Tim Bell Road over Dry Creek Bridge (38C-0073)

Replacement Project

Public Review Draft

Environmental Impact Report

SCH#: 2021020008

Prepared For: Stanislaus County Public Works Department
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March 2021

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Summary

Pursuant to California Environmental Quality Act (CEQA) Guidelines Section 15123, this summary provides information about the environmental impact report (EIR) prepared by the Stanislaus County Public Works Department (County) for the proposed replacement of the Tim Bell Road Bridge over Dry Creek. It presents a description of the Project; summarizes the impacts and mitigation measures; identifies areas of known controversy, including issues raised by agencies and the public; and identifies unresolved issues.

S.1 Project Description Summary

The County proposes to replace the existing Tim Bell Road Bridge over Dry Creek. The Tim Bell Road over Dry Creek Bridge (38C-0073) Replacement Project (Project) is located in eastern Stanislaus County along Tim Bell Road, 0.8 mile south of its junction with Claribel Road, about 5.4 miles northeast from the City of Waterford and 14 miles southeast of the City of Oakdale. The Project is located on the Paulsell USGS Topographic Quad (T3S, R12E, Section 6, Mt. Diablo Base and Meridian) and is in the Upper Tuolumne Hydrologic Unit (Hydrologic Unit Code 18040009). The existing Tim Bell Road Bridge over Dry Creek is 131-foot-long by 20-foot-wide. The Tim Bell Road Bridge was built in 1925.

The Project purpose is to correct the existing deficiencies of the Tim Bell Road Bridge by replacing it with a new structure that meets the current Stanislaus County standards and the AASHTO guidelines The County will use Highway Bridge Program (HBP) funds to replace the existing structure.

The proposed Project would construct a new bridge downstream of the existing bridge to improve sight distance, remove the existing "s-curve", provide for a safe design speed, and provide a structure that spans the 100-year floodplain of Dry Creek. The bridge structure type will be a cast-in-place prestressed concrete box girder and slab bridge with arching soffit. Eleven multi-column bents will support the approximately 60-foot spans of the bridge structure over the floodplain. At Dry Creek, the bridge span will be approximately 160 feet long to clear span the ordinary high-water mark (OHWM) of the creek. The new, two-lane bridge will have a 26-foot clear deck width, which satisfies AASHTO guidelines. The deck width accommodates two 11-foot travel lanes and two 2-foot shoulders. A California ST-30 guard rail will extend along the entire length of the bridge and road approaches on both sides of Tim Bell Road.

In addition to the new bridge, the proposed Project includes approximately 920 feet of road improvements. Road improvements south of the bridge will be approximately 220 feet long to safely conform into the existing alignment. North of the new bridge, an approximately 700-foot-long road improvement will convey the road past the touchdown point above the floodplain.

S.2 Areas of Known Controversy

State CEQA Guidelines Section 15123(b) requires that a summary section include a description of areas of controversy known to the lead agency, including issues raised by agencies and the public;

and issues to be resolved, including the choice among alternatives and whether or how to mitigate the significant impacts. Known areas of controversy include right of way acquisition and the preservation of historic resources.

S.3 Environmental Impact Report Process and Public Review

A Notice of Preparation of an EIR was prepared for the proposed Project and published for a 30-day public review and comment period beginning 24 October 2018 and ending 23 November 2018 and also between 1 February 2021 and 3 March 2021 (Appendix A). The County held a public scoping meeting on 14 November 2018, at the Waterford Community Center (540 C Street, Waterford, CA) from 6:00 to 7:00 p.m. The scoping meeting included a presentation by County staff and consultants and was followed by a question-and-answer period. Comment cards were handed out to facilitate the receipt of written comments regarding the Project and the EIR.

A total of 13 members of the public were in attendance. Comments and questions received during 14 November 2018, comment cards, subsequent emails and letters are included in Appendix A. These comments were considered in preparing this Draft EIR.

The County encourages public review of this EIR. This Draft EIR is being circulated for a 45-day public review period. During this time, written comments may be submitted to the following staff person for consideration in the Final EIR.

Stanislaus County Public Works Department
1716 Morgan Street
Modesto, CA 95358
Phone: (209) 525-4150
Attn: Denis Bazyuk, P.E., Project Manager
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Following the close of the public comment period, the County will prepare a Final EIR that contains this Draft EIR plus any technical clarifications and responses to significant environmental points raised in the public review and resource agency consultations. The Draft and Final EIR will be considered by the Stanislaus County Board of Supervisors and, subsequently, a decision will be made to approve or deny the proposed Project.

S.4 Project Impacts and Mitigation Measures

The potential significant environmental impacts that would result from implementation of the proposed Project and the proposed mitigation measures are summarized in the table at end of this chapter. The effects of the Project that, when compared to the significance criteria, would result in no impact or would result in a less-than-significant impact are not included in the table but are discussed in Chapter 4, *Effects Found Not to Be Significant*.

S.5 Other CEQA-Related Impact Conclusions

S.6.1 Cumulative Impacts

Section 15130 of the State CEQA Guidelines requires that an EIR consider a project's contribution to any significant cumulative impacts. Section 15355 of the State CEQA Guidelines states that "Cumulative impacts" refers to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts. Cumulative impacts are the incremental effects of a proposed project added to the impacts of other closely related past, present, and reasonably foreseeable future projects, which, together, are cumulatively considerable. The purpose of the cumulative impact analysis is to assess the project's contribution in the context of the larger, cumulative impact.

All resource areas were analyzed for cumulative impacts. The proposed Project would not contribute to a cumulative impact in the Project region for the following resource areas.

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

The proposed Project's contribution to cumulative impacts is expected to be less than cumulatively considerable for the following resource areas within the Project region (and therefore cumulative impacts would be less than significant).

- Cultural resources: The assessment of the Project's contribution to cumulative impacts is provided in Chapter 6, Other CEQA Considerations.

S.6.2 Growth Inducement and Growth-Related Impacts

Section 15126.2 of the State CEQA Guidelines provides guidance for analyzing the growth-inducing impacts of a project. The growth inducement analysis must discuss ways in which a proposed project could foster economic or population growth or the construction of additional housing, either directly or indirectly, in the surrounding environment. Projects that would remove obstacles to population growth could lead to increased demand for existing community services. Growth in an area is not necessarily considered beneficial, detrimental, or of little significance to the environment.

However, the secondary impacts associated with growth (e.g., air quality impacts from new construction) can be significant. This Draft EIR concludes that the Project would not induce growth. Growth inducement and growth-related impacts are discussed in further detail in Chapter 6, *Other CEQA Considerations*.

S.6.3 Significant Irreversible Environmental Changes

The 2021 State CEQA Guidelines Section 15126.2(d) requires the evaluation and discussion in certain EIRs of significant irreversible changes that would be caused by a proposed project. State CEQA Guidelines Section 15127 (Limitations on Discussions of Environmental Impact) of the State CEQA Guidelines states:

'The information required by Section 15126.2(d) concerning irreversible changes, need be included only in EIRs prepared in connection with any of the following activities:

(a) The adoption, amendment, or enactment of a plan, policy, or ordinance of a public agency;

(b) The adoption by a Local Agency Formation Commission (LAFCO) of a resolution making determinations; or

(c) A project which will be subject to the requirement for preparing an environmental impact statement pursuant to the requirements of the National Environmental Policy Act of 1969, 42 U.S.C. 4321–4347."

Implementation of the proposed Project would replace a functionally obsolete bridge to improve safety and movement for vehicles and bicyclists across the Dry Creek in rural Stanislaus County. The Project does not include any of the activities listed in State CEQA Guidelines Section 15127 that would require the evaluation and discussion of significant irreversible environmental impacts. The Project is not a plan, policy, or ordinance, does not include LAFCO approvals, and does not require the preparation of a NEPA environmental impact statement. No further evaluation or documentation is required.

S.6 Project Alternatives

The Draft EIR must examine a reasonable range of alternatives to the Project that could feasibly attain most of the Project objectives and avoid or substantially lessen any of the Project's significant environmental impacts (State CEQA Guidelines 15126 [f]). As required by Section 15126.6 of the State CEQA Guidelines, the range of alternatives must always include the No-Project Alternative. The purpose of describing and analyzing a No-Project Alternative is to allow decision-makers to compare the impacts of approving the proposed Project with the impacts of not approving the proposed Project. Alternatives are discussed in Chapter 5, *Alternatives Analysis*.

Table S-1. Summary of Significant Impacts and Mitigation Measures

Resource Topic	Significance Criteria and Significant Impact Summary	Mitigation Measures	Significance after Mitigation
Aesthetics			
	Impact AES-3: In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality? • The primary lasting change in visual resources would be the replacement of an historic bridge with a new structure in a slightly different location, the re-alignment of the approach roadways, and the raised elevation of the road's profile. Construction activities would result in a high visual impact for all viewer groups. Temporary impacts during construction would be related to the presence of construction workers, materials, equipment, and vegetation clearing.	**Measure AES-1 (Visual Impact Measures)** • To the extent practicable the final design will space bridge piers uniformly to reflect the orderliness of the adjacent orchards. • To the extent practicable the final design will use see-through railings to allow travelers views of the surrounding countryside, providing them with a better understanding of the geographical context of Dry Creek, the surrounding terrain, and land use patterns. • To the extent practicable the final design will include the use of a formliner that mimics local stone construction for the retaining wall, bridge abutments, and piers to better integrate the structure with the adjacent landscape. • To the extent practicable the final design will include the use local rock mulch for erosion control where plants would be ineffective or difficult to establish or maintain. **Measure BIO-1 (Valley elderberry longhorn beetle):** See text of measure below under Impact BIO-1 **Mitigation Measure BIO-7 (Valley Oak Woodland/ Trees):** See text of measure below under Impact BIO-2 **Measure BIO-8 (Dry Creek)**: See text of measure below under Impact BIO-2	Less than significant
Agricultural and Forestry Resources			
	Impact AG-2: Conflict with existing zoning for agricultural use or conflict with a Williamson Act contract • Project requires right of way from three parcels under Williamson Act.	**Mitigation Measure AG-1 (Williamson Act Parcels):** • Acquisition of ROW from any parcel enrolled in an active Williamson Act Contract will comply with the noticing requirements of the California Department of Conservation Public Acquisition Notification Procedures 'A Step by Step Guide' (https://www.conservation.ca.gov/dlrp/wa/Documents/basic_contr	Less than significant

<table>
<tr><th>Resource Topic</th><th>Significance Criteria and Significant Impact Summary</th><th>Mitigation Measures</th><th>Significance after Mitigation</th></tr>
<tr><td></td><td></td><td>act_provisions/Public%20Acquisition%20A%20Step%20by%20Step%20Guide%207.13.2020.pdf.).</td><td></td></tr>
<tr><td colspan="4">Biological Resources</td></tr>
<tr><td></td><td>Impact BIO-1: 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?
• Potential for construction activities to result in impacts to special status species including Valley elderberry longhorn beetle (VELB), Western Pond Turtle (WPT), Birds of Prey and Migratory Birds, Western burrowing owl, Swainson’s hawk, Pallid bat, and Western red bat.</td><td>Mitigation Measure BIO-1 (Valley elderberry longhorn beetle):
• To compensate for impacts to VELB, the USFWS (2017) Framework for Assessing Impacts to the Valley Elderberry Longhorn Beetle (VELB Framework) recommends a compensation ratio of 3:1 when proposing habitat-level compensation for riparian habitats. The purchase of 37 VELB credits from a USFWS-approved bank is proposed as compensation for impacts to 0.05 ac of riparian habitat (see table below).
Summary Table of VELB Mitigation Compensation
<table>
<tr><th>Habitat Type</th><th>Compensation Ratio</th><th>Acres of Disturbance</th><th>Compensation Acreage</th><th>VELB Credit</th></tr>
<tr><td>Riparian</td><td>3:1</td><td>0.05</td><td>1.5</td><td>37 credits</td></tr>
</table>
• Riparian vegetation will be avoided and preserved to the maximum extent practicable.
• Environmentally Sensitive Areas (ESAs) will be established along the limits of construction to exclude construction activities from avoided habitat. Trucks and other vehicles shall not be allowed to park in, nor shall equipment be stored in, an ESA. No storage or dumping of oil, gasoline, or other substances shall be permitted within an ESA. All ESAs will be clearly delimited with yellow caution tape or temporary fencing prior to commencement of construction activities. ESAs will be protected as specified in Section 13-4 “Water Pollution Control, Job Site Management” and in Section 14 “Environmental Stewardship” and specifically in Section 16-2.03 “Temporary Facilities, Miscellaneous Temporary Facilities, High Visibility Fences” of the Caltrans 2015 Standard Specifications and the contract Special Provisions.</td><td>Less than significant</td></tr>
</table>

Resource Topic	Significance Criteria and Significant Impact Summary	Mitigation Measures	Significance after Mitigation
		• Valley oaks removed by construction will be replaced on-site at a ratio of 2:1 (two re-established for each removed) in accordance with the Oak Woodland Management Plan that is Appendix F to the Project Natural Environment Study (NES). • Signs will be installed along the edge of the ESA and will read the following: "This area is habitat of the beetle, a threatened species, and must not be disturbed. This species is protected by the Endangered Species Act of 1973, as amended. Violators are subject to prosecution, fines, and imprisonment." The signs should be clearly readable from a distance of 20 feet and must be maintained for the duration of construction. • All temporarily disturbed areas will be restored to approximate pre-construction contours and revegetated, either through hydroseeding or other means, with native species. • To prevent fugitive dust from drifting into adjacent habitat, all clearing, grubbing, scraping, excavation, land leveling, grading, cut and fill, demolition activities, or other dust generating activities will be effectively controlled for fugitive dust emissions utilizing application of water or by presoaking. • Prior to the start of construction, a qualified biologist will survey for elderberry shrubs within 165 feet of the Project disturbance area. If the survey documents any shrubs with stem diameter greater than 1 inch that were not identified during the surveys for the February 2018 BA, Caltrans will contact the Service. The Service and Caltrans will work to determine a way to proceed without take or Caltrans will reinitiate consultation with the Service to update the BO to obtain an Incidental Take Statement that includes any additional take that may occur. • All construction personnel will attend environmental awareness training. During the environmental awareness training, construction personnel will be briefed on the status of the beetle, the need to avoid damage to the elderberry host plant, and the possible penalties for not complying with these requirements.	

Resource Topic	Significance Criteria and Significant Impact Summary	Mitigation Measures	Significance after Mitigation
		• Herbicides will not be used within the drip-line of the shrub. Insecticides will not be used within 30 meters (98 feet) of an elderberry shrub. All chemicals will be applied using a backpack sprayer or a similar direct application method. **Measure BIO-2 (Western pond turtle):** • A qualified biologist shall conduct a preconstruction survey for WPT within 48 hours prior to the onset of vegetation removal or ground disturbance in the Project area. If any WPT are found, construction activities will stop to allow the biologist sufficient time to relocate the WPT. WPT will be relocated to the closest suitable habitat where they will not be affected by construction. Detailed records of individuals that are relocated should be maintained by the qualified biologist to determine whether translocated individuals are returning to the Project area. These records should include size, coloration, any distinguishing features, and photographs. • 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 WPT. Construction personnel should also be informed that if a WPT is encountered in the work area, construction should stop and a qualified biologist will be notified. Construction will resume when the biologist has either relocated the WPT out of the construction zone to nearby suitable habitat, or, after thorough inspection, determined that the WPT has moved away from the construction zone. The crew foreman will be responsible for ensuring that crew members adhere to the guidelines and restrictions. 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. **Measure BIO-3 (Birds of Prey and Migratory Birds):**	

Resource Topic	Significance Criteria and Significant Impact Summary	Mitigation Measures	Significance after Mitigation
		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 August 31. **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. Black phoebes, another bridge-nesting species, nest from March to August with peak activity in May. Measures should be taken to prevent establishment of nests on the bridge 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 31 August 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 1 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 31 August, a biologist shall conduct a survey for active	

Resource Topic	Significance Criteria and Significant Impact Summary	Mitigation Measures	Significance after Mitigation

Swainson's hawk nests within 600 feet, active bird of prey nests within 300 feet, and active MBTA bird nests within 100 feet of the Project area from accessible areas within one week 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.

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:
  - Stop all work within a 300-foot radius of the discovery.
  - Notify the Engineer.
  - Do not resume work within the specified radius of the discovery until authorized.
- The biologist shall establish a minimum 600-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*
Swainson's hawk	*600 ft no-disturbance buffer*
Bird of Prey	*300 ft no-disturbance buffer*
MBTA protected bird (not bird of prey)	*100 ft no-disturbance buffer*

Resource Topic	Significance Criteria and Significant Impact Summary	Mitigation Measures	Significance after Mitigation
		• Activity in the ESA will be restricted as follows: o Do not enter the ESA unless authorized o If the ESA is breached, immediately: ▪ Secure the area and stop all operations within 100 feet of the ESA boundary. ▪ Notify the Engineer. o 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 31 August, 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. **Measure BIO-4 (Western Burrowing Owl):** • During the burrowing owl non-breeding season (1 September to 31 January) of the winter prior to construction, it is recommended that a biologist survey the Project area for wintering burrowing owls or potential denning habitat. If wintering burrowing owls are found in the Project area, they should be passively excluded in accordance	

Resource Topic	Significance Criteria and Significant Impact Summary	Mitigation Measures	Significance after Mitigation
		with the DFG 2012 Staff Report, prior to the start of the nesting season. If unoccupied burrows suitable for burrowing owl are found, the burrows should be collapsed. The Project area should be maintained free of burrows until construction commences to avoid the potential for a nesting burrowing owl in the Project area. **Measure BIO-5 (Pallid bat):** • A preconstruction survey will be performed by a qualified biologist to determine if bat species are roosting on the underside of the bridge. If bats are roosting on the bridge, exclusion of these bats shall take place prior to construction. The survey and exclusion, if necessary, will be performed prior to April 1, before the bats have given birth. Exclusionary devices should remain on the bridge until demolition of the bridge, or until exclusionary netting for bridge-nesting bird species are installed. • An additional survey will be conducted two weeks before construction activities to determine if bat species are still roosting on the bridge. If roosting is occurring, the county will contact CDFW for additional guidance on bat avoidance and impact minimization during construction activities. **Measure BIO-6 (Wester red bat):** • All potential roost trees (i.e., 20-inch diameter breast height (DBH) or greater), including snags, shall be removed from the project site between September 1 and October 31, which is outside of the bat breeding and hibernation season and when western red bat densities in the Central Valley are lowest. Removal of trees during this period will reduce impacts to any bats or their young occurring on the project site during the breeding season or during winter hibernation. • To identify the presence of potential resident western red bats, potential roost trees within the project area shall be surveyed by a qualified biologist within 15 days prior to removal to determine if bats are present or if any trees can be excluded as suitable bat roosts	

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		due to the lack of suitable structural characteristics. The survey method shall include visual verification to identify guano and other evidence of bat presence. If it is determined that bats are not using the trees, or the trees can be excluded as bat roosts, removal of these trees would not be subject to the seasonal restrictions. • If a potential roost is identified, methods to evict the bats shall consist of the following: o Ultrasound deterrents or other sensory irritants may be set up to encourage bats to depart from the site on their own. Deterrents shall be set up late in the day or in the evening during weather and temperature conditions conducive to bat activity to reduce the likelihood of evicted bats falling prey to diurnal predators. o Prior to tree removal, confirmed roost trees would be shaken, repeatedly struck with a heavy implement such as an ax and several minutes should pass before felling trees to allow bats time to arouse and leave the tree.	
	Impact BIO-2: 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? • Potentail temporary and permanent impacts to Valley Oak Woodland/ Trees	**Mitigation Measure BIO-7 (Valley Oak Woodland/ Trees)**: • Tree removal will be minimized to the extent possible. • To minimize impacts to valley oak woodland not scheduled for removal, the limits of construction will be fenced by the County or Contractor to minimize impacts on retained trees. • 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. • The construction contract will require implementation of Appendix G (Oak Woodland Management Plan) of the approved 2017 NES. The Oak Woodland Management Plan describes the approach for managing the valley oak (Quercus lobata) trees that will be impacted by the replacement of Tim Bell Road Bridge (38C-0073) over Dry Creek. This Oak Woodland Management Plan describes goals, methods of implementation, and monitoring requirements in	Less than significant

Resource Topic	Significance Criteria and Significant Impact Summary	Mitigation Measures	Significance after Mitigation
		accordance with guidance provided by University of California Oak Woodland Conservation Workgroup.	
	Impact BIO-3: Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? • Potential temporary and indirect effects to Dry Creek.	**Mitigation Measure BIO-8 (Dry Creek):** • During construction, water quality will be protected by implementation of BMPs consistent with the current edition of the Caltrans Stormwater Quality Handbooks to minimize the potential for siltation and downstream sedimentation of Dry Creek. • Riparian vegetation will be avoided and preserved to the maximum extent practicable. The limits of vegetation removal will be marked with temporary fencing or flagging. • Equipment will be refueled and serviced at designated construction staging areas. All construction material will be stored and contained in a designated area that is located away from channels to prevent transport of materials into the adjacent Dry Creek. The preferred distance is a minimum 100 feet from riparian habitat or water bodies. Construction vehicles and equipment will be maintained to prevent contamination of soil and water from external grease and oil and from leaking hydraulic fluid, fuel, oil, and grease. • Any temporary diversion structure will be designed so that fish passage is maintained through the Project area. The diversion will not create an impassible barrier to fish passage. The contractor will prepare a creek dewatering plan that complies with any applicable permit conditions. Water diversion in Dry Creek will be conducted in accordance with the Stanislaus County Stormwater Management Plan (SWMP; Revised 18 May 2004). • If pumps are used to temporarily divert or dewater a stream to facilitate construction, an acceptable fish screen must be used to prevent entrainment or impingement of small fish. Potential contact between fish and pump will be minimized and/or avoided by constructing an open basin prior to commencing dewatering. The open basin will be inspected for fish, which will be salvaged and placed in the active flow of Dry Creek adjacent to the work zone by a qualified biologist.	Less than significant

Resource Topic	Significance Criteria and Significant Impact Summary	Mitigation Measures	Significance after Mitigation
		• All disturbed soils in the Project area will undergo erosion control treatment prior to October 15 and/or immediately after construction is terminated at the completion of the Project. Treatment includes seeding and the application of sterile straw mulch. Any disturbed soils on a gradient greater than 30 percent will have erosion control blankets installed. Areas temporarily disturbed on the banks of Dry Creek in the Project area will be seeded with native herbaceous plant species in accordance with Appendix F (Revegetation Planting and Erosion Control Specifications) on the approved 2017 NES.	
Cultural Resources			
	Impact CULT-1: Potential to cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5. • The Project will remove and replace the Tim Bell Road Bridge which has been determined eligible for listing in the CRHR.	**Measure CULT-1 (HAER)** • Prior to the start of construction, Caltrans shall contact the regional Historic American Building Survey/Historic American Engineering Record/Historic American Landscape Survey (HABS/HAER/HALS) coordinator at the National Park Service Interior Regions 8, 9, 10, and 12 Regional Office (NPS) to request that NPS stipulate the level of and procedures for completing the documentation. Within ten (10) days of receiving the NPS stipulation letter, Caltrans shall send a copy of the letter to all consulting parties for their information. • Caltrans will ensure that all recordation documentation activities are performed or directly supervised by architects, historians, photographers, and/or other professionals meeting the qualification standards in the Secretary of Interior's Professional Qualification Standards (36 CFR 61, Appendix A). • Upon receipt of the NPS written acceptance letter, Caltrans will make archival, digital and bound library-quality copies of the documentation and provide them to the [insert appropriate parties], the [relevant formation center] and the California State Library. • Caltrans shall notify SHPO that the documentation is complete and all copies distributed, as outlined in C, and include the completion of the documentation in the annual report. All field surveys shall be completed prior to the start of construction.	Significant Unavoidable Impact

Resource Topic	Significance Criteria and Significant Impact Summary	Mitigation Measures	Significance after Mitigation
		Measure CULT-2 (Informational Plaque) • The County will design, produce, and install a permanent metal plaque on a concrete or boulder mount at a publicly accessible site in close, visual proximity to the Tim Bell Road Bridge crossing. The plaque will provide a brief history of the historic Tim Bell Road Bridge, its engineering features, and its significance. The SHPO and Caltrans will be provided 30 days to review and comment on the design and text of the new plaque before it is produced and installed. **Measure CULT-2 (Informational booklet)** • The County will prepare and produce a booklet regarding the Tim Bell Road Bridge and its use within the broader contextual history of Stanislaus County. The booklet will be paperback not to exceed 10 pages and will include high quality black and white images of the Tim Bell Road Bridge, copies of historic photographs and/or drawings, as appropriate, and text describing the Tim Bell Road Bridge, its design, construction, and use. Data from the HAER report prepared under CULT-1 will be used to produce the booklet. • The County will submit a draft copy of the booklet to Caltrans District 10 for review and approval prior to making the booklet available to recipients. Following approval by Caltrans District 10, the County will produce hardcopies for distribution to local libraries, as well as local historical societies, organizations, and museums, including but not limited to the McHenry Museum in Modesto; California State University, Stanislaus, Library Special Collections; Stanislaus County Public Library, Modesto Branch, Special Collections Room; and Waterford Historical Society. One copy will be submitted to Caltrans Transportation Library and History Center in Sacramento. The County will maintain the camera-ready master booklet for up to five years and produce additional copies within that time frame if there is demand.	

