but including roadway improvement projects, shall be mitigated so as not to exceed the levels specified in Table 6-1 at existing noise-sensitive land uses.

General Plan Table 6-1 is reproduced as Table 9 below.

Table 9. Maximum Allowable Noise Exposure for Transportation Noise Sources (General Plan Table 6-1).

TABLE 6-1 MAXIMUM ALLOWABLE NOISE EXPOSURE FOR TRANSPORTATION NOISE SOURCES			
Land Use	**Outdoor Activity Areas[1] L_{dn}/CNEL, dB**	**Interior Spaces**	
		L_{dn} /CNEL, dB	**L_{eq}, dB[2]**
Residential	60[3]	45	--
Transient Lodging	60[3]	45	--
Hospitals, Nursing Homes	60[3]	45	--
Theaters, Auditoriums, Music Halls	--	--	35
Churches, Meeting Halls, Schools	60[3]	--	40
Office Buildings	--	--	45
Libraries, Museums	--	--	45
Playgrounds, Neighborhood Parks	70	--	--

Notes:

[1] In Communities and Rural Centers, where the location of outdoor activity areas is not clearly defined, the exterior noise level standard shall be applied to the property line of the receiving land use. For residential uses with front yards facing the identified noise source, an exterior noise level criterion of 65 dB L_{dn} shall be applied at the building facade, in addition to a 60 dB L_{dn} criterion at the outdoor activity area. In Rural Regions, an exterior noise level criterion of 60 dB L_{dn} shall be applied at a 100 foot radius from the residence unless it is within Platted Lands where the underlying land use designation is consistent with Community Region densities in which case the 65 dB L_{dn} may apply. The 100-foot radius applies to properties which are five acres and larger; the balance will fall under the property line requirement.

[2] As determined for a typical worst-case hour during periods of use.

[3] Where it is not possible to reduce noise in outdoor activity areas to 60 dB L_{dn}/CNEL or less using a practical application of the best-available noise reduction measures, an exterior noise level of up to 65 dB L_{dn}/CNEL may be allowed provided that available exterior noise level reduction measures have been implemented and interior noise levels are in compliance with this table.

Policy 6.5.1.12 When determining the significance of impacts and appropriate mitigation for new development projects, the following criteria shall be taken into consideration.

A. Where existing or projected future traffic noise levels are less than 60 dBA L_{dn} at the outdoor activity areas of residential uses, an increase of more than 5 dBA L_{dn} caused by a new transportation noise source will be considered significant;

B. Where existing or projected future traffic noise levels range between 60 and 65 dBA L_{dn} at the outdoor activity areas of residential uses, an increase of more than 3 dBA L_{dn} caused by a new transportation noise source will be considered significant; and

C. Where existing or projected future traffic noise levels are greater than 65 dBA L_{dn} at the outdoor activity areas of residential uses, an increase of more than 1.5 dBA L_{dn} caused by a new transportation noise will be considered significant.

County General Plan Policy 6.5.1.11 and ordinance code section 130.37.020 outline standards for daytime construction and will apply to construction-related noise associated with the Project. General Plan Policy 6.5.1.11 and ordinance code section 130.37.020 note that night time construction activities are allowed if it can be shown that nighttime construction activities would alleviate traffic congestion and safety hazards. The significance of noise impacts associated with operation of transportation facilities is normally measured using General Plan Policy 6.5.1.12, which takes into account the existing (ambient) noise environment. Because the Project is not capacity increasing and would not result in an increase of the number of vehicles passing through the roadway corridor, the ambient condition is not expected to change as a result of the Project. The Project is not located in a general plan designated community or rural center

Potential Environmental Effects

a) ***(Construction Noise) Less Than Significant Impact.*** Construction activities could increase noise levels temporarily in the vicinity of the Project. Actual noise levels would depend on the type of construction equipment involved, distance to the source of the noise, time of day, and similar

factors. These increases would be temporary. Daytime construction would comply with noise standards for construction activities outlined in General Plan Policy 6.5.1.11 and ordinance code section 130.37.020, and any nighttime work would be allowed only if nighttime construction activities would alleviate traffic congestion and safety hazards (ordinance code section 130.37.020.C). Given that the Project contractor would adhere to applicable County construction-related noise standards, this impact is considered less than significant.

(Operational Traffic Related Noise) No Impact. The Project does not increase the capacity of Green Valley Road. The post project noise levels in the Project vicinity will be substantially unchanged from the pre-project condition

b) ***Less Than Significant Impact.*** Project construction includes activities, such as operation of large pieces of equipment (e.g., heavy trucks) which may result in the periodic, temporary generation of ground-borne vibration. Because the Project would not change the way in which it is used, an increase in ground-borne vibration associated with use of the road would not change from the current condition. Given the nature of any potential ground-borne vibration and given that any impacts would be temporary and periodic, potential impacts are less than significant.

c) ***No Impact.*** The Project is not traffic- or growth inducing and would not change the way in which the roadway is used. The Project would not contribute to a substantial permanent increase in the ambient noise level in the project vicinity.

d) ***Less Than Significant.*** Construction activities would increase noise levels temporarily in the vicinity of the Project. Actual noise levels would depend on the type of construction equipment involved, distance to the source of the noise, weather, time of day, and other factors. However, these increases would be temporary. Daytime construction activity would comply with noise standards for construction activities outlined in General Plan Policy 6.5.1.11, and any nighttime work would be allowed if nighttime construction activities would alleviate traffic congestion and safety hazards. Because the Project contractor would be required to comply with applicable County construction-related noise standards, this impact is considered less than significant.

e) ***No Impact.*** The Project is not located within an airport land use plan area or within two miles of a public or public use airport.

f) ***No Impact***. The Project is not located within the vicinity of a private airstrip.

4.2.14 Population and Housing

XIV. POPULATION AND HOUSING—Would the project:	*Potentially Significant Impact*	*Potentially Significant Unless Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
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)?	☐	☐	☐	☒
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

Environmental Setting

The Project is the replacement of two bridges and will not increase the capacity of the Green Valley Road.

Potential Environmental Effects

a) ***No Impact.*** The Project will not result in population growth, the displacement of existing any housing, or a need for new housing.

b) ***No Impact.*** See response to item a).

c) ***No Impact.*** See response to item a).

4.2.15 Public Services

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

Environmental Setting

The El Dorado County Sheriff provides general public safety and law enforcement services. The Diamond Springs-El Dorado Fire Protection District provides fire protection and emergency services. The County maintains public facilities including the project area roadways.

Potential Environmental Effects

a) ***No Impact.*** The Project would not increase human presence in the area. No new or physically altered governmental facilities would be needed.

4.2.16 Recreation

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

Environmental Setting

There are no recreation facilities within or adjacent to the proposed project area.

Potential Environmental Effects

a) ***No Impact.*** The Project would not increase the use of existing parks in the area and does not include the construction of any recreational facilities.

b) ***No Impact.*** The Project does not include the construction of any recreational facilities and would not require the expansion of existing recreational facilities.

4.2.17 Transportation/Traffic

XVII. TRANSPORTATION/TRAFFIC—Would the project:	*Potentially Significant Impact*	*Potentially Significant Unless Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?	☐	☐	☐	☒
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	☐	☐	☐	☒
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	☒
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒
e) Result in inadequate emergency access?	☐	☐	☒	☐
f) Result in inadequate parking capacity?	☐	☐	☐	☒
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	☐	☐	☐	☒

Environmental Setting

Green Valley Road is classified as an off State Highway System, minor arterial road in the County. The proposed Project would not increase the capacity of Green Valley Road. Green Valley Road in the Project vicinity had an approximate ADT of 4,699 in 2016 (El Dorado County 2017d). The term off-system refers to the fact that Green Valley Road is not part of the State Highway System (on-system).

Potential Environmental Effects

a) ***No Impact.*** The Project would not change the amount of traffic on Green Valley Road because it is not a new development or growth inducing project. The number of through lanes on Green Valley Road would remain the same. The Project will not require a long term detour (Note: temporary closures of side streets, including Stagecoach over a weekend, etc. may be needed). The Project will adopt 2-staged construction so that Green Valley Road can remain open for all but short duration closures during construction. Project construction activities would be coordinated with local law enforcement and emergency services providers.

b) ***No Impact.*** The bridge replacements would not change the amount of traffic on Green Valley Road.

c) ***No Impact.*** The Project would not result in a change in air traffic patterns.

d) ***No Impact.*** The purpose of the Project is to replace the existing Indian Creek and Mound Springs Creek bridges along Green Valley Road. Project objectives include improving roadway safety and compliance with AASHTO guidelines and County standards.