Resource Topic	Significance Criteria and Significant Impact Summary	Mitigation Measures	Significance after Mitigation
	Impact CULT-2: Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? • Figure 3.6-5 (Paleontological Sensitivity) of the County General Plan DEIR identifies the project area as having high paleontological sensitivity	**Measure CULT-4 (Paleontological Resources)** • A qualified paleontologist will prepare a Paleontological Monitoring Plan based on 65% design. • The qualified paleontologist would designate a paleontological monitor to be present during qualifying earthmoving activities, as described in the Paleontological Monitoring Plan. • The Resident Engineer will notify the qualified paleontologist in advance of the start of construction activity and would attend any safety training programs for the proposed Project. The proposed Project paleontologist would meet with the Resident Engineer and construction contractor at a preconstruction meeting to develop an agreed upon communication plan and provide for worker safety. All project personnel involved with excavation or drilling activities in paleontologically sensitive areas will receive a paleontological awareness training session prior to commencement of work. • If paleontological resources are discovered during earthmoving activities, the construction crew would immediately cease work within a 60-foot radius of the find, and immediately notify the Resident Engineer. In the event that paleontological resources are discovered, fossil specimens would be properly collected and sufficiently documented to be of scientific value. Collection, documentation, and storage standards will be provided in the Paleontological Monitoring Plan. • Upon the completion of excavation and/or drilling activities in paleontologically sensitive areas, the paleontologist will prepare a Paleontological Monitoring and Findings Report summarizing the results of the monitoring. The report will provide a summary of the field and laboratory methods, site geology and stratigraphy, faunal list, and a brief statement of the significance and relationship of the site to similar fossil localities. Full copies of the final Paleontological Monitoring and Findings Report will be deposited with the repository institution.	Less than significant

Resource Topic	Significance Criteria and Significant Impact Summary	Mitigation Measures	Significance after Mitigation
Hazards and Hazardous Materials			
	Impact HAZ-2: 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? • Potential for the soils in the area of proposed modification adjacent to APN 008-001-036 to be impacted with pesticides and herbicides, specifically arsenic and dichloro-diphenyl-trichloroethane (DDT) at levels that exceed the EPA Region 9 Regional Screening Levels for worker safety	**Measure HAZ-1 (Agricultural Chemicals)** • Prior to construction a testing program for agricultural chemicals including heavy metals such as arsenic will be implemented to determine if soils adjacent APN 008-001-036 that will be disturbed by the proposed Project exceed regulatory thresholds or screening levels for worker safety. Identifying the level of contamination will guide disposal options for the excavated soil. • Soils in the Project area that exceed regulatory thresholds or screening levels for worker safety will be disposed of at a landfill with the appropriate acceptance standard. • The construction contract will require all on-site personnel comply with standards found in the Construction Safety Orders and General Industry Safety Orders as defined by Cal/OSHA.	Less than significant
Hydrology, Water Quality, and Water Resources			
	Impact WQ-1: Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	**Measures BIO-1 (Valley elderberry longhorn beetle) and BIO-7 (Dry Creek)**: See text of measures above under Impact BIO-1 and Impact BIO-3	Less than significant

Chapter 1
Introduction

1.1 Introduction

The Stanislaus County, Public Works Department (County) proposes to replace the existing Tim Bell Road Bridge over Dry Creek. The Tim Bell Road over Dry Creek Bridge (38C-0073) Replacement Project (Project) is located in eastern Stanislaus County along Tim Bell Road, 0.8 mile south of its junction with Claribel Road, about 5.4 miles northeast from the City of Waterford and 14 miles southeast of the City of Oakdale (Figures 1-1 and 1-2). The County will use Highway Bridge Program (HBP) funds to replace the existing structure to improve roadway safety and comply with the American Association of State Highway and Transportation Officials (AASHTO) design guidelines and Stanislaus County standards.

1.2 Purpose of this Environmental Impact Report

The Project is being funded by the Federal Highway Bridge Program and therefore requires compliance with both the National Environmental Policy Act and the California Environmental Quality Act (CEQA). The lead agency for NEPA is the California Department of Transportation (Caltrans) as assigned by the Federal Highway Administration. Stanislaus County is the CEQA lead agency.

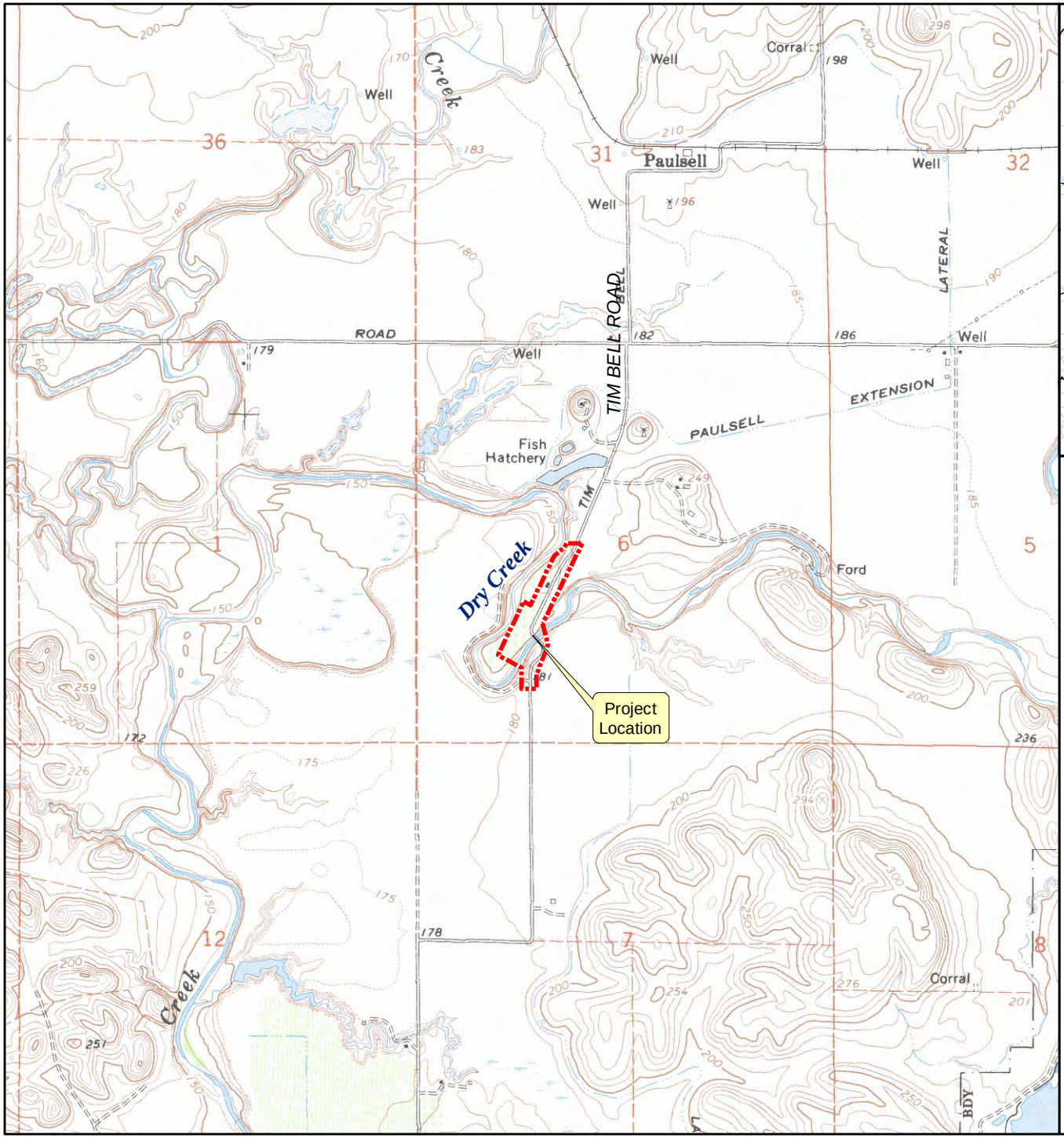
This Draft Environmental Impact Report (EIR) has been prepared according to CEQA (California Public Resources Code Section 21000 et seq.) and the State CEQA Guidelines (California Code of Regulations, Title 14, Chapter 3) to evaluate the potential environmental impacts associated with implementing the proposed Project.

CEQA requires public agencies to consider the potential adverse environmental impacts of projects under their consideration. Adverse environmental impacts include both direct impacts and reasonably foreseeable indirect impacts. A discretionary project that would have a significant adverse impact on the environment cannot be approved without the preparation of an EIR.

According to Section 15002 of the State CEQA Guidelines, the basic purposes of CEQA include the following.

- Inform government decision makers and the public about the potential significant environmental effects of proposed activities.
- Identify ways that environmental damage can be avoided or significantly reduced.
- Prevent significant, avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures when the governing agency finds the changes to be feasible.
- Disclose to the public the reasons why a governmental agency approved the project in the manner the agency chose if significant environmental effects are involved.

The County Board of Supervisors will review the Draft EIR to understand the Project's impacts before taking action. They will also consider other information and testimony that will arise during deliberations on the Project before making their decision.



Tim Bell Road Over
Dry Creek Bridge (38C-0073)
Replacement
Stanislaus County, CA
26 September 2017

Figure 1. Location Map

Project Location

2,000 1,000 0 2,000 Feet

N

Scale: 1 inch = 2,000 feet

USGS Quadrangle: Paulsell, CA (Photoinspected 1976)
o_sw0101.sid
7.5 Minute (C) Series, Albers Nad83 Mosaics (MrSID),
CASIL California USGS Digital Raster Graphics (DRG)

11094TimBellRdDryCkBridge_BAFig1LocationMap.mxd

Tim Bell Road over
Dry Creek Bridge (38C-0073)
Replacement
Stanislaus County, CA
26 September 2017

Biological Study Area (BSA)

Aerial Photograph: 20 June 2016
NAIP2016 USDA FSA Imagery
ESRI Imagery Basemap layer

Figure 2. Aerial Photograph

11094TimBellRdDryCkBridge_BAFig2AerialPhoto.mxd

1.3 Notice of Preparation

A Notice of Preparation of an EIR was prepared for the proposed Project and published for a 30-day public review and comment period beginning 24 October 2018 and ending 23 November 2018 and also between 1 February 2021 and 3 March 2021. The County held a public scoping meeting on 14 November 2018, at the Waterford Community Center (540 C Street, Waterford, CA) from 6:00 to 7:00 p.m. The scoping meeting included a presentation by County staff and consultants and was followed by a question and answer period. Comment cards were handed out to facilitate the receipt of written comments regarding the Project and the EIR.

A total of 13 members of the public were in attendance. Comments and questions received during 14 November 2018, comment cards, subsequent emails and letters are included in Appendix A. These comments were considered in preparing this Draft EIR.

1.4 Scope of the Environmental Impact Report

After review of all relevant comments received during the NOP comment period on environmental issues, the County determined that the following resource areas would be reviewed for potential environmental impacts.

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

1.5 Terminology Used to Describe Impacts

To assist the reader in understanding this EIR, terms used are defined as follows.

- *Project*: The whole of an action that has the potential for resulting in a physical change in the environment, directly or ultimately.
- *Environment*: Means the physical conditions that exist in the area and would be affected by a proposed project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of

historical or aesthetic significance. The environment includes both natural and human-made conditions.

- *Impacts* analyzed under CEQA must be related to a physical change. There are two types of possible impacts.
  - *Direct* or primary impacts that are caused by the proposed project and occur at the same time and place.
  - *Indirect* or secondary impacts that are caused by the proposed project and are later in time or farther removed in distance but still reasonably foreseeable, including growth-inducing impacts and other impacts related to induced changes in the pattern of land use, population density, or growth rate, and related impact on air and water and other natural systems, including ecosystems.
- *Significant impact on the environment*: A substantial, or potentially substantial, adverse change in any of the physical conditions in the area affected by the project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance. An economic or social change by itself is not considered a significant impact on the environment. A social or economic change related to a physical change may be considered in determining whether the physical change is significant.
- *Mitigation can include any or all of the following.*
  - *Avoiding the impact altogether by not taking a certain action or parts of an action.*
  - *Minimizing impacts by limiting the degree or magnitude of the action and its implementation.*
  - *Rectifying the impact by repairing, rehabilitating, or restoring the affected environment.*
  - *Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action.*
  - *Compensating for the impact by replacing or providing substitute resources or environments.*
- *Cumulative impacts*: Two or more individual impacts that, when considered together, are considerable or that compound or increase other environmental impacts. The individual impacts may be changes resulting from a single project or separate projects. The cumulative impact from several projects is the change in the environment that results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time.
- This EIR uses a variety of terms to describe the level of significance of adverse impacts. These terms are defined as follows.
  - *Less-than-significant impact:* An impact that is adverse but does not exceed the defined thresholds of significance. Less-than-significant impacts do not require mitigation.
  - *Potentially significant impact*: An environmental effect that may cause a substantial adverse change in the environment; however, additional information is needed regarding the extent of the impact to make the determination of significance. For CEQA purposes, a potentially significant impact is treated as if it were a significant impact.

- *Significant impact:* An impact that exceeds the defined thresholds of significance and would or could cause a substantial adverse change in the environment. Mitigation measures are recommended to eliminate the impact or reduce it to a less-than-significant level.
- *Significant and unavoidable impact:* An impact that exceeds the defined thresholds of significance and cannot be eliminated or reduced to a less-than-significant level through the implementation of mitigation measures.

1.6 Organization of the Environmental Impact Report

The EIR is organized in the following chapters.

- *Executive Summary* presents a brief summary of the Project; summarizes the impacts and mitigation measures; identifies areas of known controversy, including issues raised by agencies and the public; and identifies unresolved issues. The Executive Summary also summarizes the proposed Project's growth-inducing impacts, cumulative impacts, significant and unavoidable impacts, and significant irreversible impacts.
- Chapter 1, *Introduction*, explains the purpose of this EIR, defines terms used in the analysis, and discusses the environmental review process.
- Chapter 2, *Project Description*, describes the proposed Project, including the Project objectives, the proposed bridge and roadway design, methodologies for construction, and required project approvals.
- Chapter 3, *Impact Analysis*, presents the analysis of potential short-term, long-term, and cumulative impacts of the proposed Project for each environmental topic (e.g., aesthetics, air quality, noise). Each section is organized according to the following framework.
  - Existing Conditions
    - Regulatory Setting
    - Environmental Setting
  - Environmental Impacts
    - Methods of Analysis
    - Thresholds of Significance
  - Impacts and Mitigation Measures
- Chapter 4, *Effects Not Found to Be Significant* summarizes environmental issues that were determined not to be significant with implementation of the proposed Project. The reasons for the conclusion of non-significance are provided for each issue area.
- Chapter 5, *Alternatives*, presents alternatives to the proposed Project. As allowed by CEQA, the impacts of these alternatives are evaluated at a more general and comparative level than the analyses contained in Chapter 3 and Chapter 4. Chapter 5 also presents alternatives considered but rejected and not analyzed further.

Chapter 6, *Other CEQA Considerations*, presents the analysis of the proposed Project's growth-inducing impacts, a summary of cumulative impacts, and the identification of significant and irreversible, as well as significant and unavoidable, environmental changes.

Chapter 7, *List of Preparers*, lists the EIR authors, the technical specialists and members of the production team, and other key individuals who assisted in the preparation and review of this EIR.

1.7 Environmental Review Process

1.7.1 Draft Environmental Impact Report Public Review and Opportunity for Public Comment

Reviewers should focus on the sufficiency of the document in identifying and analyzing the possible impacts on the environment and ways in which the significant effects of the Project might be avoided or mitigated.

This Draft EIR is available for review and comment by the public, responsible agencies, organizations, and other interested parties for a 45-day period. Comments must be received either electronically or physically by 5 p.m. on the last day of the comment period. All comments or questions about the Draft EIR should be addressed to:

Stanislaus County, Department of Public Works
1716 Morgan Rd
Modesto, CA 95358
Attn: Denis Bazyuk
Email: Bazyukd@stancounty.com

The County will conduct a public meeting to present the conclusions of the Draft EIR and solicit comments on the document. The meeting will also provide agencies and the public with opportunities to clarify any questions or concerns about the Draft EIR. Public meeting information will be posted on the Stanislaus County website at http://www.stancounty.com/publicworks/projects.shtm.

1.7.2 Final Environmental Impact Report

After the close of the public review period for the Draft EIR, the County will prepare the Final EIR. The Final EIR will consist of the Draft EIR and the Final EIR and will include the comments received during the formal review period of the Draft EIR; responses to the comments received that relate to environmental issues; and any revisions made to the Draft EIR in response to the comments in errata format.

The Final EIR and accompanying Draft EIR will be available to the County Board of Supervisors for consideration during their decision-making process to approve or deny the Project. The County will hold a public hearing during a noticed Board of Supervisors meeting before certifying the Final EIR, during which the public and agencies can provide additional comments.

1.8 Intended Uses of the Environmental Impact Report

This Draft EIR examines the potential impacts of the proposed Project. The Final EIR will be considered by the County Board of Supervisors prior to taking their final action on the Project.

Chapter 2
Project Description

2.1 Project Background

The County proposes to replace the Tim Bell Road Bridge No. 38C-0073 over Dry Creek and construct the necessary approach roadway improvements to accommodate the new bridge. The proposed Project will address existing deficiencies to meet current American Association of State Highway and Transportation Officials (AASHTO) design guidelines and Stanislaus County standards.

2.2 Project Location and Existing Conditions

The Project is located in rural unincorporated eastern Stanislaus County along Tim Bell Road, 0.8 mile south of its intersection with Claribel Road, approximately 5.38 miles northeast of the City of Waterford and 14 miles southeast of the City of Oakdale. The Project is located on the Paulsell USGS Topographic Quad (T3S, R12E, Section 6, Mt. Diablo Base and Meridian) and is in the Upper Tuolumne Hydrologic Unit (Hydrologic Unit Code 18040009). Elevation in the in the Project area ranges from approximately 145 to 190 feet above sea level. Table 2-1 lists the Stanislaus County Assessor's Parcel Numbers (APNs) in the Project area.

Table 2-1. Assessor's Parcels in the Project Area

Assessor's Parcel Number (APN)	Parcel Area (acre)	County General Plan Designation	Zoning Designation	Current Land Use	Williamson Act Contract Status
008-001-038	20.20	Agriculture (AG)	Agriculture 40 Acre (A-2-40)	Fallow/ Residence	Active-1971-0510
008-001-036	40.36	Agriculture (AG)	Agriculture 40 Acre (A-2-40)	Active Orchard	Active-1971-0510
008-001-056	45.15	Agriculture (AG)	Agriculture 40 Acre (A-2-40)	Active Orchard	Active-1971-1150
008-001-055	49.06	Agriculture (AG)	Agriculture 40 Acre (A-2-40)	Active Orchard	Active-1971-1150

Tim Bell Road is classified as a two-lane minor collector in the Stanislaus County General Plan and Airport Land Use Compatibility Plan Update Draft Program EIR (Stanislaus County 2016). The existing Tim Bell Road Bridge over Dry Creek is 131-foot-long by 20-foot-wide. The Tim Bell Road Bridge was built in 1925. Note: The sign adjacent to the south end of the bridge states the bridge was constructed is 1915; the correct date is 1925. The bridge is located in a rural area with orchards and rangeland surrounding the bridge site. The bridge is primarily used by local farmers and ranchers along with bicyclists.

The bridge structure is a two lane, single span bridge with a reinforced concrete arch and abutments supported on concrete spread footings. The arch supports open spandrel wood members, wood joist,

and metal deck covered with asphalt concrete fill. The bridge is located at an oxbow of Dry Creek with a bluff to the south and floodplain to the north. To minimize bridge length, the existing bridge was constructed at a right angle to Dry Creek. The south bridge approach was cut into the bluff to minimize the slope of the bridge deck headed down into the floodplain. As the road alignment approaches the bridge from the south, the road curves to the right through an approximately 45-degree curve followed by an almost 90-degree curve to the left onto the bridge. Just past the north end of the bridge, the road curves another almost 90 degrees to the right. The alignment speed at the bridge and "s-curve" has been posted for 20 mph.

The bridge is eligible for listing in the National Register of Historic Places under Criteria C, as an unusual example of a hybrid timber-concrete bridge. In accordance with Section 15064.5(a)(2)-(3) of the CEQA Guidelines, using the criteria outlined in Section 5024.1 of the California Public Resources Code, Tim Bell Road Bridge is listed in the California Register of Historical Resources (CRHR). Most arched spandrel bridges in California are constructed out of concrete. The Tim Bell Bridge is unique because its vertical spandrels are made of wood. While the timbers, railing, and the deck have been replaced, the concrete arches are intact and the bridge retains a fair degree of integrity of design, materials, workmanship, feeling, and association. The metal deck was installed in 1979 to replace a wood deck.

The bridge has a sufficiency rating of 53.3 due to several deficiencies. The bridge deck geometry and approach roadway alignment do not meet American Association of State Highway and Transportation Officials (AASHTO) guidelines. The bridge deck width is 20 feet, which does not meet the minimum AASHTO width of 24 feet (travel way plus 2 feet on each side) for average daily traffic (ADT) below 400 vehicles. All wood spandrel caps, columns, bracing and sill plates are inadequate to support AASHTO permit truck loading. The concrete arch size is inadequate to support standard truck loading. The bridge wood barrier railing is composed of a single horizontal 4x6-inch rail, and 6x6-inch posts spaced at around 7 feet on center. The post is anchored to the joist with 2 5/8-inch diameter bolts. This barrier does not meet current AASHTO crash tested barrier capacity requirements. The existing top of the bridge deck is 168 feet elevation at the south abutment and 161 feet at the north abutment. AASHTO guidelines require the bridge soffit needs to clear the 100-year high water elevation and 50-year high water elevation plus 2 feet. The bridge profile does not clear the 100-year high water level of 168.5 feet. Wood spandrel bents are not adequate to resist seismic loading. The County and Caltrans Structural Headquarters Office evaluated the deficiencies and determined that bridge replacement was appropriate.