To enhance safety, the County proposes to improve the roadway approximately 700 feet southwest of the Indian Creek Bridge, the 1,050 feet between the two bridges, and 700 feet northeast of the Mound Springs Creek Bridge. The roadway will be widened to a pavement width of approximately 43 feet. The roadway and bridges will have the same lane and striping configuration. Road widening will primarily take place on the northwest side of the existing road within the County right-of-way. Minor widening will take place east of Mortara Circle on the south side of the road, requiring a small right-of-way acquisition. At Stagecoach Road, improvements will conform to existing near the intersection. It is anticipated that landscaping will be left in place as much as possible.

To correct the substandard geometrics, the profile of Green Valley Road must be raised at each bridge to achieve acceptable vertical and horizontal curve lengths and associated site distances and to meet a 50-mph design speed requirement. The existing road surface at the Indian Creek Bridge will be raised approximately 1 foot higher than the existing condition. The existing road surface at the Mound Springs Bridge will be raised approximately 3 feet higher than the existing condition.

e) ***Less than Significant.*** The Project will adopt 2-stage construction so that Green Valley Road can remain open for all but short duration closures during construction. The plan is to maintain two-lane traffic throughout construction with minimal periods of one-lane traffic control. The County will prepare a traffic control plan in conjunction with the engineering plans. The Project will not require a long term detour (Note: temporary closures of side streets, including Stagecoach over a weekend, etc. may be needed). Project construction activities would be coordinated with local law enforcement and emergency services providers.

f) ***No Impact.*** The Project would not result in an increase in demand for parking in the vicinity of the Project.

g) ***No Impact.*** This Project is identified in the County Capital Improvement Program (CIP) as project # 77127 (Green Valley Road at Indian Creek) and project # 77136 (Green Valley Road at Mound Springs Creek) (El Dorado County 2017). The CIP is coordinated with the Five-Year major review of the General Plan (including the Transportation and Circulation Element) and is also included in the annual General Plan review. The Transportation and Circulation Element address alternative transportation systems.

4.2.18 Utilities/ Service Systems

XVIII. UTILITIES AND SERVICE SYSTEMS—Would the project:	*Potentially Significant Impact*	*Potentially Significant Unless Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☐	☒
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☒
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☒	☐
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☐	☒
e) 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?	☐	☐	☐	☒
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☐	☒
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☐	☒

Environmental Setting

Based on preliminary design, there are approximately 14 joint utility poles, utility vaults, water valves and a water main that will require relocation due to construction. In December 2016 by means of a Board of Supervisor's resolution, El Dorado County formed the Green Valley Road Underground Utility District (GVRUUD). The GVRUUD will allow the undergrounding of all overhead utilities in the project corridor in a single construction season as part of the Green Valley Road 2 Bridges project. The County coordinated with PG&E and AT&T in the formation of the GVRUUD. The physical and visual impacts to the Public of undergrounding is less intrusive than pole relocation. The undergrounding will simplify construction sequencing and improve the aesthetics in the Project area by removing a heavy concentration of overhead utility lines.

The utility undergrounding may require a single 3-ft wide by 5-ft deep joint trench. The utility providers may install their own utility lines in separate trenches within the County right-of-way. The utility trench will extend along the northwest side of Green Valley Road, along the southwest side of Stagecoach Road, along the east side of Mortara Circle, along Indian Creek Road, and along 3 private driveways off Green Valley Road. The utility companies may use a trenchless construction method, like horizontal directional drill. Utility relocation to a residence southeast of the Mound Springs Creek Bridge will likely be installed using the trenchless method. No trenching will occur through the creeks or wetlands. The County proposes to place the lines within the bridge structures.

Potential Environmental Effects

a) ***No Impact.*** The Project would not produce additional wastewater and would not exceed the applicable wastewater treatment requirements.

b) ***No Impact.*** The Project would not increase the demand on existing water or wastewater treatment facilities.

c) ***Less than Significant.*** The Project may involve minor reconfiguration of the roadside drainage system within the project area. The facilities will retain approximately the same capacity as the existing system.

d) ***No Impact.*** The Project would not require water service.

e) ***No Impact.*** The Project would not produce wastewater.

f) ***No Impact.*** Solid waste generated by the Project would be limited to construction debris, including asphalt and concrete, generated by the excavation of existing roadway and construction of the proposed improvements. Solid waste disposal would occur in accordance with federal, state, and local regulations. Disposal would occur at permitted landfills. Therefore, the Project would not generate the need for new solid waste facilities.

g) ***No Impact.*** The Project would conform to all applicable state and federal solid waste regulations.