2.3 Related Projects

The following transportation related projects occur in the general vicinity of the Tim Bell Road Bridge Project site.

- **Crabtree Road:** The Crabtree Road Bridge (38C-0009) over Dry Creek Replacement Project is a federally funded project through the Federal Highway Administration (FHWA). The project is located in eastern Stanislaus County along Crabtree Road, 1.9 miles south of its intersection with Warnerville Road and approximately 13.6 miles southeast of the city of Oakdale. The Project is the replacement of an existing two-lane, single-span bridge. With a sufficiency rating of 26.7 in the 2018 bridge inspection report, the bridge is eligible for replacement. The proposed bridge will be 170 feet long and 27 feet wide, accommodating two 10-foot traffic lanes, 2-foot shoulders, and concrete traffic barriers. The bridge will be constructed of reinforced concrete and will clear span Dry Creek and the 100-year floodplain. The Crabtree Road Bridge is located approximately 5 air miles upstream of the Tim Bell Road crossing of Dry Creek.

- **North County Corridor State Route 108 East Route Adoption Project:** The California Department of Transportation (Caltrans), in cooperation with the North County Corridor (NCC) Transportation Expressway Authority (Authority), proposes to adopt a wide corridor from which a future freeway alignment will be chosen in which to build a replacement for the existing State Route 108. The project area lies in northern Stanislaus County. Within the project area, State Route 108 is a conventional highway that runs from its western end in downtown Modesto northward and then eastward until it meets and joins State Route 120 east of the city of Oakdale. The NCC is located approximately 6 air miles northwest of the Tim Bell Road crossing of Dry Creek.

2.4 Project Purpose

The Project purpose is to correct the existing deficiencies of the Tim Bell Road Bridge by replacing it with a new structure that meets the current Stanislaus County standards and the AASHTO guidelines by providing:

- Improved sight distance,
- Improved bridge deck geometry and approach roadway alignment removes the existing "s-curve",
- A safe design speed,
- An increased bridge deck width of 26 feet (two 11-foot travel lanes with two 2-foot shoulders)
- A bridge structure the allows AASHTO permit truck loads,
- A new bridge barrier system, and
- A bridge structure that passes the 100-year high water elevation and 50-year high water elevation plus 2 feet.

2.5 Funding

The proposed Project is included in the StanCOG 2019 Federal Transportation Improvement Program as project number 5938(189) with HBP-ID 3628 (StanCog 2018a). Appendix K (Project List) of the 2018 Regional Transportation Plan/Sustainable Communities Strategy includes the Tim Bell Road Bridge Replacement Project as project ID S78 (StanCog 2018a). Replacement of the existing bridge will be funded through the Highway Bridge Program (HBP) under the "Toll Credit" program where State covers match at no cost to the County for participating costs.

2.6 Bridge Type

The proposed Project is to replace the existing Tim Bell Road Bridge with a new, approximately 960-foot-longbridge that spans the 100-year floodplain. The bridge structure type will be a cast-in-place prestressed concrete box girder and slab bridge with arching soffit. Eleven multi-column bents will support the approximately 60-foot spans of the bridge structure over the floodplain. The columns will have a smaller diameter than the arch bents, or a rectangular shape to maintain an open feel. At Dry Creek, the bridge span will be approximately 160 feet long to clear span the ordinary high-water mark (OHWM) of the creek. The new, two-lane bridge will have a 26-foot clear deck width, which satisfies AASHTO guidelines. The deck width accommodates two 11-foot travel lanes and two 2-foot shoulders.

A California ST-30 guard rail will extend along the entire length of the bridge and road approaches on both sides of Tim Bell Road.

Bridge abutments will be seat type at both ends supported on 24-inch diameter cast-in drilled-hole (CIDH) concrete piles. Piles will be used to support the bridge foundation. The abutments for the new bridge will be placed above and outside the OHWM of Dry Creek. Depending on final design one or two new bridge bents may extend within and below the OHWM of Dry Creek. Rock Slope Protection (RSP) may be installed around the base of the two new bents closest to Dry Creek to address potential scour concerns. The RSP aprons at the base of the new bents may extend below the OHWM of Dry Creek.

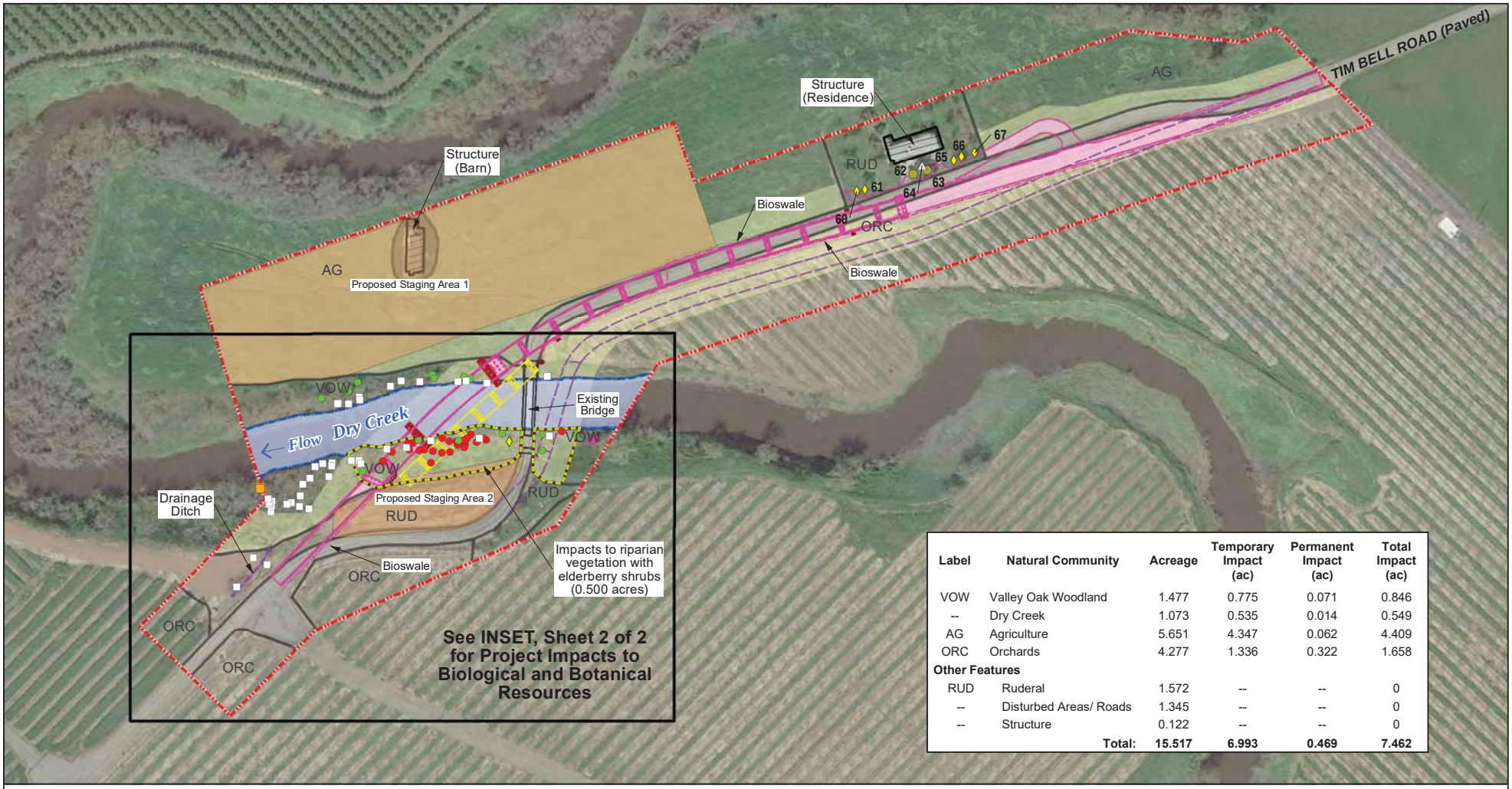
2.7 Roadway Alignment Improvements

The new bridge will be shifted downstream of the existing bridge to improve sight distance, remove the existing "s-curve", and provide for a safe design speed. The proposed alignment consists of an approximately 1,000 foot-radius horizontal curve over Dry Creek and an approximately 2,000 foot-radius horizontal curve at the northern conform location. Tim Bell Road will be shifted to the east slightly to minimize impacts to a private residence on the parcel (APN 008-001-036) west of Tim Bell Road.

In addition to the new bridge, the proposed Project includes approximately 920 feet of road improvements. Road improvements south of the bridge will be approximately 220 feet long to safely conform into the existing alignment. North of the new bridge, an approximately 700-foot-long road improvement will convey the road past the touchdown point above the floodplain. The approach road will be a 26-foot-wide paved surface with two 11-foot lanes with 2-foot shoulders at a 2 percent slope. The shoulder backing will be 4 feet wide. The road profile will match the existing road at both ends of the Project. From the south end of the Project, the road profile will follow the existing ground elevation until it reaches the top of the bluff above Dry Creek. From there, the bridge profile will start sloping down at approximately a 1.2 percent slope until the soffit of the bridge is 2 feet above the 50-year high water elevation and clears the 100-year high water elevation. The driveway to the residence on the property west of Tim Bell Road will be reconstructed.

2.8 Drainage

An approximately 245-foot long bioswale will be located on the east side of Tim Bell Road on the south side of the creek to the top of the bank above Dry Creek. From the end of the bridge to the top of the bank, the swale will be rock-lined to prevent erosion to the bluff. RSP will be placed at the end of the rock-lined swale. From the north side of the creek on the east side of Tim Bell Road, an approximately 1,265-foot-long bioswale will drain into Dry Creek. The bridge deck will drain into a catch basin with a vertical outlet. Erosion control aggregate will be placed at the outlet above the OHWM of Dry Creek. The swale will continue from the outlet for approximately 65 feet and will drain onto RSP placed on the top of the northern bank above Dry Creek. On the west side of Tim Bell Road north of the creek, a 330 foot-long drainage ditch will drain into a corrugated metal pipe under the driveway and have aggregate rock for erosion control at the outlet. From that outlet, a bioswale will continue another 700 feet before crossing underneath the bridge to merge with the bioswale on the east side of the bridge. See figure 2-1 for locations of drainage features.



Label	Natural Community	Acreage	Temporary Impact (ac)	Permanent Impact (ac)	Total Impact (ac)
VOW	Valley Oak Woodland	1.477	0.775	0.071	0.846
--	Dry Creek	1.073	0.535	0.014	0.549
AG	Agriculture	5.651	4.347	0.062	4.409
ORC	Orchards	4.277	1.336	0.322	1.658
Other Features					
RUD	Ruderal	1.572	--	--	0
--	Disturbed Areas/ Roads	1.345	--	--	0
--	Structure	0.122	--	--	0
	Total:	**15.517**	**6.993**	**0.469**	**7.462**

Tim Bell Road over
Dry Creek Bridge (38C-0073)
Replacement
Stanislaus County, CA
14 March 2018

Figure 3. Proposed Project Map
Sheet 1 of 2

- Biological Study Area (BSA)
- Dry Creek
- Drainage Ditch
- Structures
- Impacts to riparian vegetation with elderberry shrubs (0.500 acres)

- Valley oak
- Black walnut
- Gray pine
- Almond
- Fig
- Olive
- Sandbar willow
- Elderberry Shrub (EB)

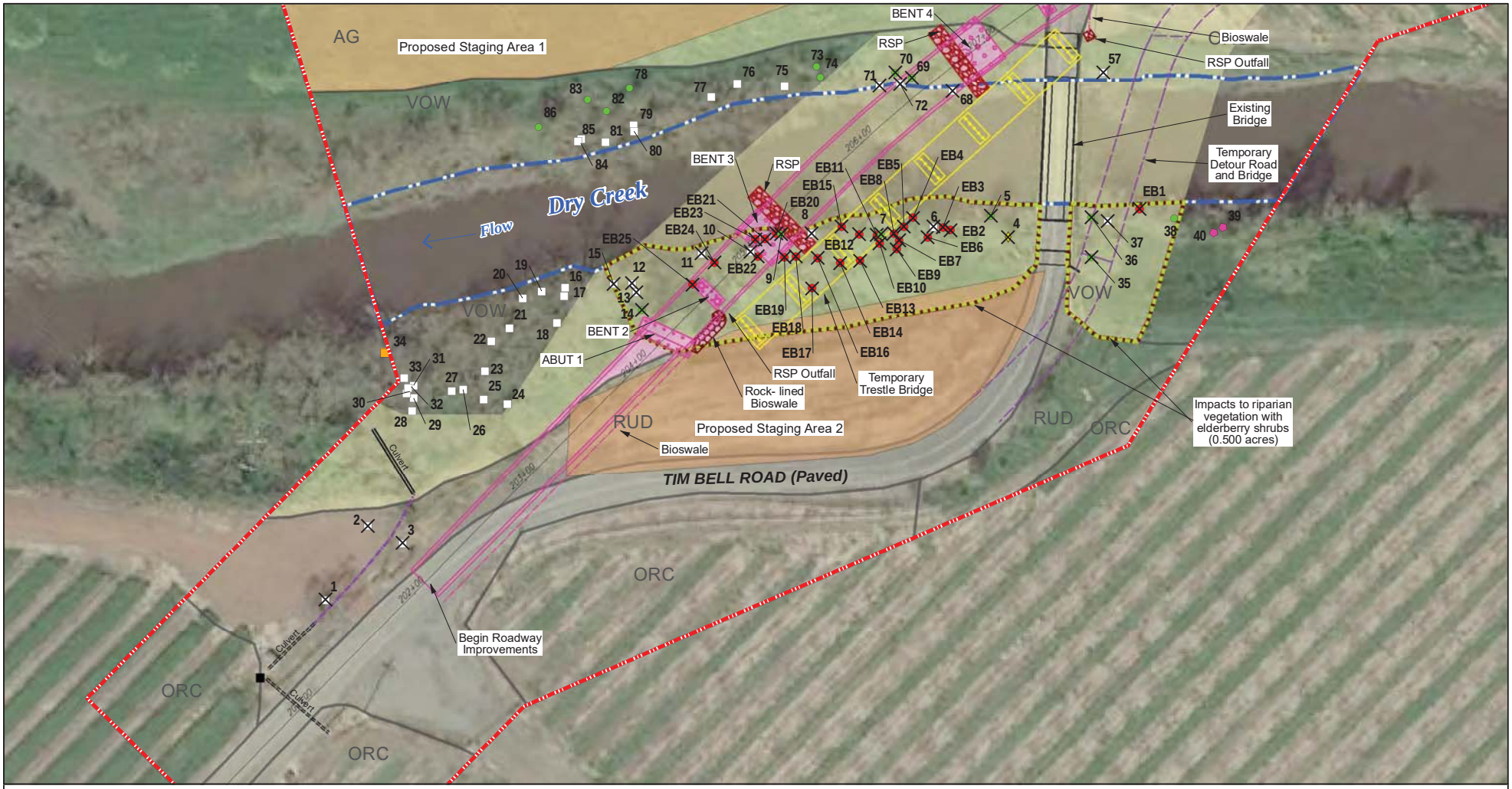
- Proposed Road and Bridge
- Temporary Trestle Bridge
- Temporary Road and Bridge
- Proposed Staging Area
- Permanent Impact
- Temporary Impact

150 75 0 150 Feet

Scale: 1 inch = 150 feet

Proposed Project: Tim Bell Road Over Dry Creek Bridge Replacement Project
35% Improvement Plans, CAD: Tim_Bell_Road_STRIP_BASE.dwg (Mar. 2017), FP-1_FNDN.dwg (May 2017)
and X-38C0073-Topo_C3D.dwg by HDR Inc, Engineering Company
Aerial Photograph: 14 March 2014
Google Earth Imagery

11094TimBellRdDryCkBridge_BAFig3ProjectMap_Sht1of2_v3.mxd



Tim Bell Road over
Dry Creek Bridge (38C-0073)
Replacement
Stanislaus County, CA
14 March 2018

Figure 3. Proposed Project Map
Sheet 2 of 2, INSET

- Biological Study Area (BSA)
- Dry Creek
- Drainage Ditch
- Impacts to riparian vegetation with elderberry shrubs (0.500 acres)
- Valley oak
- Black walnut
- Almond
- Fig
- Sandbar willow
- Elderberry Shrub (EB)
- Indicates Tree or Shrub to be Removed
- Proposed Road and Bridge
- Temporary Trestle Bridge
- Temporary Road and Bridge
- Proposed Staging Area

60 30 0 60 Feet

Scale: 1 inch = 60 feet

Proposed Project: Tim Bell Road Over Dry Creek Bridge Replacement Project
35% Improvement Plans, CAD: Tim_Bell_Road_STRIP_BASE.dwg (Mar. 2017), FP-1_FNDN.dwg (May 2017)
and X-38C0073-Topo_C3D.dwg by HDR Inc, Engineering Company
Aerial Photograph: 14 March 2014
Google Earth Imagery

11094TimBellRdDryCkBridge_BAFig3ProjectMap_Sht2of2_v3.mxd

2.9 General Construction Details

Construction will require a temporary work trestle spanning Dry Creek on the east side of the new bridge. A temporary trestle, supported on pile bents at 30 foot spacing with 5 piles per bent, was evaluated. The temporary piles would be installed with a vibratory hammer. The trestle will allow access to foundations on the south bluff. The new bridge will be constructed using falsework. Falsework in the channel will be supported on the temporary trestle. Shoring on the bluff with sheet piles or equivalent during construction is anticipated. Vertical falsework will be installed underneath and parallel to the new bridge to support forms for pouring concrete.

Removal of the existing bridge foundations and construction of the new bridge foundations will involve work in the creek channel. Construction of the new bridge will require excavation into rock, likely below groundwater. The bottoms 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.

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.

Once the new bridge is open for traffic, the existing bridge will be removed. Best management practices will be implemented during construction to prevent concrete or other materials from entering Dry Creek.

Disturbed areas will be revegetated/ restored to the extent possible in accordance with the Revegetation Planting and Erosion Control Specifications and Oak Woodland Management Plan included as Appendices F and G of the Project Natural Environment Study (NES) approved 13 October 2017 (Sycamore Environmental 2017).

2.10 Traffic Management During Construction

Tim Bell Road in the Project area will be closed to through traffic during construction. A detour will be provided for adjacent local residents. The existing bridge will remain in place during construction and be used as a detour for local residents and emergency service responders. The local detour will cross under the new bridge and falsework. This local detour alignment minimizes impacts to an existing active walnut orchard and Dry Creek compared to a detour alignment that remained on the east side of Tim Bell Road. A traffic management plan will be prepared to alleviate and minimize construction related traffic delays and provide direction on how to minimize effects on access, including emergency service responders.

2.11 Right of Way and Temporary Easements

Permanent right of way acquisition will be required from adjacent privately-owned parcels on both sides of Tim Bell Road north and south of the existing bridge (Table 2-2). Temporary Construction Easements will also be required for Project constructions.

Table 2-2. Preliminary Permanent ROW Needs

Stanislaus County Assessor's Parcel Number (APN)	Parcel Size (acre)	General Description	Zoning Designation[1]	Approximate Permanent ROW Needed (Acres)
008-001-036	20.2	Agriculture	A-2-40 (General Agriculture, 40 acre minimum)	0.44
008-001-038	40.36	Agriculture	A-2-40 (General Agriculture, 40 acre minimum)	0.15
008-001-055	45.15	Agriculture	A-2-40 (General Agriculture, 40 acre minimum)	0.00
008-001-056	49.06	Agriculture	A-2-40 (General Agriculture, 40 acre minimum)	0.76

2.12 Construction Equipment and Staging

General construction equipment expected to be used includes, haul trucks, dump trucks, backhoes, bulldozers, scrapers, excavators, water trucks, concrete delivery trucks and extensive pumping systems, high- and low-level cranes, and service vehicles. Installation of temporary falsework and temporary trestle will use a vibratory hammer for installation on temporary piles or sheet piles.

Construction staging for the Project is anticipated to occur on a currently fallow portion of APN 008-001-036 located immediately north and west of the existing road and bridge.

2.13 Utility Relocations

There are overhead utility lines on the east side of Tim Bell Road south of the existing bridge that cross the road at the northern "s-curve", and continue up the west side of the road to the north end of the project area. Existing telecommunication lines (copper/ fiber optic) are underground south of the existing bridge, then run through conduit attached to the downstream side of the bridge deck. North of the bridge, the telecommunication lines are underground on the west side of Tim Bell Road. These utilities will require relocation due to construction. Relocation of overhead utility lines may require the County, utility provider, or their contractors to trim or remove trees prior to construction.

2.14 Construction Schedule

Construction of the new bridge is anticipated to take two construction seasons to complete. Work is planned to begin in 2022 and be completed in 2023. Relocation of utility lines may require the County,

utility provider, or their contractors to trim or remove trees prior to construction. In-water construction activities will be restricted to the period between 1 June and the first qualifying rain event on or after 31 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. The falsework and trestle will be left in place for approximately one year during construction of the new bridge.

2.15 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 any 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;
- Contract special provisions will require compliance with San Joaquin Valley Air Pollution Control District (SJVAPCD) Regulation VIII 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 that in the event unanticipated historical, archeological (including structural features, unusual amounts of bone or shell, artifacts, human remains, or architectural remains) or paleontological resources are encountered during construction, all earthmoving activity shall cease within 60 feet of the find until the County retains the services of a qualified archaeologist and/or paleontologist. Any and all potential archaeological or paleontological resources discovered during construction will be examined by a qualified archaeologist or paleontologist, respectively, who will examine the findings, assess their significance, and offer recommendations for procedures deemed appropriate to either further investigate or mitigate adverse impacts on those archaeological or paleontological resources that have been encountered (e.g., excavate the significant resource).
- Contract provisions will require implementation of BMPs consistent with the Caltrans Stormwater Quality Handbooks and or the California Stormwater Quality Association (CASQA) BMP Handbook 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 will implement Caltrans Standard Specification 14-8.02, "Noise Control".

2.16 Required Approvals

In addition to CEQA compliance, implementation of the proposed Project would require compliance and the issuance of other approvals listed below.

- Caltrans — National Environmental Policy Act (NEPA) Categorical Exclusion
- Corps of Engineers (USACE) Section 404 Clean Water Act Nationwide Permit
- Central Valley Regional Water Quality Control Board (RWQCB) Section 401 Water Quality Certification. Per 40 CFR 121.4(a) "*At least 30 days prior to submitting a certification request, the project proponent shall request a pre-filing meeting with the certifying authority.*" This public circulation draft CEQA document serves as the required 40 CFR Part 121.4(a) '*pre-filing meeting request'* to the RWCQB*.*
- Central Valley Regional Water Quality Control Board — Section 402 NPDES Construction General Permit coverage
- California Department of Fish and Wildlife (CDFW) Section 1600 Streambed Alteration Agreement

2.17 References

Stanislaus County. April 2016. Stanislaus County General Plan and Airport Land Use Compatibility Plan Update Draft Program EIR.

Sycamore Environmental Consultants. Approved 13 October 2017. Natural Environment Study, Tim Bell Road over Dry Creek Bridge (38C-0073) Replacement Project, Stanislaus County, CA. Federal Aid Number: BRLO 5938 (189). Prepared for: Stanislaus County Public Works Department

Stanislaus Council of Governments (StanCog). 15 August 2018 (2018a). Regional transportation plan/sustainable communities strategy (RTP/ SCS). Adopted per resolution 18-03.

Stanislaus Council of Governments (StanCog). 15 August 2018 (2018b). 2019 Federal Transportation Improvement Program, Federal Fiscal Years 2018/19—2021/22. Adopted per resolution 18-05.

Chapter 3
Impact Analysis

This chapter contains an evaluation of the environmental impacts of the proposed Project for compliance with CEQA. The following sections examine the temporary, permanent, direct, and indirect effects on the physical environment.

Resources Considered in the Environmental Impact Report

Based on the Project description and the County's understanding of the environmental issues associated with the Project, the following topics are analyzed in detail in Chapter 3 of this document.

- Aesthetics
- Agricultural and Forestry Resources
- Biological Resources
- Cultural Resources
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Noise

Pursuant to CEQA Guidelines Section 15065(a), the Mandatory Findings of Significance were considered in the selection of the above resource topics and discussions are subsumed within each of the above applicable sections.

Effects Not Found to Be Significant

Section 15128 of the California Environmental Quality Act (CEQA) Guidelines requires that an EIR briefly describe why various environmental effects were determined not to be significant and therefore were not discussed in detail in the EIR. The **Effects Not Found to Be Significant** chapter of this EIR summarizes environmental issues (listed below) that were determined not to be significant with implementation of the proposed Project. The reasons for the conclusion of non-significance are provided for each issue area in Chapter 4.

- Air Quality
- Tribal Cultural Resources
- Energy
- Geology and Soils
- Greenhouse Gas Emissions
- Land Use and Planning
- Minerals Resources
- Population and Housing

- Public Services
- Recreation
- Transportation
- Utilities/ Service Systems
- Wildfire

Terminology

For each resource topic listed in section 3.1 above, the EIR presents following information.

- **Existing Conditions**
  - **Regulatory Setting**—Pertinent federal, state, and local policies, regulations, and standards are described.
  - **Environmental Setting**—Existing site and study area conditions are described.
- **Environmental Impacts**
  - **Methods for Analysis**—describes the technical methodology for impact assessment. If models were used to assess impacts, they are described in this section, as are other technical tools.
  - **Thresholds of Significance**—presents the thresholds used to determine the significance of the impacts. The significance conclusions that can be noted at the end of each impact discussion are defined below.
    - **No Impact:** This level of significance is used for impacts where it was clear at the outset that there would be no impact on a particular resource topic under any of the alternatives.
    - **Less than Significant:** This level of significance is used for impacts where there would be an impact, but the degree of the impact would not meet or exceed the identified thresholds.
    - **Less than Significant with Mitigation:** This level of significance is used for impacts that would meet or exceed the identified thresholds, but implementing mitigation measures would reduce such impacts to less-than-significant levels.
    - **Significant and Unavoidable:** This level of significance is used for significant impacts where mitigation is not available or feasible to reduce the significant impact to a less-than-significant level.
  - **Impacts and Mitigation Measures**—describes the effects of the proposed Project. For each identified significant or potentially significant impact, mitigation measures are identified. As stated above, where mitigation is not available or feasible to reduce the impact to a less-than-significant level, the impact is identified as significant and unavoidable.

CEQA requires that each public agency mitigate or avoid the significant impacts of any project it approves or implements (State CEQA Guidelines Section 15126.4). State CEQA Guidelines Section 15370 defines mitigation as follows.

- Avoiding the impact altogether by not taking a certain action or part of an action.

- Minimizing the impact by limiting the degree or magnitude of the action and its implementation.
- Rectifying the impact by repairing, rehabilitating, or restoring the affected environment.
- Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action.
- Compensating for the impact by replacing or providing substitute resources or improvements to the environment.

This EIR recommends feasible mitigation measures consistent with State CEQA Guidelines to reduce impacts of the proposed Project.

Topics required by CEQA in addition to the resource topics addressed in Chapters 3 and 4 are addressed in Chapter 5(*Alternatives Analysis)*, and Chapter 6, *Other CEQA Considerations*. Chapter 5 examines a range of feasible alternatives to the Project, including no project, which would reduce one or more of its potential environmental impacts. Chapter 6 includes the following additional topics.

- Cumulative Impacts
- Growth-Inducing Impacts
- Significant and Unavoidable Impacts
- Significant Irreversible Environmental Changes
- Mitigation Measures with the Potential for Environmental Effects Under CEQA

3.1 Aesthetics

This section describes concepts and terminology used to describe and evaluate aesthetics/visual resources and existing conditions related to aesthetics or visual resources and analyzes potential impacts that could result from implementation of the proposed Project. This section is based on the Minor Level Visual Impact Assessment (VIA) prepared for the Project and approved by Caltrans in April 2020 (HDR 2019).

3.1.1 Existing Conditions

3.1.1.1 Regulatory Setting

Federal

National Environmental Policy Act (NEPA): The NEPA is a federal law administered by the Environmental Protection Agency (EPA) that requires federal agencies to consider environmental values in the decision- making process. The federal agencies must consider environmental impacts and consequences of proposed actions and reasonable alternatives that could potentially reduce impacts. There are no federal aesthetics permits or regulations applicable to the proposed Project.

State

California Scenic Highway Program: California's Scenic Highway Program was created by the Legislature in 1963. Its purpose is to preserve and protect scenic highway corridors from change which would diminish the aesthetic value of lands adjacent to highways. The state laws governing the Scenic Highway Program are found in the Streets and Highway Code, Section 260 et seq. Per the Streets and Highway Code, Section 260 et seq the stated intent of the California Scenic Highway Program is to protect and enhance California's natural beauty and to protect the social and economic values provided by the State's scenic resources.

California Environmental Quality Act (CEQA): CEQA establishes the policy of the state to take all action necessary to provide the people of the state "with…enjoyment of aesthetic, natural, scenic and historic environmental qualities" (California PRC Section 21001[b]).

Local

Stanislaus County General Plan

Land Use Element: The Land Use Element contains policies that require development plan review in order to minimize land use conflict. This requirement indirectly protects aesthetic resources by ensuring visual compatibility between land uses (e.g., Goals Two and Five). There are also policies that require county-wide voter approval prior to allowing open space and agricultural land uses to be rezoned to residential uses (Goal Six). This limits the potential for changes that would have aesthetic impacts. Many land use policies pertain indirectly to aesthetic resources, such as protecting riparian habitat and preserving and encouraging enhancement of existing communities. However, the following directly pertains to aesthetic resources within the County.

- **Goal One:** Provide for diverse land use needs by designating patterns which are responsive to the physical characteristics of the land as well as to environmental, economic and social concerns of the residents of Stanislaus County.
    - **Policy Two:** Land designated Agriculture shall be restricted to uses that are compatible with agricultural practices, including natural resources management, open space, outdoor recreation and enjoyment of scenic beauty.
    - **Implementation Measure 1:** Agricultural areas should generally be zoned for 40- to 160-acre minimum parcel sizes. Exceptions include land in a ranchette area so identified because of significant existing parcelization of property, poor soils, location, and other factors which limit the agricultural productivity of the area.

Conservation/Open Space Element: The Conservation/Open Space Element contains many goals and policies that indirectly protect aesthetic resources, such as preserving natural resources in parks and open spaces, ensuring zoning regulations pertaining to development ensure compatibility with natural areas, restricting development in sensitive habitat areas, protecting and enhancing oak woodlands, preserving water quality, improving air quality, conserving agricultural lands, and preserving historical sites. In addition, there are policies and measures that promote increased visual access and aesthetic enjoyment through the creation of parks and trail systems.

- **Goal One**: Encourage the protection and preservation of natural and scenic areas throughout the County.
    - **Policy One:** Maintain the natural environment in areas dedicated as parks and open space.
    - **Policy Two:** Assure compatibility between natural areas and development.
    - **Policy Three:** Areas of sensitive wildlife habitat and plant life (for example, vernal pools, riparian habitats, flyways, and other waterfowl habitats), including those habitats and plant species listed in the General Plan Support Document or by state or federal agencies, shall be protected from development and/or disturbance.

3.1.1.2 Environmental Setting

Information pertaining to the environmental setting was taken primarily from the Minor Level Visual Impact Assessment (HDR 2019). Setting information provides the context for determining the type of changes that would occur to the existing visual environment. The project setting is also referred to as the corridor or project corridor, which is defined as the area of land that is visible from, adjacent to, and outside the project limits, and is determined by topography, vegetation, and viewing distance.

The Project is located in the San Joaquin Valley Subregion of California's Great Central Valley. The landscape is characterized by dry grassland covering rolling terrain, bisected by Dry Creek and its riparian woodlands. The grasslands mostly support ranching except where irrigated orchards have been planted in rows. The land use within the corridor and its vicinity is primarily agricultural with some residential development occurring along roadways. The rolling terrain and the vegetation, particularly the trees planted as orchards, would limit views of the new bridge and re-aligned roadway to those viewing the new facilities in close proximity.

The Project is not located on a highway or route that is designated or eligible for designation as a scenic highway (Caltrans 2020). The County has not designated any scenic corridors of vistas (Stanislaus County 2016 a & b).

3.1.2 Environmental Impacts

3.1.2.1 Methods of Analysis

Analysis of the visual effects of the Project are based on the following.

- The Project VIA (HDR 2019)
- Review of the project description and proposed land uses and zoning
- Review of the Project in regard to compliance with state and local ordinances and regulations.

The VIA generally follows the guidance outlined in the publication Visual Impact Assessment for Highway Projects published by the Federal Highway Administration (FHWA 1981).

To review visual context of the project area and assess the potential change to visual resources, a key observation point (KOP) was identified immediately adjacent to APN 008-001-036 on the existing Tim Bell Road alignment. Once the KOP was identified, photos of the existing condition were recorded. To illustrate project changes, a 3-dimensional computer model was created, complete with texture and color. This model was rendered from the same camera view point as where the corresponding existing condition photo was taken. The modeled Project was superimposed on the existing conditions to show the before and after effects.

3.1.2.2 Thresholds of Significance

In accordance with Appendix G of the State CEQA Guidelines the following thresholds were used for the proposed Project.

Except as provided in Public Resources Code Section 21099 would the project

- Have a substantial adverse effect on a scenic vista.
- Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway.
- In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?
- Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

3.1.2.3 Impacts and Mitigation Measures

Impact AES-1: Have a substantial adverse effect on a scenic vista (less than significant)

The term vista generally implies an expansive view, usually from an elevated point or open area. A scenic vista is a view that possesses visual and aesthetic qualities of high value to the community. Scenic

vistas can provide views of natural features or significant structures and buildings. Tim Bell Road is not part of a scenic route, the adjacent landscape is not protected by local ordinances, and is not considered uniquely scenic (HDR 2019). The County has not designated any scenic corridors of vistas (Stanislaus County 2016 a & b). See also Impact AES-3 for discussion.

Impact AES-2: Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway. (no impact)

Tim Bell Road is not a state designated scenic highway by the Caltrans California Scenic Highway Mapping System (2020). The County has not designated any scenic corridors of vistas (Stanislaus County 2016 a & b).

Impact AES-3: In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality? (less than significant with mitigation)

Visual resources of the project setting are defined and identified below by assessing visual character and visual quality in the project corridor. Resource change is assessed by evaluating the visual character and the visual quality of the visual resources that comprise the project corridor before and after the construction of the proposed Project.

Visual Resources and Resource Change: The utilitarian visual character of the proposed Project would be compatible with the utilitarian nature of the adjacent agricultural landscape. The proposed alignment would arc across the existing setting which is composed of three distinct landscapes:

- an expansive grassland spreading across amorphic rolling hills or flat floodplains, creating a tonal patchwork of brownish hues except in winter when it becomes a green patchwork. It is used primarily for ranching;
- a similarly rolling terrain or flat floodplain dominated by orchards with orderly rows of trees. Trees appear as evenly-spaced, roughly textured, punctuated green dots on a typically brownish field.
- a meandering creek bounded by steep embankments eroding or covered by a rough-textured, disorderly jumble of mostly deciduous broadleaf trees and shrubs with some occasional smaller evergreen trees and shrubs.

The visual quality of the existing corridor would not be altered by the proposed Project. Since the component attributes of the existing landscape would be unchanged and undamaged, the vividness (or memorability), of the corridor would not change. The intactness (or freedom from visual intrusion) of the existing landscape would only be slightly altered by the new higher profile of the road being structurally supported where previously it occurred at-grade. The new bridge would intrude on the landscape and form a visual barrier separating one side of the road from the other side. However, the location of the structure would be placed along an existing division between land used primarily for orchards and land currently used primarily for pasture/ row crops, emphasizing existing landscape patterns rather than creating new ones. Consequently, the unity of the landscape, the degree to which it forms a coherent and harmonious visual pattern would be unchanged.

During construction, the placement of a temporary bridge upstream from the existing structure would increase the dominance of transportation facilities within the landscape, as the temporary bridge would be necessary while the new bridge is being constructed. While a temporary condition, the impact is lessened by the inability of most viewers to see all three bridges simultaneously. Nonetheless, resource change would be higher during construction than after construction.

The primary lasting change in visual resources would be the replacement of an historic bridge with a new structure in a slightly different location, the re-alignment of the approach roadways, and the raised elevation of the road's profile. Materials would also change. Reinforced concrete would replace the combination of concrete, steel, and wood used of the existing bridge's substructure and the majority of its superstructure. The existing wooden bridge railing would be replaced with an approved metal or concrete railing. The proposed Project replaces the original arched spandrel structure with an arched box girder structure. The proposed new bridge would span Dry Creek a similar distance, 160 feet, avoiding placing piers in the water. Consequently, replacing the bridge over the creek, by itself, generates only a low change in visual resources. However, by extending the length of the bridge to cross the floodplain north of Dry Creek, the form of the new bridge would be longer and higher than the structure it is replacing.

The change in the road's geometrics is the most dramatic visual change in the corridor. The alignment over Dry Creek would no longer form an "s-curve". The existing bridge is set perpendicular to the direction of the creek's flow, with the approach roadways curving into it from opposite directions. The alignment of the new roadway, including the section on structure, would appear as a single continuous arc. The current abrupt turns would be replaced by a gentle, 1,000-foot radius arc. The profile also would dramatically change. It would no longer cut into the southern embankment. Rather, it would cross the creek at the top of the southern embankment. North of the creek, it would be supported by piers over the floodplain for an additional 700 feet before reconnecting with the existing roadway outside of the 100-year floodplain.

This lengthening of the bridge visibly identifies the width of the floodplain and illustrates the need to raise the road's profile out of the 100-year floodplain. It also increases the dominance of the roadway when viewed from adjacent properties while providing more expansive views of the countryside for roadway users (also known as travelers). These changes in alignment and profile caused by the extension of the bridge across the floodplain would usually generate moderate-high changes to visual resources. However, most of the extended bridge is located on the same alignment as the existing roadway, lowering the change to visual resources to a moderate level.

Changes to visual resources as measured by changes in visual character and visual quality would be low. Although the realignment of the roadway and the new location of the creek crossing would involve replacing existing agricultural land with a transportation facility, it would also remove the existing transportation facility. The new bridge over Dry Creek replaces the existing bridge which would leave almost the same transportation footprint impacting the natural creek. Consequently, the quantity and ratio of land devoted to agriculture, transportation, and the natural waterway would remain essentially the same. With the area devoted to transportation remaining constant and no change in the dimensions of the natural waterway, agricultural uses would remain the dominant land use and landscape diversity would not be altered. The visual dominance of the bridge as it crosses the floodplain would increase due primarily to its increased elevation, creating a minor change in visual resources.

Viewers and Viewer Response: *Neighbors* (people with views *to* the road) and *travelers* (people with views *from* the road) would, in general, only be slightly affected by the proposed Project. There is almost no potential for a neighbor to view the new facility from a publicly accessible location. Even the skewed view

of the new structure from the maintenance access road shown in Figures 3-1 and 3-2 is limited to maintenance personnel and the handful of people who would be accessing the driveway to a single residence adjacent to the proposed facility.

Figure 3-1 illustrates before and after views looking northeast from KOP 1 on existing Tim Bell Road. On the north side of Dry Creek, portions of the new alignment are slightly to the east of existing Tim Bell Road. The existing road would become a driveway for an adjacent neighbor. The new alignment would be elevated an structure with the approach road on fill contained by a retaining wall. The retaining wall would be cast-in-place concrete using a formliner and stained to simulate stonework found in the area. A see- through railing would allow travelers views of the countryside.

Figure 3-2 illustrate before and after views looking southwest from KOP 1 on existing Tim Bell Road. On the north side of Dry Creek, the new alignment is elevated above the ground plain. Evenly spaced piers allow views under the roadway. To provide consistent architectural treatment, the piers would also be constructed using the same simulated rock formliner used on the nearby retaining walls. A see-through railing would continue, allowing travelers views of the countryside.

Figure 3-1: Simulation Set 1, KOP 1, view looking northeast.

Figure 3-2: Simulation Set 1, KOP 1, view looking southwest.

Although the sensitivity of neighbors would be high, the number of neighbors adversely impacted would be low. Consequently, the response by neighbors to the proposed Project's visual impacts would be low.

For travelers with views from the new roadway itself, exposure would be greater than it would be for neighbors. However, the number of travelers is projected to be only a few hundred vehicles per day. Most travelers would also be traveling the route frequently, perhaps several times a week if not a couple of times a day, making the trip routine.

Although their views would be familiar and of a short duration, the increased elevation provided by the bridge across the floodplain, may, by expanding the range of their views, provoke a higher level of interest for travelers than they currently have traveling on the existing roadway. For tourists not familiar with the area, the more comprehensive view may increase interest in the surrounding landscape. The number of tourists, however, is low. The road is not part of a scenic route, the adjacent landscape is not protected by local aesthetic or scenic resource ordinances, and is not considered uniquely scenic. Consequently, although viewer exposure may be slightly higher for travelers than it is for neighbors, viewer sensitivity for travelers would be lower.

Visual Impact: Visual impacts are determined by assessing changes to the visual resources and predicting viewer response to those changes. The proposed Project would generate only minor changes to visual resources. An existing roadway's alignment would be changed; an existing bridge would be relocated, lengthened, and elevated; existing agricultural land would remain essentially intact, and the functioning of the existing natural waterway would actually be improved, especially during floods. Consequently, change to visual resources would be low to moderate. Viewer exposure (the number of people viewing) and viewer sensitivity (their concern about visual change) from public locations is low. Consequently, the viewer response to these changes would also be low. Therefore, visual impacts are low-moderate.

The relocation and reconstruction of the Tim Bell Road Bridge over Dry Creek would not dramatically alter the visual character of the agricultural landscape and the roadway corridor. It would generate low changes to visual character of Dry Creek and moderate changes to the visual character of the floodplain. Viewer exposure and viewer sensitivity, for both neighbors and travelers would be low. Elevating the proposed roadway above the 100-year floodplain would serve as evacuation route for the community and would minimize floodplain encroachment, the elevated roadway would also be beneficial to travelers by providing them with a view of the geographical context of Dry Creek, the surrounding terrain, and the land use patterns of Stanislaus County. Consequently, adverse visual impacts caused by Tim Bell Bridge Replacement Project would be low. Implementation of Measure AES-1 along with the revegetation components of mitigation measures BIO-1, BIO-7, and BIO-8 will reduce potential impact to less than significant.

Measure AES-1: Visual Impact Measures

- To the extent practicable the final design will space bridge piers uniformly to reflect the orderliness of the adjacent orchards.
- To the extent practicable the final design will use see-through railings to allow travelers views of the surrounding countryside, providing them with a better understanding of the geographical context of Dry Creek, the surrounding terrain, and land use patterns.

- To the extent practicable the final design will include the use of a formliner that mimics local stone construction for the retaining wall, bridge abutments, and piers to better integrate the structure with the adjacent landscape.
- To the extent practicable the final design will include the use local rock mulch for erosion control where plants would be ineffective or difficult to establish or maintain.

Impact AES-4: Creation of a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area (no impact).

The proposed Project design does not include the installation of lighting.

3.1.3 References

HDR, Inc. April 2019 (approved by Caltrans 21 April 2020). Minor Level Visual Impact Assessment, Tim Bell Road over Dry Creek Bridge Replacement Project.

California Department of Transportation. Accessed: March 2020. California Scenic Highway Mapping System. Officially Designated State and Scenic Highways and Historic Parkways spreadsheet. https://dot.ca.gov/-/media/dot-media/programs/design/documents/desig-and-eligible-aug2019_a11y.xlsx

Stanislaus County. Adopted 23 August 2016 (2016a). Stanislaus County general plan 2015.

Stanislaus County. April 2016 (2016b). Stanislaus County General Plan and Airport Land Use Compatibility Plan Update Draft Program EIR.

Federal Highway Administration (FHWA). 1981. Visual Impact Assessment for Highway Projects.

3.2 Agricultural and Forestry Resources

This section describes the regulatory and environmental setting and identifies potential impacts to agricultural and forestry resources.

3.2.1 Existing Conditions

3.2.1.1 Regulatory Setting

Federal

The Farmland Protection Policy Act (FPPA, 7 United States Code [USC] 4201-4209; and its regulations, 7 Code of Federal Regulations [CFR] Part 658, Farmland Protection Policy Act) require federal agencies, such as the Federal Highway Administration (FHWA), to coordinate with the Natural Resources Conservation Service (NRCS) if their activities may irreversibly convert farmland (directly or indirectly) to nonagricultural use. For purposes of the FPPA, farmland includes prime farmland, unique farmland, and land of statewide or local importance.

State

California Farmland Mapping and Monitoring Program

The Farmland Mapping and Monitoring Program (FMMP is a non-regulatory program of the California Department of Conservation (DOC) that inventories the state's important farmlands and tracks the conversion of farmland to other land uses. The FMMP publishes reports of mapped farmland and conversions every two years. The FMMP categorizes farmland on the basis of its soil quality, the availability of irrigation water, current use, and slope, among other criteria. Land use categories identified in the FMMP are described below.

- **Prime Farmland**. Farmland with the best combination of physical and chemical features able to sustain long-term agricultural production. This land has the soil quality, growing season, and moisture supply needed to produce sustained high yields. Land must have been used for irrigated agricultural production at some time during the four years prior to the mapping date.
- **Farmland of Statewide Importance**. Farmland similar to Prime Farmland but with minor shortcomings, such as greater slopes or less ability to store soil moisture. Land must have been used for irrigated agricultural production at some time during the four years prior to the mapping date.
- **Unique Farmland**. Farmland of lesser quality soils used for the production of the state's leading agricultural crops. This land is usually irrigated, but may include nonirrigated orchards or vineyards as found in some climatic zones in California. Land must have been cropped at some time during the four years prior to the mapping date.
- **Farmland of Local Importance**. Land of importance to the local agricultural economy as determined by each county's board of supervisors and a local advisory committee.
- **Grazing Land**. Land on which the existing vegetation is suited to the grazing of livestock. This category was developed in cooperation with the California Cattlemen's Association, University of California Cooperative Extension, and other groups interested in the extent of grazing activities.

- **Urban and Built-Up Land**. Land occupied by structures with a building density of at least one unit to 1.5 acres, or approximately six structures to a 10-acre parcel. Common examples include residential, industrial, commercial, institutional facilities, cemeteries, airports, golf courses, sanitary landfills, sewage treatment, and water control structures.
- **Other Land**. Land not included in any other mapping category. Common examples include low-density rural developments, brush, timber, wetland, and riparian areas not suitable for livestock grazing, confined livestock, poultry, or aquaculture facilities, strip mines, borrow pits, and water bodies smaller than 40 acres. Vacant and nonagricultural land surrounded on all sides by urban development and greater than 40 acres is mapped as Other Land.

California Land Conservation Act of 1965 (Williamson Act) and Farmland Security Zone Act

The California Land Conservation Act of 1965, commonly referred to as the Williamson Act, enables local governments to enter into contracts with private landowners for the purpose of restricting specific parcels of land to agricultural or related open space use. In return, landowners receive property tax assessments which are much lower than normal because they are based upon farming and open space uses as opposed to full market value.