4.2.19 Mandatory Findings of Significance

XIX. MANDATORY FINDINGS OF SIGNIFICANCE (To be filled out by Lead Agency if required)	*Potentially Significant Impact*	*Potentially Significant Unless Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
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?	☐	☒	☐	☐
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☐	☒	☐
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐

a) ***Potentially Significant Unless Mitigation Incorporated.*** Through the use of BMPs and the mitigation measures noted previously, the Project will not degrade the quality of the environment.

b) ***Less than Significant.*** The Project is consistent with the General Plan and would not result in individually limited but collectively significant impacts. Therefore, the project would not cause any additional environmental effects or significantly contribute to a cumulative impact.

c) ***Less than Significant.*** The Project would not result in substantial direct or indirect adverse effects from noise, either during project construction or operation, nor would it result in impacts to air quality, water quality or utilities and public services. Therefore the Project would not cause substantial adverse effects on human beings.

5. Determination

5.1 Environmental Factors Potentially Affected

This Initial Study has determined that in the absence of mitigation the proposed Project could have the potential to result in significant impacts associated with the factors checked below. Mitigation measures are identified in this Initial Study that would reduce all potentially significant impacts to less-than-significant levels.

___	Aesthetics	___	Mineral Resources
___	Agricultural Resources	___	Noise
___	Air Quality	___	Population and Housing
✓	Biological Resources	___	Public Services
✓	Cultural Resources	___	Recreation
___	Geology and Soils	___	Transportation/Traffic
___	Greenhouse Gas Emissions	___	Utilities and Service Systems
___	Hazards and Hazardous Materials	✓	Mandatory Findings of Significance
___	Hydrology and Water Quality	___	None Identified
___	Land Use and Planning		

On the basis of 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 the project-specific mitigation measures described in Section III have been added to the project. 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 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 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 EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature: _____ **Date:** 2/2/2018

Name and Title: Donna Keeler, Principal Planner

6. Report Preparation and References

6.1 Report Preparation

El Dorado County, Department of Transportation– CEQA Lead Agency

Jon Balzer, P.E.	Senior Civil Engineer
Donna Keeler	Principal Planner

Sycamore Environmental Consultants, Inc.

Jeffery Little	Project Manager, Vice President
Adam Forbes	Planner

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Appendix A: Mitigation Monitoring and Reporting Plan

MITIGATION MONITORING AND REPORTING PLAN
GREEN VALLEY ROAD
2 BRIDGE REPLACEMENT PROJECT

CEQA LEAD AGENCY:
El Dorado County

PREPARED:
February 2018

ADOPTED BY BOARD OF SUPERVISORS ON: _____

Introduction

Purpose

The El Dorado County, Department of Transportation (County), in conjunction with the California Department of Transportation (Caltrans) and the Federal Highway Administration (FHWA) intends to replace the two existing Green Valley Road bridges over Indian Creek (25C0040) and Mound Springs Creek (25C0041). The proposed wider bridges with a continuous median turn-lane in the roadway center will improve driver safety and be consistent with American Association of State Highway and Transportation Officials (AASHTO) guidelines. The Indian Creek Bridge (25C0040) and the Mound Springs Creek Bridge (25C0041) are located approximately 1,050 feet from each other along Green Valley Road just west of the City of Placerville in unincorporated El Dorado County.

As described in the IS/MND, the Project itself incorporates a number of measures to minimize adverse effects on the environment. The IS/MND also identified several mitigation measures that are required to reduce potentially significant impacts to levels that are less than significant. This Mitigation Monitoring and Reporting Plan (MMRP) describes a program for ensuring that these mitigation measures are implemented in conjunction with the Project. The County, as the lead agency under the California Environmental Quality Act (CEQA), is responsible for overseeing the implementation and administration of this MMRP. The County will designate a staff member to manage the MMRP. Duties of the staff member responsible for program coordination will include conducting routine inspections and reporting activities, coordinating with the Project construction contractor, coordinating with regulatory agencies, and ensuring enforcement measures are taken.

Regulatory Framework

California Public Resources Code Section 21081.6 and California Code of Regulations Title 14, Chapter 3, Section 15097 require public agencies to adopt mitigation monitoring or reporting plans when they approve projects under an MND. The reporting and monitoring plans must be adopted when a public agency makes its findings pursuant to CEQA so that the mitigation requirements can be made conditions of Project approval.

Format of This Plan

The MMRP summarizes the impacts and mitigation measures identified and described in the Project IS/MND. Each of the impacts discussed within this MMRP is numbered based on the sequence in which they are discussed in the IS/MND. A summary of each impact with the corresponding specific mitigation measures are provided. Mitigation measures are followed by an implementation description, the criteria used to determine the effectiveness of the mitigation, the timeframe for implementation, and the party responsible for monitoring the implementation of the measure.