California Timberland Productivity Act of 1982

The California Timberland Productivity Act of 1982 (Government Code Section 51100 et seq.) was enacted to help preserve forest resources. Similar to the Williamson Act, this program gives landowners tax incentives to keep their land in timber production. Contracts involving Timber Production Zones are on 10-year cycles.

Local

Stanislaus County General Plan 2015

The Stanislaus County General Plan 2015 and CEQA EIR was adopted by the Board of Supervisors on 23 August 2016 (Stanislaus County 2016a and 2016b). As summarized below, the County General Plan contains various objectives, policies, and implementing measures related to agriculture. The summary below is focused on transportation related general plan objectives, policies, and implementing measure.

Land Use Element

- **Policy Seventeen:** Agriculture, as the primary industry of the County, shall be promoted and protected.'

Conservation/Open Space Element

- **Goal 3:** Provide for the long-term conservation and use of agricultural lands.
    - **Policy 10:** Discourage the division of land which forces the premature cessation of agricultural uses.
    - **Policy 11:** In areas designated "Agriculture" on the Land Use Element, discourage land uses which are incompatible with agriculture.

Agricultural Element

- **Goal 2:** Conserve our agricultural lands for agricultural uses.

- **Policy 2.1**: The County shall continue to provide property tax relief to agricultural landowners by participating in the Williamson Act.
- **Policy 2.2**: The County shall support reasonable measures to strengthen the Williamson Act, making it a more effective tool for the protection of agricultural land.
- **Policy 2.3:** The County shall ensure all lands enrolled in the Williamson Act are devoted to agricultural and compatible uses supportive of the long-term conservation of agricultural land.
- **Policy 2.14:** When the County determines that the proposed conversion of agricultural land to non- agricultural uses could have a significant effect on the environment, the County shall fully evaluate on a project- specific basis the direct and indirect effects, as well as the cumulative effects of the conversion.

In addition to the agricultural goals and policies discussed above, the Stanislaus County general plan also specifies buffer and setback guidelines for new or expanded development and mitigation program guidelines for residential development. The purpose of the buffer and setback guidelines is "to protect the long-term health of local agriculture by minimizing conflicts resulting from normal agricultural practices as a consequence of new or expanding nonagricultural uses approved in or adjacent to the A-2 (General Agriculture) zoning district." These guidelines apply to all projects requiring approval by a discretionary permit. Per the guidelines "*For purposes of these guidelines discretionary permit shall mean any general plan amendment, community plan amendment, rezone, tentative map, parcel map, use permit (excluding single-family dwellings in the A-2 zoning district), or variance processed by the County Planning & Community Development Department.*" The Project is not a development project and does not require a discretionary permit from Stanislaus County. The County's buffer and setback guidelines do not apply to the Project. Likewise, the Project is not a residential development project, and the County's farmland mitigation program guidelines do not apply to the Project.

Stanislaus County Williamson Act Program

The Stanislaus County cannot take action on any application for a new structure or use on a parcel restricted by a Williamson Act contract until such time as sufficient evidence is presented to the county and/or the California State Department of Conservation that the proposed new use is compatible with the Williamson Act contract. A landowner may opt to discontinue their contract by filing a notice of non-renewal with the county. In these cases, the contract would expire 10 years after the filing. The county may also cancel a Williamson Act contract without the 10-year expiration period but only under limited circumstances and subject to mandatory findings of fact that those circumstances exist.

In Stanislaus County, the uses compatible with Williamson Act contracts are listed in the General Agricultural (A-2) zoning district. They include: gas, electric, water, communication facilities; farm labor camps and farm employee housing; certain agricultural industries; agricultural service airports; and produce markets. (Stanislaus County Code Sections 21.20.030 and 21.20.045).

County Measure E

Stanislaus County voters passed Measure E in November 2007. Under Measure E, land that is designated as agricultural or open space in the Land Use Element cannot be amended to residential or rezoned to residential without the approval of a majority of county voters. Because Measure E amended the county general plan, it affects unincorporated lands that are under the county's jurisdiction. Under California law, a general plan amendment that is adopted by voter-approved initiative can be changed only by approval of another initiative.

Measure E is intended to direct residential growth into the incorporated cities, which are more capable of serving such growth, and limit the potential for residential growth to convert agricultural land within the unincorporated areas. Its immediate effect is to restrict future residential developments within the unincorporated county to those areas that are currently designated and zoned for residential development (e.g., Salida and Diablo Grande). Measure E will remain in effect until 31 December 2036 unless it is otherwise amended by a future voter initiative.

3.2.1.2 Environmental Setting

Agriculture is the leading industry in Stanislaus County, generating an annual gross value in excess of a billion dollars into the local economy. Stanislaus County consistently ranks among the top ten agricultural counties in the state and plays a major role in agriculture at the national level, based on market value of agricultural product sold. Agricultural land use in Stanislaus County includes approximately 249,964 ac of Prime Farmland, 33,172 ac of Farmland of Statewide Importance, 116,212 ac of Unique Farmland, and 26,030 ac of Farmland of Local Importance (DOC 2020a). Agricultural land uses include livestock grazing; hay production; dairies; walnut, almond, and various fruit orchards; row crops; and nurseries.

Stanislaus County conducted a farmland conversion evaluation for the Project, as required by Caltrans to comply with the Farmland Protection Policy Act. The evaluation consisted of review of the States Farmland Mapping and Monitoring Program maps for Stanislaus County (DOC 2020b), completion of the USDA Natural Resource Conservation Service (NRCS)-CPA-106 form, and coordination with the NRCS.

Table 3-1 lists the APNs in the project area, there designation(s) per the States Farmland Mapping and Monitoring Program, and their Williamson Act contract status. All four parcels adjacent to the Tim Bell Road Project ROW are currently enrolled with active Williamson Act contracts.

The NRCS determined that the Project will convert 0.3 ac of Prime Farmland and Unique Farmland and 0.8 ac of Farmland of Statewide Importance. The Project will convert approximately 0.25 ac of grazing land.

Table 3-1. Assessor's Parcels in the Project Area.

Stanislaus County Assessor's Parcel Number (APN)	Parcel Size (acre)	General Description	Zoning Designation[1]	Agricultural Designations		Approximate Permanent ROW Needed (Acres)
				California State Farmland Mapping and Monitoring Program Status	Williamson Act Contract Status [2]	
008-001-036	20.2	Agriculture	A-2-40 (General Agriculture, 40 acre minimum)	Prime Farmland, Farmland of Statewide Importance, Unique Farmland, Grazing Land	Enrolled (Contract No. 1972-0510)	0.44
008-001-038	40.36	Agriculture	A-2-40 (General Agriculture, 40 acre minimum)	Prime Farmland, Unique Farmland, Grazing Land	Enrolled (Contract No. 1972-0510)	0.15
008-001-055	45.15	Agriculture	A-2-40 (General Agriculture, 40 acre minimum)	Prime Farmland, Farmland of Statewide Importance, Unique Farmland, Grazing Land	Enrolled (Contract No. 1972-1150)	0.00
008-001-056	49.06	Agriculture	A-2-40 (General Agriculture, 40 acre minimum)	Prime Farmland, Farmland of Statewide Importance, Unique Farmland, Grazing Land	Enrolled (Contract No. 1972-1150)	0.76
					Total:	**1.35**

[1] Zoning designation per Stanislaus County GIS Central (http://gis.stancounty.com/giscentral/public/js/Public_app.html)

[2] Williamson Act Contract Number and Status per Stanislaus County GIS Central (http://gis.stancounty.com/giscentral/public/js/Public_app.html).

3.2.2 Environmental Impacts

3.2.2.1 Methods of Analysis

Information on agricultural and timber resources was obtained from the FMMP and from review of County General Plan and zoning designations, and review of the project vicinity using aerial photographs.

3.2.2.2 Thresholds of Significance

In accordance with Appendix G of the State CEQA Guidelines, the proposed Project would be considered to have a significant effect if it would result in any of the conditions listed below.

- Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to nonagricultural use
- Conflict with existing zoning for agricultural use or conflict with a Williamson Act contract
- Conflict with existing zoning for, or cause rezoning of, forest land (as defined in PRC Section 12220[g]), timberland (as defined by PRC Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104[g]).
- Result in the loss of forest land or conversion of forest land to non-forest use.
- Involve other changes in the existing environment that, due to their location or nature, could result in conversion of Farmland to nonagricultural use or conversion of forest land to non-forest use.

3.2.2.3 Impacts and Mitigation Measures

Impact AG-1: Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the FMMP of the California Resources Agency, to nonagricultural use (*less than significant*).

The proposed Project will convert a total of 1.1 ac of Prime Farmland, Unique Farmland, and Farmland of Statewide Importance. A total of 425,378 ac of Prime Farmland, Farmland of Statewide Importance, Unique Farmland, and Farmland of Local Importance occur in Stanislaus County. The conversion of 1.1 ac of Prime Farmland, Unique Farmland, and Farmland of Statewide Importance represents approximately 0.0003 percent (or three ten thousandths of a percent) of the farmable land in Stanislaus County. This impact is less than significant.

Impact AG-2: Conflict with existing zoning for agricultural use, or a Williamson Act contract? (*less than significant with mitigation*)

The proposed Project requires purchase of approximately 1.35 ac of ROW from APNs 008-001-036, 008-001-038, and 008-001-056 for the proposed improvements. All three APNs' are under active Williamson Act contracts. The acquisition and use of approximately 1.35 ac of agricultural land for a transportation use is not inconsistent with the existing zoning.

The California Land Conservation Act of 1965 [Cal. Govt. Code Section51200-51295], commonly known as the Williamson Act, provides incentives, through reduced property taxes, to deter the early conversion of agricultural and open space lands. Farmland need not be considered "prime" in order to be placed under provisions of the Williamson Act. All lands defined by the State as "prime farmland," "other than prime farmland," and "open space land" are eligible for coverage by a Williamson Act contract. The Williamson Act prohibits a public agency from acquiring prime farmland covered under the Act for the location of a public improvement if there is other land within or outside the preserve on which it is reasonably feasible to locate the public improvement.

When there is a need for a public agency or other eligible entity to acquire land enrolled in a Williamson Act contract, or located in an agricultural preserve, the Department of Conservation must be notified. The requirement to notice occurs four times in the Land Conservation Act of 1965 statute:

1. Notice is required before making a decision to acquire property located in an agricultural preserve (GC Section51290(b));
2. Notice is required within 10 days of acquisition of the property (GC Section51291(c));
3. Notice is required if the public entity proposes any significant changes to the acquisition; and
4. Notice is required after acquisition if the acquiring public agency decides not to acquire the property for the intended purpose (GC Section51291(d)).

The noticing requirement per the California Department of Conservation' *Public Acquisition Notification Procedures A Step by Step Guide* are listed below (DOC 2020c).

First Notice: The first notice, must occur ***before*** the public agency makes a decision to acquire a property located in an agricultural preserve. The first notice needs to include the following information:

1) The public agency's explanation of its preliminary considerations of the findings of Government Code Section51292 (a) and (b):
   a) *"The location is not based primarily on a consideration of the lower cost of acquiring land in an agricultural preserve (Section51292(a))."*
   b) *"There is no other land within or outside of the preserve on which it is reasonably feasible to locate the public improvement (Section51292(b))."*
2) A description of the agricultural preserve land it intends to acquire;
3) A copy of the Land Conservation Act contract on property that pertains to any land subject to the restrictions of such a contract between the local governing body, city or county, responsible for the administration of the agricultural preserve where the property to be acquired is located.

Second Notice: A second notice is required within 10 working days after acquisition (escrow has closed). The second notice shall include the following, if not previously provided due to some exemption in Government Code Section51290 – Section51295 (state the applicable exemption in second notice):

1) The notice shall include a general explanation of the decision and the findings made pursuant to Government Code Section51292.
2) A general description, in text or by diagram, of the agricultural preserve land acquired (a vicinity map is good); and
3) A copy of the applicable Land Conservation Act contract(s).

Note: If the information and documents, noted above, were provided to the Department in the first notice then the second notice need only list the documents as having been previously provided

Third Notice: A third notice is required if there is a significant change in the public improvement that the public agency intends to locate on land that is acquired in an agricultural preserve for such a purpose. The public agency must provide notice to the Department and the local jurisdiction (city/county) regarding increases or decreases in the amount of land acquired; **OR**

Third / Fourth Notice: A third/fourth notice is required if the public agency does not acquire the land it notified the Department it intended to acquire in the first notice and/or the public agency determines not to use the property it acquired for the purpose identified in the first notice. The land must be reenrolled under a contract that is as restrictive as the one it was under before the acquisition occurred (Government Code Section51295).

Acquisition of land from these four Williamson Act Contract parcels is required because there is no other land within or outside of the preserve on which it is reasonably feasible to locate the Project and attain the Project goals. The Project/ bridge location is already established and is not based on any consideration of the lower cost of acquiring land in an agricultural preserve (Section 51292(a)). A design that placed the new bridge further up or down stream would likely increase road approach work and require and increase the amount of ROW needed from the subject parcels or adjacent Williamson Act parcels. This would result in an overall greater impact to farmland. This document serves as the 'first notice', a copy of the Land Conservation Act contract for APNs 008-001-036, 008-001-038, 008-001-055, and 008-001-056 is included in Appendix B. The Project will comply with the remaining noticing requirements of the Land Conservation Act of the 1965. With implementation of measure AG-1 this impact is less than significant.

Measure AG-1 (Williamson Act Parcels)

- *Acquisition of ROW from any parcel enrolled in an active Williamson Act Contract will comply with the noticing requirements of the California Department of Conservation Public Acquisition Notification Procedures 'A Step by Step Guide' (https://www.conservation.ca.gov/dlrp/wa/Documents/basic_contract_provisions/Public%20Acquisition%20A%20Step%20by%20Step%20Guide%207.13.2020.pdf.).*

Impact AG-3: Conflict with existing zoning for, or cause rezoning of, forest land (as defined in PRC Section 12220[g]), timberland (as defined by PRC Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104[g]) (no impact).

Per the County General Plan, Stanislaus County does not include lands zoned for forestland or timberland; therefore, no impacts on these resources would occur (Stanislaus County 2016a and 2016b).

Impact AG-4: Result in the loss of forest land or conversion of forest land to non-forest use (less than significant).

The proposed Project will result in temporary and permanent impacts to forest land (as defined in Public Resources Code section 12220(g)). Temporary impacts to forest land will result from trees and vegetation removal to allow construction of the proposed Project. Approximately 0.07 ac of Valley Oak Woodland will be converted by construction of the replacement bridge. The permanent loss of less than a quarter of an acre (0.07 ac) of forest land (as defined in Public Resources Code section 12220(g)) is considered less than significant. No mitigation is required.

Impact AG-5: Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use? (no impact)

The proposed Project is not anticipated to involve other changes in the existing environment that could result in conversion of farmland or forest land.

3.2.3 References

California Department of Conservation (DOC). Accessed September 2020 (2020a). Farmland mapping and monitoring program (FMMP), Stanislaus County, land use conversion table, 2014-2016. https://www.conservation.ca.gov/dlrp/fmmp/Pages/Stanislaus.aspx

California Department of Conservation (DOC). Accessed September 2020 (2020b). Farmland Mapping and Monitoring Program. https://www.conservation.ca.gov/dlrp/fmmp/Pages/county_info.aspx

California Department of Conservation (DOC). Accessed September 2020 (2020c). Public Acquisition Notification Procedures A Step by Step Guide. https://www.conservation.ca.gov/dlrp/wa/Documents/basic_contract_provisions/Public%20Acquisition%20A%20Step%20by%20Step%20Guide%207.13.2020.pdf

Stanislaus County. Adopted 23 August 2016 (2016a). Stanislaus County general plan 2015.

Stanislaus County. April 2016 (2016b). Stanislaus County General Plan and Airport Land Use Compatibility Plan Update Draft Program EIR.

3.3 Biological Resources

This section provides information on biological resources in the Project area and analyzes potential Project impacts. Specific mitigation measures to avoid, minimize, or compensate for potential significant impacts on biological resources are described for each potential impact, as necessary.

3.3.1 Existing Conditions

This section describes the regulatory setting and environmental setting for biological resources in the Project area. For the purpose of this EIR, "Project area" is defined as all proposed permanent and temporary project impact areas, including staging areas (Figure 2-1).

3.3.1.1 Regulatory Setting

This section summarizes the federal and state regulations as well as pertinent local general plan policies and ordinances that protect special-status species, waters of the United States (and waters of the State), including wetlands; and sensitive habitats.

Federal Regulations

Clean Water Act Section 401 Water Quality Certification - Regional Water Quality Control Board (RWQCB)

Under Section 401 of the Clean Water Act (33 U.S.C. 1341), applications for a federal permit or license for any activity that may result in a discharge to a water body require a State Water Quality Certification to ensure that the proposed activity complies with state water quality standards.

Section 402 of the Clean Water Act - NPDES - Regional Water Quality Control Board (RWQCB)

Section 402(p) of Clean Water Act establishes the National Pollutant Discharge Elimination System (NPDES), a permitting system for the discharges (except for dredge or fill material) of any pollutant into waters of the U.S. Regional Water Quality Control Boards (RWQCBs) administer this permitting program in California.

Clean Water Act Section 404 Permit - U.S. Army Corps of Engineers (Corps)

The Corps and the U.S. Environmental Protection Agency regulate the discharge of dredge and fill material into "waters of the United States" under Section 404 of the Clean Water Act (33 U.S.C. 1344). The Corps issues permits for certain dredge and fill activities in waters of the U.S. pursuant to the regulations in 33 CFR 320-330.

Federal Endangered Species Act (FESA)

FESA defines take (Section 9) and prohibits taking of a federal-listed endangered or threatened animal without an Incidental Take Permit (16 U.S.C. 1532; 50 CFR 17.3). If a federal-listed animal could be harmed, harassed, injured, or killed by a project, a Section 7 consultation is initiated by a federal agency or a Section 10 consultation is initiated by a local agency or private applicant. Formal consultations culminate with a Biological Opinion and may result in the issuance of an Incidental Take Permit.

Federal Migratory Bird Treaty Act (MBTA)

All 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 Part 21). Any construction-related disturbance that causes direct injury, death, nest abandonment, or forced fledging of migratory birds is restricted under the MBTA. Any removal of active nests during the breeding season or any disturbance that results in the abandonment of nestlings is considered 'take' of the species under federal law.

Federal Magnuson-Stevens Fishery Conservation and Management Act

Under the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act), Essential Fish Habitat (EFH) for the Pacific coast salmon fishery includes waters and substrates necessary for salmon production to support a long-term sustainable salmon fishery and salmon contributions to a healthy ecosystem. The geographic extent of freshwater EFH is specifically defined as all currently viable waters and most of the habitat historically accessible to salmon within a USGS hydrologic unit (PFMC 1999). Consultation with NOAA Fisheries is required by federal agencies undertaking, permitting, or funding activities that may adversely affect EFH.

Executive Order 13112 - Invasive Species

Executive Order 13112, issued 3 February 1999, is a directive aimed at preventing the introduction and spread of invasive species as a result of federal agency actions. EO 13112 directs federal agencies to use relevant programs and authorities to prevent the introduction of invasive plants and animals, control existing populations of such species, monitor populations of such species, and provide for the restoration of native species. The Federal Highway Administration (FHWA) is ordered to not authorize, fund, or carry out projects that are likely to cause or promote the introduction or spread of invasive species.

The Bald and Golden Eagle Protection Act

The Bald and Golden Eagle Protection Act (16 U.S.C. 668-668c), enacted in 1940, and amended several times since then, prohibits anyone, without a permit issued by the Secretary of the Interior, from "taking" bald and golden eagles, including their parts, nests, or eggs. The Act provides criminal penalties for persons who "take, possess, sell, purchase, barter, offer to sell, purchase or barter, transport, export or import, at any time or any manner, any bald eagle ... [or any golden eagle], alive or dead, or any part, nest, or egg thereof." The Act defines "take" as "pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb." There are a number of different types of permits available for authorizing take, possession, and transport of bald and golden eagles.

State Regulations

California Endangered Species Act (CESA)

CESA prohibits take of wildlife and plants listed as threatened or endangered by the California Fish and Game Commission. "Take" is defined under California Fish and Game Code Section 86 as any action or attempt to "hunt, pursue, catch, capture, or kill." CESA allows exceptions for take that occurs during otherwise lawful activities. Fish and Game Code Section 2081 describes the requirements for incidental take applications under CESA. Incidental take of state-listed species may be authorized if an applicant

submits a plan that minimizes and mitigates the impacts of take, and makes financial assurance for the mitigation.

Lake and Streambed Alteration Agreement (CA Fish and Game Code Section 1600)

Fish and Game Code Section 1600 requires any person, government agency, or public utility proposing any activity that will divert or obstruct the natural flow or change the bed, channel or bank of any river, stream, or lake, or proposing to use any material from a streambed, to first notify CDFW of such proposed activity.

Native Plant Protection Act (NPPA; CA Fish and Game Code Section 1900-1913)

The NPPA prohibits the take, possession, and sale of plants designated as rare, threatened, or endangered under NPPA in California. An exception to these prohibitions in the Act allows landowners, under specific circumstances, to take listed plant species, provided that the owners first notify CDFW and give that agency at least 10 days to retrieve the plants before they are disturbed or destroyed. Fish and Game Code Section 1913 exempts from take prohibition "the removal of endangered or rare native plants from a canal, lateral ditch, building site, or road, or other right of way."

Nesting Birds and Birds-of-Prey (CA Fish and Game Code Section 3503, 3503.5)

Fish and Game Code Section 3503 protects all nesting native birds. 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. It is unlawful to take, possess, or needlessly destroy the nest or eggs of any native bird or bird-of-prey, except as otherwise provided by Fish and Game Code or any regulation adopted pursuant thereto.

Fully Protected Species (CA Fish and Game Code Section 3511, 4700, 5050)

CDFW's classification of "fully protected" species was the State's initial effort in the 1960s to identify and protect animals that were rare or faced possible extinction. Lists of fully protected species were created for birds (Section 3511), mammals (Section 4700), reptiles and amphibians (Section 5050), and fish (Section 5515). The Fish and Game Code states that fully protected species, "… may not be taken or possessed at any time. No provision of this code or any other law shall be construed to authorize the issuance of permits or licenses to take any fully protected species."

Take Prohibition (CA Fish and Game Code Section 86, 2080)

Fish and Game Code Section 86 defines 'take' and Section 2080 prohibits 'taking' of a species listed as threatened or endangered under CESA (CA Fish and Game Code Section 2080) or otherwise fully protected, as defined in CA Fish and Game Code Section 3511, 4700, and 5050.

Senate Bill 1334 (SB 1334) - The Oak Woodlands Conservation Act.

SB 1334 is an act to add Section 21083.4 to the Public Resources Code (PRC), relating to oak woodlands conservation. California PRC Section 21083.4 requires each county in California to implement an oak woodland protection policy to mitigate for the loss of oak woodlands resultant from approved projects within their jurisdiction. In this policy, oak trees are defined as all native species of oaks larger than five inches dbh (diameter at breast height, or 4.5 feet above grade). At least one of four mitigation alternatives for significant conversions of oak woodlands are required in this regulation: 1) conserve oak woodlands through the use of a conservation easement, 2) plant an appropriate number of trees, including maintaining plantings and replacing dead or diseased trees (planting maintenance must last

for seven years, and mitigation plantings shall not fulfill more than one-half the mitigation requirement for the project; this alternative may also be used to restore former oak woodlands), 3) contribute funds to the Oak Woodlands Conservation Fund, as established under Section 1363 (a) of the Fish and Game Code, and 4) other mitigation measures developed by the County.

Porter-Cologne Water Quality Control Act

California Water Code Section 13260 requires "any person discharging waste, or proposing to discharge waste, in any region that could affect the waters of the state to file a report of discharge (an application for waste discharge requirements)." Under the Porter-Cologne Act definition, waters of the state are "any surface water or groundwater, including saline waters, within the boundaries of the state." Although all waters of the United States that are within the borders of California are also waters of the state, the reverse is not true. California retains authority to regulate discharges of waste into any waters of the state, regardless of whether USACE has concurrent jurisdiction under CWA Section 404.

Local Regulations

The Stanislaus County General Plan includes several goals and policies to protect natural resources. The goals and polices listed below are relevant to biological resources in the county and can be found in Chapter 1, Land Use Element, and Chapter 3, Conservation/Open Space Element, of the County General Plan.

Land Use Element

Goal One. Provide for diverse land use needs by designating patterns which are responsive to the physical characteristics of the land as well as to environmental, economic and social concerns of the residents of Stanislaus County.

Policy Seven. Riparian habitat along the rivers and natural waterways of Stanislaus County shall to the extent possible be protected.

Conservation/Open Space Element

Goal One. Encourage the protection and preservation of natural and scenic areas throughout the County

Policy One. Maintain the natural environment in areas dedicated as parks and open space.

Policy Two. Assure compatibility between natural areas and development.

Policy Three. Areas of sensitive wildlife habitat and plant life (e.g., vernal pools, riparian habitats, flyways and other waterfowl habitats, etc.) including those habitats and plant species listed in the General Plan Support Document or by state or federal agencies shall be protected from development.

Policy Four. Protect and enhance oak woodlands and other native hardwood habitat.

Implementation Measure 1. Require all discretionary projects that will potentially impact oak woodlands and other native hardwood habitat, including but not limited to hardwood rangelands identified in the maps in Appendix III-A, to include a management plan for the protection and enhancement of oak woodlands and other native hardwood habitat.

Goal Two. Conserve water resources and protect water quality in the County.

Policy Six. Preserve vegetation to protect waterways from bank erosion and siltation.

Goal Three. Provide for the long-term conservation and use of agricultural lands.

Policy Ten. Discourage the division of land which forces the premature cessation of agricultural uses.

Goal Nine. Manage extractive mineral resources to ensure an adequate supply without degradation of the environment.

Goal Ten. Protect fish and wildlife species of the County.

Policy Twenty-Nine. Adequate water flows should be maintained in the County's rivers to allow salmon migration.

Policy Thirty. Habitats of rare and endangered fish and wildlife species shall be protected. Information on rare and endangered species and habitats is constantly being updated in response to a 1982 state law by the California State Department of Fish and Wildlife through various sources which include the Stanislaus Audubon Society, California Native Plant Society, and the Sierra Club.

3.3.1.2 Environmental Setting

Methods

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

- Natural Environment Study (NES; Sycamore Environmental 2017a). The NES was approved by Caltrans District 10 Environmental Branch Chief, on 13 October 2017. The NES is a standard Caltrans report format for documenting and evaluating the potential Project impacts to biological resources for projects of limited scope and impact.
- Biological Assessment (BA, Sycamore Environmental 2018): The BA was approved by Caltrans District 10 Environmental Branch Chief, on 15 February 2018. The BA is a standard report format used when consultation with Federal agencies is required.
- Jurisdictional Delineation Report (Sycamore Environmental 2017b): The purpose of the delineation was to identify wetlands and waters in the Project area. Jurisdictional delineations are preliminary until verified by the U.S. Army Corps of Engineers (Corps).

An evaluation of biological resources was conducted to determine whether any listed special-status plant/ wildlife species, or their habitat, or other sensitive habitats occur in the Project area. Data on special-status species and habitats known in the area were obtained from state and federal agencies. Maps and aerial photographs of the Project area and surrounding areas were reviewed. Field surveys of the Project area were conducted on 11 September 2013 and 21 May 2014. The field surveys, map review, and a review of the biology of evaluated species and habitats were used to determine the special-status species and sensitive habitats that could occur in the Project area.

Special-status species addressed in the 2017 NES include those listed (or candidate or proposed) under the federal or state endangered species acts, under the California Native Plant Protection Act, as a California species of special concern or fully protected by the California Department of Fish and Wildlife (CDFW), or that are California Rare Plant Rank 1 or 2 (CNPS 2017). Special-status natural communities in the 2017 NES are waters, wetlands, riparian communities, and any natural community ranked S1, S2, or S3 by CDFW (2017b).

The following sources of information were reviewed during preparation of the 2017 NES:

- An official letter and list were obtained from the U.S. Fish and Wildlife Service (USFWS), Sacramento Field Office on 7 January 2014, and was updated on 14 September 2017. The list identifies federal-listed, candidate, and proposed species that potentially occur in, or could be affected by the Project.
- The California Natural Diversity Database (CNDDB) was queried for known occurrences of special-status species in or near the Project (Paulsell Quad and the eight surrounding quads; data dated 9 January 2014). This query was updated 14 June 2017.
- The California Native Plant Society (CNPS) inventory of rare and endangered plants was queried on 15 April 2014 for known occurrences of special-status plants in or near the Project (Paulsell Valley Quad and the eight surrounding quads). This query was updated 14 June 2017.
- NMFS provided technical assistance regarding the potential for federal-listed fish species to occur in Dry Creek in the Project area in a letter dated 21 May 2014. A list of federal-listed species and designated critical habitat that occur on the Paulsell Quad was obtained from the NMFS database on 1 February 2017.

Physical Conditions

The Project occurs in western Stanislaus County approximately 5.4 miles northeast of Waterford and approximately 9.5 miles southeast of the City of Oakdale. The Project occurs on the Paulsell Quad (T3S, R12E, Section 6, Mt. Diablo Base and Meridian) and is in the Upper Tuolumne Hydrologic Unit (Hydrologic Unit Code 18040009). The Project area consists of portions of Tim Bell Road, the existing bridge, Dry Creek, valley oak woodland along the banks of Dry Creek, agriculture/ orchards, and ruderal and disturbed areas. Elevation in the Project area ranges from approximately 145 to 190 feet above sea level.

Mapped soil units in the Project area include Anderson gravelly fine sandy loam, 3 to 8% slopes, Honcut loam, 0 to 1% slopes, Paulsell clay, 0 to 1% slopes, Peters cobbly clay, 0 to 8% slopes, Raynor clay, 0 to 3% slopes, Ryer clay, 0 to 1% slopes, Terrace escarpments, and Wyman loam, 0 to 1% slopes (NRCS 2016). Soils in all of these series are well-drained, except Terrace escarpments, which are excessively drained and prone to gully erosion, and Pausell, which are imperfectly drained.

Land Cover Types

The term land cover type is used here to refer to vegetation communities, water features, and ruderal or disturbed areas. Land cover types present in the Project area are listed in Table 3-2, shown on Figure3-3 and described below. Impacts to non-special-status land cover types are not discussed.

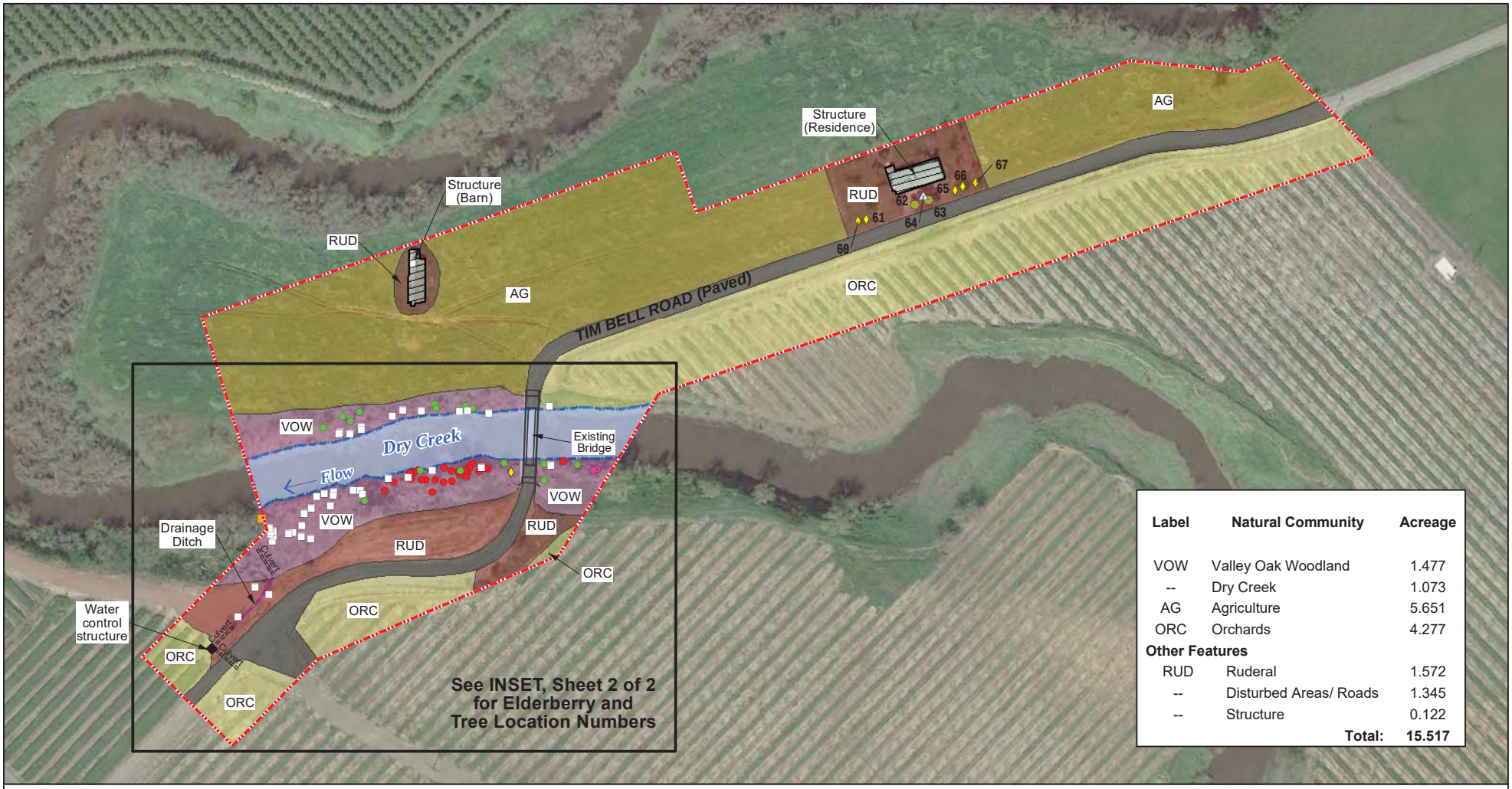
Table 3-2. Land Cover Types in the Project Area

Natural Community	Vegetation Alliance(s) Present 1	CDFW Alliance Code	CDFW Rarity Rank[2]	Acreage
Valley Oak Woodland	*Quercus lobata* Woodland Alliance	71.040.00	G3 S3	1.48
Dry Creek	--	--	--	1.07
Other Features				
Agriculture field	--	--	--	5.65

Orchards	--	--	--	4.28
Ruderal	--	--	--	1.57
Disturbed Areas/ Roads	--	--	--	1.35
Structure	--	--	--	0.12
			Total:	**15.52**

[1] Vegetation alliances are based on descriptions and classification methods in Sawyer et al. (2009).

[2] Alliance codes and rarity ranks are from CDFW (2010). Rarity ranking follows NatureServe's Heritage Methodology and is based on degree of imperilment as measured by rarity, trends, and threats. State (S) ranks of 1-3 are considered highly imperiled (CDFW 2010). Aquatic communities and communities dominated by nonnatives are not ranked.



Label	Natural Community	Acreage
VOW	Valley Oak Woodland	1.477
--	Dry Creek	1.073
AG	Agriculture	5.651
ORC	Orchards	4.277
Other Features		
RUD	Ruderal	1.572
--	Disturbed Areas/ Roads	1.345
--	Structure	0.122
	Total:	**15.517**

Tim Bell Road over
Dry Creek Bridge (38C-0073)
Replacement
Stanislaus County, CA
28 September 2017

Figure 4. Biological Resources Map
Sheet 1 of 2

Biological Study Area (BSA)
Dry Creek
Drainage Ditch

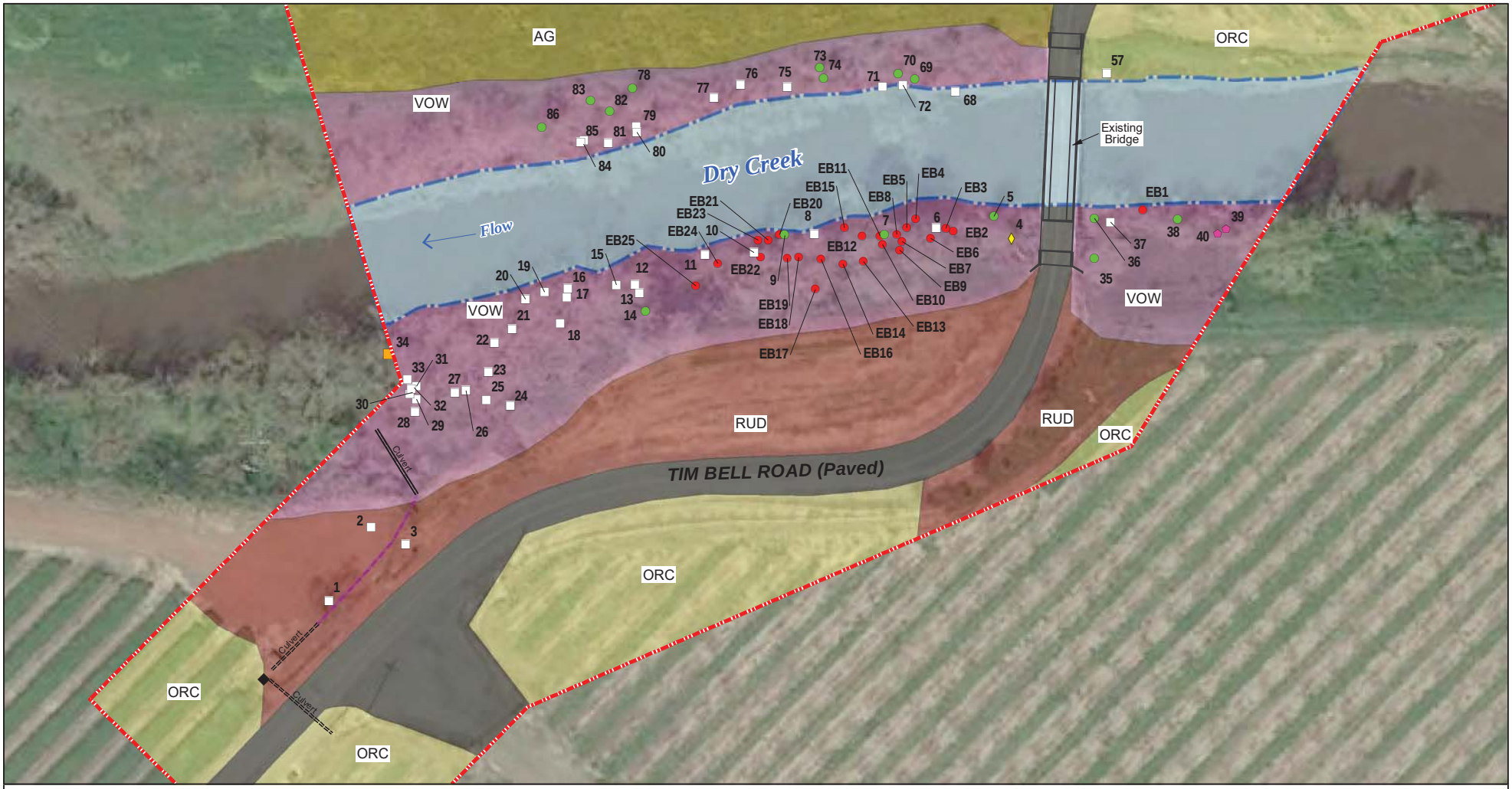
Valley Oak Woodland (VOW)
Orchard (ORC)
Agriculture (AG)
Ruderal (RUD)
Disturbed Areas / Roads
Structures

Valley oak
Black walnut
Gray pine
Almond
Fig
Olive
Sandbar willow
Elderberry Shrub (EB)

150 75 0 150 Feet
Scale: 1 inch = 150 feet

Aerial Photograph: 14 March 2014
Google Earth Imagery

11094TimBellRdDryCkBridge_Fig4BioresMap_Sht1of2_v2.mxd



Tim Bell Road over
Dry Creek Bridge (38C-0073)
Replacement
Stanislaus County, CA
26 September 2017

Figure 4. Biological Resources Map
Sheet 2 of 2, INSET

- Biological Study Area (BSA)
- Dry Creek
- Drainage Ditch
- Valley Oak Woodland (VOW)
- Orchard (ORC)
- Agriculture (AG)
- Ruderal (RUD)
- Disturbed Areas / Roads
- Valley oak
- Black walnut
- Almond
- Fig
- Sandbar willow
- Elderberry Shrub (EB)

60 30 0 60 Feet

Scale: 1 inch = 60 feet

Aerial Photograph: 14 March 2014
Google Earth Imagery

I:\094TimBellRdDryCkBridge_Fig4BioresMap_Sht2of2_v2.mxd

Valley Oak Woodland: Bands of valley oak woodland occur on both sides of the bridge on the south bank of Dry Creek, and west of the bridge on the north bank. Valley oak (*Quercus lobata*) and Northern California black walnut (*Juglans hindsii*) are co-dominant in the canopy. The understory is primarily herbaceous, dominated by grasses. The shrub layer is sparse to absent.

Dry Creek: Within the Project area, Dry Creek is an intermittent stream with an average width of approximately 70 feet. Most of the creek in the Project area is bordered by riparian valley oak woodland. The channel is low-gradient with slow-moving water, muddy pools, and a bed of silty to sandy sediments. Dry Creek originates in Tuolumne County approximately 12.8 air miles east of the Project area, north of the community of La Grange. Dry Creek is tributary to the Tuolumne River, approximately 16.5 air miles southwest of the Project area in the City of Modesto. Dry Creek appears to be fed primarily by precipitation run-off in the winter and spring, and by agricultural irrigation run-off in the summer and fall. Dry Creek is a natural community of special concern because it is a potential waters of the U.S. Dry Creek in the Project area is an intermittent channel that flows southwest under the Tim Bell Road Bridge. Approximately 1.07 ac of Dry Creek occurs in the Project area.

Agriculture: A winter wheat field occurs to the west of Tim Bell Road and north of Dry Creek. The wheat field was an orchard until at least September 2010. The orchard was cleared by June 2011, and wheat was planted between March 2014 and March 2015.

Orchards: Almond orchards occur east of Tim Bell Road on both sides of Dry Creek, and west of Tim Bell Road on the south side of the creek. The orchards were planted between September 2011 and March 2016.

Ruderal: This area includes disturbed or cleared areas colonized by disturbance-adapted and primarily nonnative species.

Disturbed Areas/ Roads: This area includes Tim Bell Road, agricultural roads, and gravel/dirt road shoulders.

Special-Status Species

Special-status species addressed here are those listed (or candidate or proposed) under the federal or state endangered species acts, under the California Native Plant Protection Act, as a California species of special concern or fully protected by the California Department of Fish and Wildlife, or that are California Rare Plant Rank 1 or 2. Special-status natural communities in this document are waters, wetlands, riparian communities, and any natural community ranked S1, S2, or S3 by CDFW (2010).

Data received from USFWS, CNDDB and CNPS records were used to compile a table of regional species and habitats of concern (Table 3-3). Table 3-3provides a general habitat description for each species and a rationale as to why habitat is either present or absent from the Project area. The CNDDB tracks other species that have not been designated by CDFW as a California species of special concern; these species were not evaluated as special-status species in the Project Natural Environment Study (NES, Sycamore Environmental 2017). California Rare Plant Rank 3 or 4 plant species are either more common or more information is needed; these species were not evaluated as special-status species in the Project NES.

Special-Status Plant Species

The 2017 NES evaluated and conducted surveys for 27 special-status plants (Table 3-3). The NES identified habitat for Jepson's Coyote Thistle (*Eryngium jepsonii*; CNPS CA Rare Plant Rank 1B.2) in the project area. Jepson's coyote thistle was not observed during the floristic botanical survey conducted in May 2014, during the evident and identifiable period. The Project will not impact special-status plant species. The Project area does not provide habitat for federal or state-listed plant species.

Special-Status Wildlife Species

The 2017 NES evaluated and conducted general biological surveys for 24 special-status animals and their habitat (Table 3-3). The Project area contains habitat for the federal-threatened Valley elderberry longhorn beetle (VELB). Caltrans completed formal FESA Section 7 Consultation with the USFWS and the Project received a Biological Opinion with Incidental Take Statement from the USFWS on 18 May 2018 (see further discussion in Section 3.3.2.3). The Project will have no effect on other federal-listed or proposed species.

The Project area provides suitable habitat for several state special-status species, including birds of prey and migratory birds, western pond turtle, burrowing owl, Swainson's hawk, pallid bat, and Western red bat.

Table 3-3. Special Status Species and Critical Habitat Potentially Occurring or Known to Occur in the Tim Bell Road over Dry Creek Bridge Replacement Project Area

Scientific Name	Common Name	Federal Status [a]	State Status [a]	General Habitat Description	Habitat Determination [c]	Rationale
Invertebrates						
Branchinecta conservatio	Conservancy fairy shrimp	E, CH	--	Occurs in swales in grassland communities and in large turbid vernal pools, where rooted vegetation is absent (USFWS 1994b). Known from eight populations in California: Vina Plains, Butte and Tehama cos.; Mariner Conservation Bank, Placer Co., Sacramento National Wildlife Refuge, Glenn Co.; Yolo Bypass Wildlife Area, Yolo Co.; Jepson Prairie, Solano Co.; Mapes Ranch, Stanislaus Co.; Hwy 165, Sandy Mush Rd., and U.C. Merced Area, Merced County; and Los Padres National Forest, Ventura County (USFWS 2012b).	A	There are no vernal pools in the Project area. There is no habitat for this species in the Project area. The Project area is not located within critical habitat (USFWS 2006).
Branchinecta lynchi	Vernal pool fairy shrimp	T, CH	--	Inhabits a wide variety of vernal pool habitats. Most commonly found in small (< 0.05 ac), clear to tea-colored vernal pools with mud, grass, or basalt bottoms in unplowed grasslands (USFWS 2005).	A	There are no vernal pools in the Project area. There is no habitat for this species in the Project area. The Project area is not located within critical habitat (USFWS 2006, 2011).
Desmocerus californicus dimorphus	Valley elderberry longhorn beetle	T, CH	--	Requires an elderberry shrub (*Sambucus* sp.) as a host plant (USFWS 2014).	HP	See discussion.
Lepidurus packardi	Vernal pool tadpole shrimp	E, CH	--	Typically occurs in large, deep vernal pools (USFWS 1994b), but can also make use of smaller pools within larger vernal pool complexes (Helm 1998).	A	There are no vernal pools to provide habitat in the Project area. The Project area is not located within critical habitat (USFWS 2006, 2011).