Implementation of mitigation measures is ultimately the responsibility of the County; during construction, the delegated responsibility is shared by the County's contractors. Each mitigation measure in this plan contains a "Verified By" signature line, which will be signed by the County Project manager when the measure has been fully implemented and no further actions or monitoring are necessary for the implementation or effectiveness of the measure.

Impacts and Associated Monitoring or Reporting Measures

IV. BIOLOGICAL RESOURCES

Impact (a): *Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.*

Big-scale balsamroot

With the exception of big-scale balsamroot, the 2016 biological surveys were conducted during the evident and identifiable period of special-status plants with potential to occur and covered the entire Project area. Implementation of BIO-1 will reduce potential impacts to big-scale balsamroot to less than significant.

Measure BIO-1

- *A properly timed survey for big-scale balsamroot will be conducted in the expanded project limits prior to construction.*
- *If big-scale balsamroot is not detected during the survey, then no further avoidance and minimization measures will be required.*
- *If big-scale balsamroot is found during the survey, the plants will be avoided to the maximum extent practicable during project construction. Environmentally Sensitive Areas (ESAs) will be established by the County or its contractors around sensitive plant occurrences within the Project area to exclude project activities. Temporary exclusionary fencing will be installed to define the limits of the ESA.*
- *If avoidance is not feasible, the plants will be transplanted to a suitable location in the Project area.*
- *If avoidance and transplantation are not feasible, the County will acquire mitigation credits from an established mitigation bank presently supporting the species with suitable habitat for such species. Off-site compensatory mitigation credits will be acquired at a minimum acreage ratio of 1:1 (acquired: impacted).*

Implementation:	The County will implement the measures as described above.
Effectiveness Criteria:	The County will prepare and keep on file documentation verifying the implementation of the above-referenced measures.
Timing:	Pre-Construction
Verified By:	_____ Date: _____ County Project Manager

California red-legged frog (CRLF; *Rana draytonii*)

Indian Creek and a seasonal pond in the Project area provide marginal breeding habitat for the federal-listed California red-legged frog (CRLF; *Rana draytonii*). Implementation of BIO-2 will reduce potential project impacts to less than significant.

Measure BIO-2

- *A Service-approved biologist shall conduct a preconstruction survey for CRLF within 48 hours prior to the onset of vegetation removal in the riparian habitat. If any CRLF are found, construction activities will stop in the riparian and aquatic habitats, and the USFWS will be contacted immediately for further guidance.*
- *Environmental awareness training will be conducted by a qualified biologist prior to the onset of project work for construction personnel to brief them on how to recognize CRLF, the importance of avoiding impacts to this species, and what to do if they are found. Education programs will be conducted for appropriate new personnel as they are brought on the job during the construction period. Upon completion of training, employees will sign a form stating that they attended the training and understand all the conservation and protection measures.*
- *All vegetation scheduled for removal in the willow riparian habitat, Indian Creek, Mound Springs Creek, and the seasonal pond will be removed by hand or with hand-held power tools. Mechanized vehicles will not be used to clear the brush.*
- *A qualified biologist will be present during clearing and grubbing activities in the riparian habitat to monitor for CRLF.*
- *ESA fencing will be established along the boundaries of the Project area to prevent encroachment by construction equipment and personnel. The fencing can be installed after initial clearing of vegetation, but shall be installed prior to any further work on the Project. Vehicles will not be allowed to park in, nor will equipment be stored in the ESA. No storage of oil, gasoline, or other substances will be permitted in the ESA. No vegetation removal or ground disturbing activities will be permitted in the ESA.*
- *If creek diversion is required, the contractor will prepare a creek diversion plan that complies with any applicable permit conditions. A qualified biologist will conduct a survey of the area to be diverted prior to diversion installation. The qualified biologist or qualified site personnel under the oversight a qualified biologist will be present during installation and removal of the diversion structure and dewatering activities (as it applies to installation and removal of dewatering activities).*
- *Plastic mono-filament netting (erosion control matting) or similar material containing netting shall not be used at the project site because the CRLF or other animals may become entangled or trapped in it. Acceptable substitutes include coconut coir matting or tackified hydroseeding compounds.*
- *If CRLF are found at any time during project work, construction will stop in the riparian and aquatic habitats, and the USFWS will be contacted immediately for further guidance.*
- *To ensure compliance with the project's avoidance and minimization measures, a County inspector will be on-site whenever in-water work occurs. The County construction inspector will make recommendations to the construction personnel, as needed, to comply with all project implementation restrictions and guidelines. The County construction inspector will be responsible for ensuring that the contractor maintains the staked and flagged perimeters of the construction area and staging areas adjacent to sensitive biological resources. A qualified biologist will be available during the construction period to assist the County construction inspector if CRLF are found and to answer questions and make recommendations regarding implementation of CRLF avoidance and minimization measures.*