Scientific Name	Common Name	Federal Status [a]	State Status [a]	General Habitat Description	Habitat Determination [c]	Rationale
Fish						
Hypomesus transpacificus	Delta smelt	T, CH	E	Euryhaline (tolerant of a wide salinity range) species that is confined to the San Francisco Estuary, principally in the Delta and Suisun Bay. They occur in the Delta primarily below Isleton on the Sacramento River side and below Mossdale on the San Joaquin River side. They are found seasonally throughout Suisun Bay and in small numbers in larger sloughs of Suisun marsh. They move into sloughs and channels of the western Delta (e.g., Lindsey Slough) when spawning (mainly March-April). Can be washed into San Pablo Bay during high-outflow periods, but do not establish permanent populations there (Moyle 2002).	A	The Project area is not within the range of the Delta smelt. The Project area is not located within critical habitat (USFWS 1994c).
Mylopharodon conocephalus	Hardhead	--	SSC	Occurs in low- to mid-elevation streams in the main Sacramento-San Joaquin drainage and in the Russian River. Their range extends from the Kern River in Kern County, in the south, to the Pit River in Modoc County in the north. In the San Joaquin drainage, the species is scattered in tributary streams and absent from valley reaches of the San Joaquin River. Typically found in undisturbed areas of larger low- to mid-elevation streams, although they are also found in the mainstem Sacramento River at low elevations and in its tributaries to about 4,920 feet. They prefer clear, deep (>32 inches) pools and runs with sand-gravel-boulder substrates and slow velocities. Hardhead are always found in association with Sacramento pikeminnow (squawfish) and usually with Sacramento sucker. They tend to be absent from streams where introduced species, especially centrarchids (sunfish), predominate and from streams that have been severely altered by human activity (Moyle 2002). Distribution may be limited to well-oxygenated streams and reservoir surface	A	There are no clear, deep pools in Dry Creek within the Project area. The Project area does not have suitable habitat for this species.

Scientific Name	Common Name	Federal Status [a]	State Status [a]	General Habitat Description	Habitat Determination [c]	Rationale
				waters due to lower oxygen levels of warm temperatures.		
Oncorhynchus mykiss	California Central Valley steelhead	T, CH	--	Historically, this species was widely distributed in the Sacramento and San Joaquin drainages. While steelhead are found elsewhere in the Sacramento River system, the principal remaining wild populations are a few hundred fish that spawn annually in Deer and Mill Creeks in Tehama County and a population of unknown size in the lower Yuba River. With the possible exception of a small population in the lower Stanislaus River, steelhead appear to have been extirpated from the San Joaquin basin (Moyle 2002). Spawning occurs in small tributaries on coarse gravel beds in riffle areas (Busby et al. 1996).	A	See discussion.
Amphibians						
Ambystoma californiense	California tiger salamander, central population	T, CH	T	Frequents grassland, oak savannah, and edges of mixed woodland and lower elevation coniferous forest. Usually breeds in temporary ponds such as vernal pools but may also breed in slower parts of streams and some permanent waters (Stebbins 2003). Requires long-lasting vernal pools to complete larval development of a minimum of 10 weeks (Jennings and Hayes 1994). Adults can migrate up to 1.5 mi from breeding ponds in upland habitat (Searcy & Shaffer 2011).	A	There are no long-lasting vernal pools or suitable upland habitat within 1.5 mi of the Project area. The Project area is not located within critical habitat (USFWS 2005).
Rana draytonii	California red-legged frog	T, CH	SSC	Inhabits quiet pools of streams and marshes, and occasionally ponds with dense, shrubby, or emergent vegetation. Requires permanent or nearly permanent pools for larval development (CWHR 2016; USFWS 2010b). The range of California red-legged frog (CRLF) extends from near sea level to approximately 5,200 feet, though nearly all sightings have occurred below 3,500 feet. CRLF	A	The Project area is not within the historic range of the California red-legged frog. The Project area is not located within critical habitat (USFWS 2010c).

Scientific Name	Common Name	Federal Status [a]	State Status [a]	General Habitat Description	Habitat Determination [c]	Rationale
				was probably extirpated from the floor of the Central Valley before 1960 (USFWS 2002).		
Spea hammondii	Western spadefoot		SSC	Ranges throughout the Central Valley and adjacent foothills, and is usually quite common where it occurs. Occurs primarily in grasslands, but occasionally occurs in valley-foothill hardwood woodlands (CWHR 2016). Primarily found in the lowlands frequenting washes, floodplains of rivers, alluvial fans, playas, and alkali flats. Also ranges into foothills and mountains. Prefers areas of open vegetation and short grasses with sandy or gravelly soil (Stebbins 2003). Spends most of the year in underground burrows up to 36 inches deep, which they generally construct themselves. Most surface movements by adults are associated with rains or high humidity at night. Breeding and egg laying occur almost exclusively in shallow, temporary pools formed by heavy winter rains (CWHR 2016).	A	There are no shallow, temporary pools formed by heavy winter rains within the Project area. There is no habitat within the Project area.
Reptiles						
Emys marmorata	Western pond turtle (WPT)	--	SSC	Prefers aquatic habitats with abundant vegetative cover and exposed basking sites such as logs. They are associated with permanent or nearly permanent water in a wide variety of habitat types, normally in ponds, lakes, streams, irrigation ditches, or permanent pools along intermittent streams (CWHR 2016).	HP	See discussion.
Thamnophis gigas	Giant garter snake	T	T	Occupy a variety of agricultural, managed, and natural wetlands, including their waterways and adjacent upland habitats. Agricultural wetlands include irrigation and drainage canals, ricelands, marshes, sloughs, ponds, small lakes, and low gradient streams. Requires 1) adequate water during the snake's active season (early spring through mid-fall) to provide food and cover; 2) emergent, herbaceous wetland vegetation, such as	A	There is limited emergent herbaceous wetland vegetation or grassy banks within the Project area. There is no habitat in the Project area.

Scientific Name	Common Name	Federal Status [a]	State Status [a]	General Habitat Description	Habitat Determination [c]	Rationale
				cattails and bulrushes, for escape cover and foraging habitat during the active season; 3) grassy banks and openings in waterside vegetation for basking; and 4) higher elevation uplands for cover and refuge from flood waters during the snake's winter dormant season. Riparian woodlands do not typically provide suitable habitat because of extensive shade, lack of basking sites, and absence of prey populations. (USFWS 2012a).		
Birds						
Agelaius tricolor	Tricolored blackbird	--	T	Forages on ground in cropland, grassland, and on pond edges. Nests near freshwater, preferably in emergent marsh of dense cattails or tules, but also in thickets of willow, blackberry, and wild rose. Highly colonial, nesting area must be large enough to support a minimum colony of about 50 pairs (CWHR 2016). Conservation of nesting colonies are of concern to CDFW (CDFW 2017a).	A	There is not sufficient foraging or nesting habitat within the Project area.
Athene cunicularia	Burrowing owl	--	SSC	Forages day and night in open, dry grassland and desert habitats, and in grass, forb, and open shrub stages of pinyon-juniper and ponderosa pine habitats. Nests in old burrows of ground squirrels or other small mammals (CWHR 2016). Conservation of nesting habitat and some wintering habitat is of concern to CDFW (CDFW 2017a).	HP	See discussion.
Buteo swainsoni	Swainson's hawk	--	T	An uncommon breeding resident and migrant in CA in the Central Valley, Klamath Basin, Northeastern Plateau, Lassen Co., and Mojave Desert. Nests in open riparian habitat, in scattered trees or in small groves in sparsely vegetated flatlands. Forages in adjacent grasslands, grain or alfalfa fields, or livestock pastures. Feeds on rodents, mammals, reptiles, large arthropods, amphibians, small birds, and, rarely, fish (CWHR 2016). Conservation of	P	See discussion.

Scientific Name	Common Name	Federal Status [a]	State Status [a]	General Habitat Description	Habitat Determination [c]	Rationale
				nesting habitat is of concern to CDFW (CDFW 2017a).		
Charadrius montanus	Mountain plover	--	SSC	This species does not nest in California. It is a winter resident from September through March in the Central Valley from Sutter and Yuba cos. southward into Mexico below 3,200 feet. Also found in foothill valleys west of San Joaquin Valley, Imperial Valley, plowed fields of Los Angeles and western San Bernardino cos. Mountain plover forage in short and open grasslands, plowed fields with little vegetation, and open sagebrush areas (CWHR 2016). Conservation of wintering habitat is of concern to CDFW (CDFW 2017a).	A	The Project area is not within the wintering range of the mountain plover.
Haliaeetus leucocephalus	Bald eagle	D	E, FP	Occurs along coasts, rivers, and large, deep lakes and reservoirs in CA. Nests mostly in Butte, Lake, Lassen, Modoc, Plumas, Shasta, Siskiyou, and Trinity cos. More widespread as a winter migrant. Roosts communally in winter dense, sheltered, remote conifer stands. Requires large bodies of water, or free flowing rivers with abundant fish, and adjacent snags or other perches. Nests in large, old-growth, or dominant live tree with open branchwork, especially ponderosa pine. Usually does not begin nesting if human disturbance is present (CWHR 2016). Conservation of nesting and wintering habitat are of concern to CDFW (CDFW 2017a).	A	The Project area does not provide nesting or wintering habitat for this species.
Icteria virens	Yellow-breasted chat	--	SSC	Uncommon summer resident and migrant in coastal California and in the foothills of the Sierra Nevada. Found up to about 4,800 feet in valley foothill riparian, and up to 6,500 feet east of the Sierra Nevada in desert riparian habitats (CWHR 2016). Although still widely distributed, the yellow-breasted chat is now rare or absent as a breeder in much of the Central Valley and parts of the southern coastal slopes. They occupy early successional riparian habitats with a well-developed shrub layer	A	The Project area is not within the range of this species. There are no dense thickets of riparian shrubs/ vines in the Project area.

Scientific Name	Common Name	Federal Status [a]	State Status [a]	General Habitat Description	Habitat Determination [c]	Rationale
				and an open canopy. Vegetation structure, however, more than age appears to be the important factor in nest-site selection. Nesting habitat is usually restricted to the narrow border of streams, creeks, sloughs, and rivers and seldom forms extensive tracts. Blackberry, wild grape, willow, and other plants that form dense thickets and tangles are frequently selected as nesting strata. Taller trees such as cottonwood and alder are required for song perches (Shuford and Gardali 2008). Conservation of nesting habitat is of concern to CDFW (CDFW 2017a).		
Vireo bellii pusillus	Least Bell's vireo	E, CH	E	Inhabits willows and other low, dense, riparian habitat below approximately 2,000 feet. Currently known from canyons in San Benito and Monterey cos., coastal areas from Santa Barbara Co. south, and western edges of southern California deserts. Usually found near water or intermittent streams. Winters in Mexico from September to the end of March. Peak egg-laying May into early June (CWHR 2016 as Bell's vireo *Vireo bellii*). Conservation of nesting habitat is of concern to CDFW (CDFW 2017a).	A	The Project area is not within the range of the least Bell's vireo. The Project area is not located within critical habitat (USFWS 1994a).

Scientific Name	Common Name	Federal Status [a]	State Status [a]	General Habitat Description	Habitat Determination [c]	Rationale
Mammals						
Antrozous pallidus	Pallid bat	--	SSC	Locally common in low elevations, occupying a wide variety of habitats including grasslands, shrub lands, woodlands, and forests. A yearlong resident in most of CA feeding on a wide variety of insects and arachnids. Forages over open ground. Day roosts in caves, crevices, mines, and occasionally buildings and hollow trees. Prefers rocky outcrops, cliffs, and crevices with access to open foraging habitats (Bolster 1998, CWHR 2016).	HP	See discussion.
Corynorhinus townsendii	Townsend's big-eared bat	--	SSC	Found throughout CA in all but subalpine and alpine habitats, and may be found at any season throughout its range. Most abundant in mesic habitats. Requires caves, mines, tunnels, buildings, or other human-made structures for roosting. May use separate sites for night, day, hibernation, or maternity roosts. Hibernation sites are cold but not below freezing. Maternity roosts are warm. Gleans from brush or trees or feeds along habitat edges. Shows high site fidelity if undisturbed; extremely sensitive to disturbance of roosting sites (Bolster 1998, CWHR 2016).	A	There is no roosting habitat that is undisturbed in the Project area.
Eumops perotis californicus	Western mastiff bat	--	SSC	Uncommon resident in southeastern San Joaquin Valley and Coastal ranges from Monterey Co. south through southern CA. A colonial species that occurs in many open, semi-arid to arid habitats, including deciduous woodlands, annual and perennial grasslands and urban areas (CWHR 2016 as greater bonneted bat *Eumops perotis*). Also occurs in ponderosa pine and mid-elevation conifer belts. This species is primarily a crevice dwelling animal and occurs only where there are significant rock features offering suitable roosting habitat such as cliff faces, large boulders, and exfoliating granite, sandstone, or columnar basalt. Also roosts in buildings. Roosts are generally high above the	A	There is no roosting habitat higher than 10 feet above the ground in the Project area.

Scientific Name	Common Name	Federal Status [a]	State Status [a]	General Habitat Description	Habitat Determination [c]	Rationale
				ground, usually allowing a clear vertical drop of at least 10 feet below the entrance for flight (Bolster 1998).		
Lasiurus blossevillii	Western red bat	--	SSC	The western red bat is a tree bat closely associated with cottonwoods in riparian areas at elevations below 6,500 feet. They especially favor roosts where leaves form a dense canopy above and branches do not obstruct the bats' flyway below. Western red bats are also known to roost in orchards, especially in the Sacramento Valley. This species is solitary and comes together only to mate and to migrate. Western red bats typically feed along forest edges, in small clearings, or around street lights. It is not known exactly where they hibernate, though they may burrow into leaf litter or dense grass; they are known to move to milder coastal areas in the Pacific Northwest for hibernation (Bat Conservation International 2016).	HP	See discussion.
Vulpes macrotis mutica	San Joaquin kit fox (SJKF)	E	T	This species is found in grasslands, saltbush scrub, open woodlands, foothills, and alkaline sink valley floor habitats (USFWS 1998). SJKF use dens for temperature regulation, shelter from adverse weather and protection from predators. They may either dig their own dens, or use those constructed by other animals, or use human-made structures. Kit foxes often change dens and many dens may be used throughout the year (USFWS 2010a).	A	There is no grassland, saltbush scrub, open woodlands, foothills, or alkaline sink valley floor habitat in the Project area. There is no denning habitat in the Project area.
Plants			**/CNPS [b]**			
Atriplex cordulata var. *cordulata*	Heartscale	--	--/ 1B.2	Annual herb found in saline or alkaline conditions of chenopod scrub, meadows and seeps, and sandy valley and foothill grassland from 0 to 1,840 feet. Known from Alameda, Butte, Contra Costa, Colusa, Fresno, Glenn, Kern, Madera, Merced, San Joaquin, San Luis Obispo, Solano, Stanislaus, Tulare, and Yolo	A	There is no saline or alkaline chenopod scrub, meadow or seep, sandy valley or foothill grassland habitat in the Project

Scientific Name	Common Name	Federal Status [a]	State Status [a]	General Habitat Description	Habitat Determination [c]	Rationale
				cos. Likely extirpated from Stanislaus Co. Blooms April through October (CNPS 2017).		area. There is no habitat in the Project area.
Atriplex subtilis	Subtle orache	--	--/ 1B.2	An annual herb found in valley and foothill grassland from 131 to 328 feet. Known from Butte, Fresno, Kings, Kern, Madera, Merced, Stanislaus, and Tulare cos. Known in Stanislaus Co. from one record in 1936 mapped 10 mi south of Modesto along Hwy 99. No existing herbarium specimens are known from Stanislaus Co. Blooms June through October (CNPS 2017).	A	There is no valley or foothill grassland in the Project area. There is no habitat in the Project area.
Calycadenia hooveri	Hoover's calycadenia	--	--/ 1B.3	Annual herb found in rocky soils of cismontane woodland and valley and foothill grassland from 213 to 984 feet. Known from Calaveras, Madera, Merced, Mariposa, and Stanislaus cos. Blooms July through September (CNPS 2017).	A	There is no cismontane woodland and valley and foothill grassland in the Project area. There is no habitat in the Project area.
Castilleja campestris ssp. *succulenta*	Succulent (=fleshy) owl's clover	T, CH	E/ 1B.2	An annual hemiparasitic herb found in often acidic vernal pools from 164 to 2,460 feet. Known from Fresno, Madera, Merced, Mariposa, San Joaquin, and Stanislaus cos. Blooms April through May (CNPS 2017).	A	The Project area is not located within critical habitat (USFWS 2006). There are no vernal pools in the Project area. There is no habitat in the Project area.
Chamaesyce hooveri	Hoover's spurge	T, CH	--/ 1B.2	An annual herb found in vernal pools from 82 to 820 feet. Known from Butte, Colusa, Glenn, Merced, Stanislaus, Tehama, and Tulare cos. Blooms July through September, and uncommonly through October (CNPS 2017).	A	The Project area is not located within critical habitat (USFWS 2006). There are no vernal pools in the Project area. There is no habitat in the Project area.

Scientific Name	Common Name	Federal Status [a]	State Status [a]	General Habitat Description	Habitat Determination [c]	Rationale
Chlorogalum grandiflorum	Red Hills soaproot	--	/ 1B.2	Perennial bulbiferous herb found in serpentine, gabbroic, and other soils in chaparral, cismontane woodland, and lower montane coniferous forest from 800 to 4,070 feet. Known from Amador, Butte, Calaveras, El Dorado, Placer, and Tuolumne cos. Blooms May through June (Baldwin et al. 2012, CNPS 2017).	A	The Project area is outside and below the elevation range for this species.
Clarkia rostrata	beaked clarkia	--	--/ 1B.3	An annual herb found in cismontane woodland and valley foothill grassland from 200 to 1,640 feet. Known from Merced, Mariposa, Stanislaus, and Tuolumne cos. Blooms April through May (CNPS 2017).	A	There are no cismontane woodlands or valley foothill grasslands in the Project area. There is no habitat in the Project area.
Cryptantha hooveri	Hoover's cryptantha	--	--/ 1A	Annual herb found in inland dunes and sandy valley and foothill grasslands from 30 to 492 feet. Known from Contra Costa, Kern, Madera, and Stanislaus cos. Blooms April through May (CNPS 2017).	A	There are no inland dunes or sandy valley and foothill grasslands in the Project area. There is no habitat in the Project area.
Cryptantha mariposae	Mariposa cryptantha	--	--/ 1B.3	Annual herb found in serpentine, rocky chaparral from 650 to 2,130 feet. Known from Calaveras, Mariposa, Stanislaus, and Tuolumne cos. Blooms April through June (CNPS 2017).	A	The Project area is outside and below the elevation range for this species.
Delphinium hansenii spp. *ewanianum*	Ewan's larkspur	--	--/ 4.2	Perennial herb found in rocky soils in cismontane woodland and valley and foothill grassland from 197 to 1,970 feet. Known from Calaveras, Fresno, Kern, Madera, Merced, and Tulare cos. Blooms March through May (CNPS 2017).	A	There are no cismontane woodlands or valley foothill grasslands in the Project area. There is no habitat in the Project area.
Downingia pusilla	Dwarf downingia	--	--/ 2B.2	Annual herb found in mesic valley and foothill grassland and vernal pools from 3 to 1,450 feet. Known from Fresno, Merced, Napa, Placer, Sacramento, San Joaquin, Solano, Sonoma,	A	There are no mesic valley and foothill grassland or vernal pools in the Project

Scientific Name	Common Name	Federal Status [a]	State Status [a]	General Habitat Description	Habitat Determination [c]	Rationale
				Stanislaus, Tehama, and Yuba cos. Blooms March through May (CNPS 2017).		area. There is no habitat in the Project area.
Eryngium jepsonii	Jepson's coyote thistle	--	--/1B.2	Perennial herb found in valley and foothill grassland and vernal pools from 10 to 984 feet. Known from Alameda, Amador, Calaveras, Contra Costa, Fresno, Napa, San Mateo, Solano, Stanislaus, Tuolumne, and Yolo cos. Blooms April through August (CNPS 2017).	HP	See discussion.
Eryngium racemosum	Delta button-celery	--	E/ 1B.1	Annual to perennial herb found in vernally mesic, clay depressions in riparian scrub from 10 to 100 feet. Known from Calaveras, Contra Costa, Merced, San Joaquin, and Stanislaus cos. Blooms June through September (CNPS 2017).	A	There are no vernally mesic, clay depressions in the Project area. There is no habitat in the Project area.
Erythranthe marmorata	Stanislaus monkeyflower	--	--/1B.1	Annual herb found in cismontane woodland and lower montane coniferous forest from 325 to 2,955 feet. Known from Calaveras, and Fresno cos. Presumed extirpated from Amador, Stanislaus, and Tuolumne cos. Blooms Mar- May (CNPS 2017).	A	There is no cismontane woodland or lower montane coniferous forest in the Project area. There is no habitat in the Project area.
Euphorbia hooveri	Hoover's spurge	--	--/ 1B.2	Annual herb found in vernal pools at 82 to 820 feet. Known from Butte, Colusa, Glenn, Merced, Stanislaus, Tehama, and Tulare cos. Blooms from July to October (CNPS 2017).	A	There are no vernal pools in the Project area.
Frittilaria agrestis	Stinkbells	--	--/ 4.2	Perennial bulbiferous herb found in clay, sometimes serpentine soils in chaparral, cismontane woodland, pinyon and juniper woodland, and valley and foothill grassland from 328 to 5,100 feet. Known from Alameda, Contra Costa, Fresno, Kern, Mendocino, Merced, Monterey, Mariposa, Placer, Sacramento, Santa Barbara, San Benito, Santa Clara, Santa Cruz, San Luis Obispo, San Mateo, Stanislaus,	A	There is no chaparral, cismontane woodland, pinyon and juniper woodland, or valley and foothill grassland in the Project area. There is no habitat in the Project area.

Scientific Name	Common Name	Federal Status [a]	State Status [a]	General Habitat Description	Habitat Determination [c]	Rationale
				Tuolumne, Ventura, and Yuba cos. Blooms March through June (CNPS 2017).		
Juncus nodosus	Knotted rush	--	--/ 2B.3	Rhizomatous herb found in mesic meadows and seeps and lake margins of marshes and swamps from 98 to 6,494 feet. Known from Inyo, San Bernardino, Stanislaus, and Tulare cos, and elsewhere. Blooms July through September (CNPS 2017).	A	There are no mesic meadows or seeps, marshes, or swamps in the Project area. There is no habitat in the Project area.
Lagophylla dichotoma	Forked hare-leaf	--	--/ 1B.1	Annual herb found sometimes in clay soils of cismontane woodland and valley and foothill grasslands from 164 to 2,493 feet. Known from Butte, Calaveras, Fresno, Merced, Monterey, San Benito, and Stanislaus cos. Blooms April through September (CNPS 2017).	A	There are no cismontane woodlands or valley foothill grasslands in the Project area. There is no habitat in the Project area.
Lomatium congdonii	Congdon's lomatium	--	--/ 1B.2	Perennial herb found in serpentine soils of chaparral and cismontane woodland from 984 to 6,888 feet. Known from fewer than twenty occurrences in Calaveras, Mariposa, and Tuolumne cos. Blooms March through June (CNPS 2017).	A	The Project area is outside and below the elevation range for this species.
Monardella leucocephala	Merced monardella	--	--/ 1A	Annual herb found in sandy soils of valley and foothill grassland from 115 to 325 feet. Known from Merced and Stanislaus cos, but may be extirpated. Last seen in 1941. Blooms May through August (CNPS 2017).	A	There are no cismontane woodlands, or valley or foothill grasslands in the Project area. There is no habitat in the Project area.
Navarretia paradoxiclara	Patterson's navarretia	--	--/ 1B.3	Annual herb found in serpentinite substrates, openings, vernally mesic areas, often drainages, and meadows and seeps from 490 to 1410 feet. Known from Calaveras and Tuolumne cos. Blooms May through June or July (CNPS 2017).	A	The Project area is below the elevation range of this species. There are no serpentinite substrates in the Project area. There is

Scientific Name	Common Name	Federal Status [a]	State Status [a]	General Habitat Description	Habitat Determination [c]	Rationale
						no habitat in the Project area.
Neostapfia colusana	Colusa grass	T, CH	E/ 1B.1	An annual herb found in large, adobe vernal pools from 17 to 656 feet. Known from Glenn, Merced, Solano, Stanislaus, and Yolo cos. Extirpated from Colusa Co. Blooms May through August (CNPS 2017).	A	The Project area is not located within critical habitat (USFWS 2006). There are no large, adobe vernal pools in the Project area. There is no habitat in the Project area.
Orcuttia inaequalis	San Joaquin Valley Orcutt grass	T, CH	E/ 1B.1	Annual herb found in vernal pools from 30 to 2,475 feet. Known from Fresno, Madera, Merced, Solano, and Tulare cos. Presumed Extirpated in Stanislaus co. Blooms April through September (CNPS 2016). Members of the Orcuttieae tribe inhabitat large vernal pools or playas with inundation lasting until May or June, in areas of the pools where other plants are almost entirely absent. Nearly all occurrences of San Joaquin Valley Orcutt grass are on the east side of the San Joaquin Valley (USFWS 2006).	A	The Project area is not located within critical habitat (USFWS 2006). There are no vernal pools in the Project area. There is no habitat in the Project area.
Orcuttia pilosa	Hairy Orcutt grass	E, CH	E/ 1B.1	An annual herb found in vernal pools from 150 to 656 feet. Known from Butte, Glenn, Madera, Merced, Stanislaus, and Tehama cos. Blooms May through September (CNPS 2017).	A	The Project area is not located within critical habitat (USFWS 2006). There are no vernal pools in the Project area. There is no habitat in the Project area.
Pseudobahia bahiifolia	Hartweg's golden sunburst	E	E/ 1B.1	An annual shrub found in clay, often acidic, soil of cismontane woodland and valley and foothill grassland from 50 to 500 feet. Known from El Dorado, Fresno, Madera, Merced, Stanislaus, and Tuolumne cos. Extirpated from Yuba Co. Associated with Mima mound topography. Nearly	A	There are no Mima mounds or Mima mound topography in the Project area. There is no habitat in the Project area.