- *Upon completion of construction activities, any barriers to flow shall be removed to allow flow to resume with the least disturbance to the substrate.*

Implementation:	The County will implement the measures as described above.
Effectiveness Criteria:	The County will prepare and keep on file documentation verifying the implementation of the above-referenced measures.
Timing:	Pre-Construction, Construction, Post Construction Potential Phases
Verified By:	_____ Date: _____ County Project Manager

Birds Of Prey and Migratory Bird Treaty Act

The Project area provides potential nesting habitat for birds of prey and birds listed by the Migratory Bird Treaty Act (MBTA) of 1918 (16 U.S.C. 703-711). BIO-3 will be implemented to avoid impacts to birds of prey and birds listed by the MBTA.

Measure BIO-3

Under the MBTA, nests that contain eggs or unfledged young are not to be disturbed during the breeding season. Nesting or attempted nesting by migratory birds and birds-of-prey is anticipated from February 15 to September 1.

Swallows

In California, bridge-nesting swallows typically arrive in mid-February, increase in numbers until late March, and remain until October. Nesting begins in April, peaks in June, and continues into August. Measures will be taken to prevent establishment of cliff swallow nests prior to construction. Techniques to prevent nest establishment include using exclusion devices, removing and disposing of partially constructed and unoccupied nests of migratory or nongame birds on a regular basis to prevent their occupation, or perform any combination of these. The following measures will be implemented:

- *The contractor will visit the site weekly and remove partially completed nests using either hand tools or high pressure water; and/or*
- *Hang netting from the bridge before nesting begins. If this technique is used, netting should be in place from late February until project construction begins.*

Birds of Prey and Birds Protected by the Migratory Bird Treaty Act

- *If construction begins outside the 15 February to 1 September breeding season, there will be no need to conduct a preconstruction survey for active nests.*
- *Trees scheduled for removal should be removed during the non-breeding season from 2 September to 14 February. Vegetation removal includes trees and vegetation within the stream zone. Within the riparian community, vegetation will be removed using hand tools, including chain saws and mowers, and may be trimmed several inches above the ground with the roots left intact to prevent erosion.*
- *If construction or vegetation removal begins between 15 February and 1 September, a*

biologist shall conduct a survey for active bird of prey nests and rookeries within 500 ft of the project area and active nests of all other MBTA-protected birds within 100 ft of the project area from publicly accessible areas within two weeks prior to construction. The measures listed below shall be implemented based on the survey results.

- *No Active Nests Found:*
- *If no active nest of a bird of prey, MBTA bird, or other CDFW protected bird is found, then no further avoidance and minimization measures are necessary unless one is subsequently found during construction, in which case the applicable measure below will be implemented.*

Active Nests Found:

- *If an active nest of a bird of prey, MBTA bird, or other CDFW protected bird is discovered that may be adversely affected by construction activities, or an injured or killed bird is found, immediately:*
    1. *Stop all work within a 100-foot radius of the discovery.*
    2. *Notify the Engineer.*
    3. *Do not resume work within the specified radius of the discovery until authorized.*
    4. *If the bird is injured or dead, determine the cause, if possible, and measures taken to prevent the same result in the future.*
- *The biologist shall establish a minimum 500-ft Environmentally Sensitive Area (ESA) around the nest if the nest is of a bird of prey or is a rookery, and a minimum 100-ft ESA around the nest if the nest is of an MBTA bird other than a bird of prey.*

Species Protection Areas

Identification	***Location***
Bird of Prey or Rookery	*500 ft no-disturbance buffer*
MBTA protected bird (not bird of prey)	*100 ft no-disturbance buffer*

- *Activity in the ESA will be restricted as follows:*
    1. *Do not enter the ESA unless authorized*
    2. *If the ESA is breached, immediately:*
        c. *Secure the area and stop all operations within 100 feet of the ESA boundary.*
        d. *Notify the Engineer.*
    3. *If the ESA is damaged, the County determines what efforts are necessary to remedy the damage and who performs the remedy.*
- *No construction activity shall be allowed in the ESA until the biologist determines that the nest is no longer active, or unless monitoring determines that a smaller ESA will protect the active nest.*
- *The ESA may be reduced if the biologist monitors the construction activities and determines that no disturbance to the active nest is occurring. Reduction of the ESA depends on the*

species of bird, the location of the nest relative to the project, project activities during the time the nest is active, and other project-specific conditions.

- *Between 15 February and 1 September, if additional trees or shrubs need to be trimmed and/or removed after construction has started, a survey will be conducted for active nests in the area to be affected. If an active nest is found, the above measures will be implemented.*
- *If an active nest is identified in or adjacent to the construction zone after construction has started, the above measures will be implemented to ensure construction is not causing disturbance to the nest.*

Implementation:	The County will implement the measures as described above.
Effectiveness Criteria:	The County will prepare and keep on file documentation verifying the implementation of the above-referenced measures.
Timing:	Pre-Construction Phase (Potential Construction Phase)
Verified By:	_____ Date: _____
	County Project Manager

Impact (b): *Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?*

Willow Riparian

The Project will remove an estimated 7 trees in the willow riparian community. Implementation of BIO-4 will reduce potential impacts to less than significant.

Measure BIO-4

- *Tree removal will be minimized to the extent possible.*
- *Environmentally sensitive area (ESA) fencing will be placed along the limits of construction in the Project area to exclude construction activities from avoided habitat. The ESA fencing will be in place prior to commencement of construction.*
- *Trucks and other vehicles will not be allowed to park beyond, nor shall equipment be stored beyond, the fencing.*
- *No vegetation removal or ground disturbing activities will be permitted beyond the fencing.*
- *Temporarily impacted areas will be revegetated and reseeded in accordance with the Appendix F (Revegetation Planting and Erosion Control Specifications) of the Project NES.*

Implementation:	The County will implement the measures as described above.
Effectiveness Criteria:	The County will prepare and keep on file documentation verifying the implementation of the above-referenced measures.
Timing:	Pre-Construction and Construction Phase
Verified By:	_____ Date: _____
	County Project Manager

Native Oak Trees

The Project will remove an estimated four (4) native oak trees. Oaks to be removed include two (2) interior live oaks and one (1) valley oak located in the California Annual Grassland community and one (1) interior live oak located in the willow riparian corridor. Implementation of BIO-5 will address Project impacts to the one, 12.5 inch DBH valley oak tree and includes obtaining an Oak Tree and Oak Woodland Removal Permit (which requires submittal of an Oak Resource Technical Report) and payment of the individual oak tree in-lieu fee in accordance with ORMP implementing ordinance No. 5061, Section 130.39.070.C.2.a.

Mitigation Measure BIO-5

- *Prior to construction the County will obtain an Oak Tree Removal Permit in accordance with ORMP implementing ordinance No. 5061, Section 130.39.070. In accordance with ORMP implementing ordinance No. 5061, Sections 130.39.070(D) and (E) the Oak Tree Removal Permit application will be accompanied by an Oak Resources Technical Report and Cod Compliance Certificate. The Oak Resources Technical Report must include all pertinent information, documents and recommended mitigation as specified in the ORMP. A Code Compliance Certificate will be submitted verifying that no Oak Resources have been impacted (in the Project area) within two years prior to application submittal.*
- *The County will pay the individual oak tree in-lieu fee for trees subject to the ORMP that removed by the Project. The individual oak tree in-lieu fee will be in accordance with Table 6 in section 3.2 (Oak Trees) of the September 2017, ORMP.*

Implementation:	The County will implement the measures as described above.
Effectiveness Criteria:	The County will prepare and keep on file documentation verifying the implementation of the above-referenced measures.
Timing:	Pre-Construction Phase
Verified By:	_____ Date: _____ County Project Manager

Impact (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?*

Indian Creek and Mound Springs Creek

Implementation of measure BIO-6 and the revegetation component of BIO-4 will reduce potential impact to less than significant.

Measure BIO-6

- *During construction, water quality will be protected by implementation of BMPs consistent with the Caltrans Stormwater Quality Handbooks (Caltrans 2011) to minimize the potential for siltation and downstream sedimentation of Indian Creek and/or Mound Springs Creek.*
- *In-water construction activities will be restricted to the period between 15 April and 15*

October, subject to the Streambed Alteration Agreement, or before the onset of the rainy season, whichever occurs first. The onset of the rainy season is defined as arrival of a frontal system that deposits 0.25 inch or more of precipitation during one event in the area.

- *If water diversion in Indian Creek and/or Mound Springs Creek becomes necessary, it will be conducted in accordance with the County of El Dorado Stormwater Management Plan (SWMP; August 2004b) and the El Dorado County grading, erosion, and sediment control ordinance (El Dorado County 2010). Minimization efforts will include marking the limits of construction with temporary fencing.*

Implementation:	The County will implement the measures as described above.
Effectiveness Criteria:	The County will prepare and keep on file documentation verifying the implementation of the above-referenced measures.
Timing:	Pre-Construction Phase (Potential Construction Phase)
Verified By:	_____ Date: _____
	County Project Manager

Seasonal Wetlands

The Project will result in 0.04 acre of temporary impacts and 0.002 acre of permanent impacts to SW1 and 0.027 acre of temporary impact to SW2 as a result of roadside grading. Implementation of BIO-6 and the revegetation component of BIO-4 will reduce potential impact to less than significant.

Measure BIO-7

- *ESA fencing will be placed between the limits of construction and the seasonal wetlands to prevent encroachment by construction equipment and personnel. The ESA fencing will be in place prior to commencement of construction. Trucks and other vehicles will not be allowed to park beyond, nor shall equipment be stored beyond the fencing. No vegetation removal or ground disturbing activities will be permitted beyond the fencing.*

Implementation:	The County will implement the measures as described above.
Effectiveness Criteria:	The County will prepare and keep on file documentation verifying the implementation of the above-referenced measures.
Timing:	Pre-Construction Phase (Potential Construction Phase)
Verified By:	_____ Date: _____
	County Project Manager

V. CULTURAL RESOURCES

Impact (b): *Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?*

During a pedestrian archaeological survey in September 2016 a possible archeological resource was observed in a small portion of the Project area. In December 2017 an XPI was conducted within an

expanded Project area; additional possible archeological resources were observed. With the existing level of disturbance and the thin soil profile above bedrock, it does not appear that the potential archaeological resources meet criteria 4 (potential to yield information important to prehistory or history). Nonetheless, even if the County assumes that the potential archeological resources meet criteria 4, implementation of mitigation measure CULT-1 will reduce potential project impact to less than significant.

Measure CULT-1

- *Prior to the initiation of construction the County will prepare and implement a Phase II Work Plan and Study (Phase II). Phase II includes a set of study goals and links the anticipated field and laboratory work to those goals. The Phase II findings provide the basis for determining whether a site is eligible for inclusion in the National Register of Historic Places (National Register) or is a historical resource under CEQA. The Phase II includes a phased approach of testing and data recovery excavations. Following the completion of testing and data recovery excavations a technical report will be sent to the County. Technical report content, organization, and illustrative materials will conform to professional standards and follow the format specified in the Caltrans Environmental Handbook, Volume 2, Cultural Resources. All final cultural resources data will be submitted electronically to the County, and ultimately to Caltrans for entry into the Caltrans Cultural Resources Database, including Department of Parks and Recreation site forms and relevant GIS data.*
- *If the Phase II Study confirms that the site is not eligible for listing on the California or National Registers, no further mitigation would be needed.*
- *Based on the Phase II, the site may be assumed eligible for 'the purposes of the project.' This happens when there are circumstances, such as restricted access, large property size, or limited potential for effects that preclude a complete evaluation. In this case the measures below will be implemented.*
    - *In accordance with the January 2014 First Amended Programmatic Agreement Among the Federal Highway Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation Regarding Compliance with Section 106 of the National Historic Preservation Act, As It Pertains to the Administration of the Federal-Aid Highway Program in California a Native American and archeological monitor will be present during ground disturbing activities (i.e. grading and excavation).*
    - *The County will prepare and implement a Post-Review Discovery and Monitoring Plan. The Discovery and Monitoring Plan is prepared to address the potential for discovery of cultural resources during construction. The Discovery and Monitoring Plan serves to outline the process that will be implemented by the County in order to resolve adverse effects to resources which may be encountered during construction activities. Post-Review Discovery and Monitoring Plan report content, organization, and illustrative materials will conform to professional standards and follow the format specified in the Caltrans Environmental Handbook, Volume 2, Cultural Resources and the January 2014 First Amended Programmatic Agreement Among the Federal Highway Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation Regarding Compliance with Section 106 of the National Historic Preservation Act, As It Pertains to the Administration of the Federal-Aid Highway Program in California.*

Implementation:	The County will implement the measures as described above.
Effectiveness Criteria:	The County will prepare and keep on file documentation verifying the implementation of the above-referenced measures.
Timing:	Pre-Construction and Potential Construction Phases
Verified By:	_____ Date: _____
	County Project Manager