Scientific Name	Common Name	Federal Status [a]	State Status [a]	General Habitat Description	Habitat Determination [c]	Rationale
				always found on the north or northeast-facing slopes of mounds. Blooms March through April (USFWS 2008, CNPS 2017).		
Tuctoria greenei	Greene's tuctoria	E, CH	R/ 1B.1	An annual herb found in vernal pools from 100 to 3,510 feet. Known from Butte, Colusa, Glenn, Merced, Modoc, Shasta, and Tehama cos. Extirpated from Fresno, Madera, San Joaquin, Stanislaus, and Tulare cos. Blooms May through July and uncommonly through September (CNPS 2017).	A	The Project area is not located within critical habitat (USFWS 2006). There are no vernal pools in the Project area. There is no habitat in the Project area.
Verbena californica	Red Hills vervain	T	T/ 1B.1	Perennial herb found in cismontane woodland, and valley and foothill grassland in mesic, usually serpentinite seeps or creeks from 850 to 1,300 feet. Known only from the Red Hills in Tuolumne Co. Blooms May through September (Baldwin et al. 2012; CNPS 2017).	A	The Project area is outside and below the elevation range for this species.

[a] **Status**: Endangered (E); Threatened (T); Proposed (P); Candidate (C), Delisted (D), Fully Protected (FP); Rare (R); State Species of Special Concern (SSC); Proposed Critical Habitat (PCH); Critical Habitat (CH) – Critical habitat has been designated for this species.

[b] **CNPS Rare Plant Rank**: 1A = Presumed Extinct in CA; 1B = Rare or Endangered in CA and elsewhere; 2 = Rare or Endangered in CA and more common elsewhere; 3 = More information is needed about this plant species (review list); 4 = Limited distribution (watch list).

CNPS Decimal Extensions: .1 = Seriously endangered in California (over 80% of occurrences threatened / high degree and immediacy of threat); .2 = Fairly endangered in California (20-80% occurrences threatened); .3 = Not very endangered in California (<20% of occurrences threatened or no current threats known).

[c] **Habitat Determination**: Absent [A] = No habitat present and no further work needed. Habitat Present [HP] = Habitat is, or may be present. The species may be present. Present [P] = The species is present. Critical Habitat [CH] = The Project footprint is located within a designated critical habitat unit, but does not necessarily mean that appropriate habitat is present.

3.3.2 Environmental Impacts

3.3.2.1 Methods of Analysis

Direct and indirect impacts to biological resources were evaluated based on potential changes to existing biological resources resulting from proposed Project activities.

3.3.2.2 Thresholds of Significance

In accordance with Appendix G of the State CEQA Guidelines and professional judgment, the proposed Project would be considered to have a significant effect if it would result in any of the conditions listed below.

- 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?
- 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?
- Have a substantial adverse effect on state or federally protected wetlands, (including, but not limited to, marshes, vernal pools, coastal wetlands, etc.), through direct removal, filling, hydrological interruption, or other means.
- 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.
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?
- Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan.

3.3.2.3 Impacts and Mitigation Measures

Figure 3-3 shows Project impact areas in relation to biological resources in the study area. Impact findings, including significance and available mitigation, are discussed below.

Impact BIO-1: 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? (*less than significant with mitigation*).

Special-Status Wildlife Species: The Project area provides habitat for several special status wildlife species discussed below. There is no critical habitat in the Project area and the Project will not affect critical habitat. The Project will not result in the 'take' of state-listed species or species proposed for listing.

Valley Elderberry Longhorn Beetle (VELB, *Desmocerus californicus dimorphus*): The Project area occurs within the range of VELB. During the field survey on 21 May 2014, 25 elderberry shrubs with

stems measuring 1 inch or greater in diameter at ground level were mapped in the project area. All elderberry shrubs occur in riparian valley oak woodland habitat on the south bank of Dry Creek, within 50 feet of the creek. Elderberry shrub stems were searched for potential VELB exit holes. No VELB or VELB exit holes were observed on any of the elderberry shrubs. All elderberry shrubs recorded had stems between 1- and 3-inches diameter at ground level.

The 25 elderberry shrubs in the project area show no sign of VELB occupancy. The shrubs occur in a small (±50-70 feet wide) band of riparian corridor along Dry Creek. The riparian corridor along Dry Creek is discontinuous and often absent. The riparian corridor in the Project area is not contiguous with any VELB record or known population. No VELB records are known from along Dry Creek or in the Dry Creek watershed. The elderberry shrubs in the Project area are unlikely to be occupied by VELB based on shrub size, lack of exit holes, and context (both in terms of known records and riparian corridor extent and connectivity).

The elderberry shrubs in the Project area cannot be avoided. The Project will remove the 25 riparian elderberry shrubs growing on the south bank of Dry Creek in valley oak woodland in the project area. A total of 0.50 ac of riparian valley oak woodland with the elderberry shrubs will be disturbed. Regardless whether exit holes occur, the USFWS (2017) considers elderberry shrubs growing in riparian habitat within the current or historic range of VELB to be 'suitable habitat, likely occupied.' The Project is not in or near designated critical habitat. The Project will have no effect on designated critical habitat for VELB. Per the 10 May 2018 approved USFWS Biological Opinion the purchase of VELB credits from a USFWS-approved bank will compensate for impacts to 25 elderberry shrubs with no sign of occupancy. Implementation of measure BIO-1 will reduce project impacts to less than significant for VELB.

Measure BIO-1 (Valley elderberry longhorn beetle)

- *To compensate for impacts to VELB, the USFWS (2017) Framework for Assessing Impacts to the Valley Elderberry Longhorn Beetle (VELB Framework) recommends a compensation ratio of 3:1 when proposing habitat-level compensation for riparian habitats. The purchase of 37 VELB credits from a USFWS-approved bank is proposed as compensation for impacts to 0.05 ac of riparian habitat (see table below).*

Summary Table of VELB Mitigation Compensation

Habitat Type	***Compensation Ratio [1]***	***Total Acres of Disturbance***	***Compensation Acreage***	***VELB Credit Compensation [2]***
Riparian	*3:1*	*0.05*	*1.5*	*37 credits*

- *Riparian vegetation will be avoided and preserved to the maximum extent practicable.*
- *Environmentally Sensitive Areas (ESAs) will be established along the limits of construction to exclude construction activities from avoided habitat. Trucks and other vehicles shall not be allowed to park in, nor shall equipment be stored in, an ESA. No storage or dumping of oil, gasoline, or other substances shall be permitted within an ESA. All ESAs will be clearly delimited with yellow caution tape or temporary fencing prior to commencement of construction activities. ESAs will be protected as specified in Section 13-4 "Water Pollution Control, Job Site Management" and in Section 14 "Environmental Stewardship" and specifically in Section 16-2.03 "Temporary Facilities, Miscellaneous Temporary Facilities, High Visibility Fences" of the Caltrans 2015 Standard Specifications and the contract Special Provisions.*
- *Valley oaks removed by construction will be replaced on-site at a ratio of 2:1 (two re-established for each removed) in accordance with the Oak Woodland Management Plan that is Appendix F to the Project Natural Environment Study (NES).*

- *Signs will be installed along the edge of the ESA and will read the following: "This area is habitat of the beetle, a threatened species, and must not be disturbed. This species is protected by the Endangered Species Act of 1973, as amended. Violators are subject to prosecution, fines, and imprisonment." The signs should be clearly readable from a distance of 20 feet and must be maintained for the duration of construction.*
- *All temporarily disturbed areas will be restored to approximate pre-construction contours and revegetated, either through hydroseeding or other means, with native species.*
- *To prevent fugitive dust from drifting into adjacent habitat, all clearing, grubbing, scraping, excavation, land leveling, grading, cut and fill, demolition activities, or other dust generating activities will be effectively controlled for fugitive dust emissions utilizing application of water or by presoaking.*
- *Prior to the start of construction, a qualified biologist will survey for elderberry shrubs within 165 feet of the Project disturbance area. If the survey documents any shrubs with stem diameter greater than 1 inch that were not identified during the surveys for the February 2018 BA, Caltrans will contact the Service. The Service and Caltrans will work to determine a way to proceed without take or Caltrans will reinitiate consultation with the Service to update the BO to obtain an Incidental Take Statement that includes any additional take that may occur.*
- *All construction personnel will attend environmental awareness training. During the environmental awareness training, construction personnel will be briefed on the status of the beetle, the need to avoid damage to the elderberry host plant, and the possible penalties for not complying with these requirements.*
- *Herbicides will not be used within the drip-line of the shrub. Insecticides will not be used within 30 meters (98 feet) of an elderberry shrub. All chemicals will be applied using a backpack sprayer or a similar direct application method.*

Steelhead – California Central Valley (CCV) DPS (*Oncorhynchus mykiss*): CCV steelhead were not observed in Dry Creek during biological surveys of the Project area. There are no known records of CCV steelhead in Dry Creek. The portion of Dry Creek in the Project area is low-gradient and consists of slow-moving water, muddy pools with a bed of silty to sandy sediments. The portion of Dry Creek in the Project area does not provide suitable spawning habitat. Dry Creek does not appear to flow continuously in the spring, isolating any fish present in stagnant pools. During the winter and spring, Dry Creek appears to flow only after large precipitation events. During the summer and fall, Dry Creek flows more consistently due to large inputs of warm irrigation runoff. The Project area is not in designated critical habitat for CCV steelhead (NMFS 2005). The limited natural flow, altered hydrology, irrigation runoff, and warm temperatures preclude use of Dry Creek by steelhead. No impact will occur and no mitigation is needed.

Western Pond Turtle (WPT; *Emys marmorata*): Dry Creek in the Project area provides habitat for WPT. WPT were not observed in the Project area during the biological surveys. Implementation of BIO-2 will reduce potential impacts to less than significant.

Measure BIO-2 (*Western Pond Turtle; WPT*)

- *A qualified biologist shall conduct a preconstruction survey for WPT within 48 hours prior to the onset of vegetation removal or ground disturbance in the Project area. If any WPT are found, construction activities will stop to allow the biologist sufficient time to relocate the WPT. WPT will be relocated to the closest suitable habitat where they will not be affected by construction. Detailed records of individuals that are relocated should be maintained by the qualified biologist to determine whether*

translocated individuals are returning to the Project area. These records should include size, coloration, any distinguishing features, and photographs.

- *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 WPT. Construction personnel should also be informed that if a WPT is encountered in the work area, construction should stop and a qualified biologist will be notified. Construction will resume when the biologist has either relocated the WPT out of the construction zone to nearby suitable habitat, or, after thorough inspection, determined that the WPT has moved away from the construction zone. The crew foreman will be responsible for ensuring that crew members adhere to the guidelines and restrictions. 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.*

Migratory Birds and Birds of Prey: The project area provides potential nesting habitat for birds of prey and birds listed by the Migratory Bird Treaty Act (MBTA). Active swallow nests were observed on the concrete under the bridge during the general biological surveys. With implementation of BIO-3 Project impacts are less than significant.

Measure BIO-3: Birds of Prey and Migratory Birds

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 15 February to 31 August. Measures to prevent swallow nest establishment will also prevent nest establishment of other birds that may nest underneath the bridge.

Swallow

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. Black phoebes, another bridge-nesting species, nest from March to August with peak activity in May. Measures should be taken to prevent establishment of nests on the bridge 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 31 August breeding season, there will be no need to conduct a preconstruction survey for active nests.*
- *Vegetation scheduled for removal should be removed during the non-breeding season from 1 September to 14 February. Vegetation may 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 31 August, a biologist shall conduct a survey for active Swainson's hawk nests within 600 feet, active bird of prey nests within 300 feet, and active MBTA bird nests within 100 feet of the Project area from accessible areas within one week 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.*

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 300-foot radius of the discovery.*
    2. *Notify the Engineer.*
    3. *Do not resume work within the specified radius of the discovery until authorized.*
- *The biologist shall establish a minimum 600-foot Environmentally Sensitive Area (ESA) around the nest if the nest is of a Swainson's hawk, a minimum 300-foot ESA if the nest is of a bird of prey, and a minimum 100-foot ESA around the nest if the nest is of an MBTA bird other than a bird of prey.*

Species Protection Areas

Identification	Location
Swainson's hawk	600-foot no-disturbance buffer
Bird of prey	300-foot no-disturbance buffer
MBTA protected bird (not bird of prey)	100-foot 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 60 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, in consultation with CDFW, 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 31 August, 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.*

Burrowing Owl (*Athene cunicularia*): The project area provides potential habitat for burrowing owls. Burrowing owls were not observed during the biological surveys in the project area. Removal or abandonment of an active nest due to construction would be a significant impact. Implementation of BIO-4 will reduce potential impacts to less than significant. Implementation of BIO-3 will also reduce potential impacts.

Measure BIO-4: **Burrowing Owl**

- *During the burrowing owl non-breeding season (1 September to 31 January) of the winter prior to construction, it is recommended that a biologist survey the Project area for wintering burrowing owls or potential denning habitat. If wintering burrowing owls are found in the Project area, they should be passively excluded in accordance with the DFG 2012 Staff Report, prior to the start of the nesting season. If unoccupied burrows suitable for burrowing owl are found, the burrows should be collapsed. The Project area should be maintained free of burrows until construction commences to avoid the potential for a nesting burrowing owl in the Project area.*

Swainson's Hawk (*Buteo swainsoni*): The project area provides potential foraging and nesting habitat for this species. A Swainson's hawk was observed flying over the Project area during the May 2014 biological survey. Implementation of BIO-3 will reduce potential Project impacts are less than significant.

Pallid Bat (*Antrozous pallidus*): The project area provides potential habitat for pallid bats. No pallid bats were observed in the Project area during the biological surveys. Implementation of BIO-5 will reduce potential Project impacts are less than significant.

Measure BIO-5: Pallid Bat

- *A preconstruction survey will be performed by a qualified biologist to determine if bat species are roosting on the underside of the bridge. If bats are roosting on the bridge, exclusion of these bats shall take place prior to construction. The survey and exclusion, if necessary, will be performed prior to April 1, before the bats have given birth. Exclusionary devices should remain on the bridge until demolition of the bridge, or until exclusionary netting for bridge-nesting bird species are installed.*
- *An additional survey will be conducted two weeks before construction activities to determine if bat species are still roosting on the bridge. If roosting is occurring, the county will contact CDFW for additional guidance on bat avoidance and impact minimization during construction activities.*

Western Red Bat (*Lasiurus blossevillii*): The orchards within the project area were planted between May 2014 and January 2015, and are not large enough to provide habitat for western red bats. The hollows and foliage of mature valley oak and black walnut trees along Dry Creek may provide suitable roosting habitat for western red bat. No western red bats were observed in the Project area during the biological survey. Implementation of BIO-6 will reduce potential impacts to less than significant.

Measure BIO-6: Western Red Bat

- *All potential roost trees (i.e., 20-inch diameter breast height (DBH) or greater), including snags, shall be removed from the project site between September 1 and October 31, which is outside of the bat breeding and hibernation season and when western red bat densities in the Central Valley are lowest. Removal of trees during this period will reduce impacts to any bats or their young occurring on the project site during the breeding season or during winter hibernation.*
- *To identify the presence of potential resident western red bats, potential roost trees within the project area shall be surveyed by a qualified biologist within 15 days prior to removal to determine if bats are present or if any trees can be excluded as suitable bat roosts due to the lack of suitable structural characteristics. The survey method shall include visual verification to identify guano and other evidence of bat presence. If it is determined that bats are not using the trees, or the trees can be excluded as bat roosts, removal of these trees would not be subject to the seasonal restrictions.*
- *If a potential roost is identified, methods to evict the bats shall consist of the following:*

- *Ultrasound deterrents or other sensory irritants may be set up to encourage bats to depart from the site on their own. Deterrents shall be set up late in the day or in the evening during weather and temperature conditions conducive to bat activity to reduce the likelihood of evicted bats falling prey to diurnal predators.*
- *Prior to tree removal, confirmed roost trees would be shaken, repeatedly struck with a heavy implement such as an ax and several minutes should pass before felling trees to allow bats time to arouse and leave the tree.*

Special-Status Plant Species: The project area provides suitable habitat for Jepson's Coyote Thistle (*Eryngium jepsonii*) a special-status plant ranked by the California Native Plant Society (CNPS). Jepson's coyote thistle was not observed during the floristic botanical survey conducted in May 2014, during the evident and identifiable period. No impact will occur and no mitigation is needed.

Impact BIO-2: Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by CDFW or USFWS (less than significant with mitigation).

Valley oak woodland and Dry Creek are sensitive natural communities in the Project area and are listed in Table 3-4. Potential impacts to valley oak woodland are discussed here. Impacts to the Dry Creek are discussed under Impact BIO-3 below.

Table 3-4. Land Cover Acreages and Anticipated Project Impacts

Land Cover Type	Acreage	Temporary Impact (ac)	Permanent Impact (ac)	Total Impact (ac)
Valley Oak Woodland	1.477	0.775	0.071	0.846
Dry Creek	1.073	0.535	0.014	0.549
Agriculture	5.651	4.347	0.062	4.409
Orchards	4.277	1.336	0.322	1.658
Other Features				
Ruderal[1]	1.572	--	--	
Disturbed Areas/Roads[1]	1.345	--	--	
Structure[1]	0.122	--	--	
Total:	**15.517**	**6.993**	**0.469**	**7.462**

[1] Developed area, no impacts are calculated.

Valley Oak Woodland/ Trees: Approximately 1.477 ac of valley oak woodland occur along Dry Creek in the Project area. Valley oak woodland is considered highly imperiled by CDFW, with a state rank of S3. The valley oak woodland in the project area is a riparian community protected by California Fish and Game Code Section 1600. The Stanislaus County General Plan (2015) Open Space and Conservation Element calls for all discretionary projects with potential impacts to oak woodlands to have an oak woodland management plan.

During the biological survey conducted on 21 May 2014, a total of 68 trees with a diameter at breast height (dbh) greater than 5 inches were recorded in the Project area. Fifteen of those trees were native valley oaks, 41 were Northern California black walnut, six were domestic almond, two were native sandbar willow, two were nonnative olive, one was a nonnative common fig, and one was a gray pine.

Cal-IPC rates common fig as a 'moderate' invasive species, and olive as a 'limited' invasive species (Cal-IPC 2016).

The Project will result in the permanent loss of 0.071 ac of the valley oak woodland. A total of 0.775 ac of the valley oak woodland will be temporarily disturbed. The Project will remove and estimated 13 Northern California black walnut trees, eight valley oaks, and one almond that occur within the Project's impact area. The final tree removal determination will be made by the Stanislaus County Public Works Department. The Stanislaus County General Plan requires all discretionary projects that impact valley oak woodlands to prepare an oak management plan. Implementation of BIO-7 will reduce potential impacts to less than significant.

Measure BIO-7: **Valley Oak Woodland/ Trees**

- *Tree removal will be minimized to the extent possible.*
- *To minimize impacts to valley oak woodland not scheduled for removal, the limits of construction will be fenced by the County or Contractor to minimize impacts on retained trees.*
- *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.*
- *The construction contract will require implementation of Appendix G (Oak Woodland Management Plan) of the approved 2017 NES. The Oak Woodland Management Plan describes the approach for managing the valley oak (Quercus lobata) trees that will be impacted by the replacement of Tim Bell Road Bridge (38C-0073) over Dry Creek. This Oak Woodland Management Plan describes goals, methods of implementation, and monitoring requirements in accordance with guidance provided by University of California Oak Woodland Conservation Workgroup.*

Impact BIO-3: Have a substantial adverse effect on state or federally protected wetlands, (including, but not limited to, marshes, vernal pools, coastal wetlands, etc.), through direct removal, filling, hydrological interruption, or other means. (*less than significant with mitigation*).

Dry Creek is a natural community of special concern because it is a potential waters of the U.S. Dry Creek in the Project area is an intermittent channel that flows southwest under the Tim Bell Road Bridge. Approximately 1.073 ac of Dry Creek occurs in the Project area. No other waters or wetlands occur in the Project area.

The Project will result in 0.535 ac of temporary impacts and 0.014 ac of permanent impacts to Dry Creek. The temporary impacts consist of the installation of four 5-pile bents that support the work trestle. The piles would be vibrated into place using a vibratory hammer. The permanent impacts consist of the installation of rock slope protection (RSP) at the bents on either side of the bridge structure to stabilize the creek bed and prevent scour. Implementation of BIO-8 will reduce potential impacts to less than significant.

Measure BIO-8: **Dry Creek**

- *During construction, water quality will be protected by implementation of BMPs consistent with the current edition of the Caltrans Stormwater Quality Handbooks to minimize the potential for siltation and downstream sedimentation of Dry Creek.*
- *Riparian vegetation will be avoided and preserved to the maximum extent practicable. The limits of vegetation removal will be marked with temporary fencing or flagging.*

- *Equipment will be refueled and serviced at designated construction staging areas. All construction material will be stored and contained in a designated area that is located away from channels to prevent transport of materials into the adjacent Dry Creek. The preferred distance is a minimum 100 feet from riparian habitat or water bodies. Construction vehicles and equipment will be maintained to prevent contamination of soil and water from external grease and oil and from leaking hydraulic fluid, fuel, oil, and grease.*
- *Any temporary diversion structure will be designed so that fish passage is maintained through the Project area. The diversion will not create an impassible barrier to fish passage. The contractor will prepare a creek dewatering plan that complies with any applicable permit conditions. Water diversion in Dry Creek will be conducted in accordance with the Stanislaus County Stormwater Management Plan (SWMP; Revised 18 May 2004).*
- *If pumps are used to temporarily divert or dewater a stream to facilitate construction, an acceptable fish screen must be used to prevent entrainment or impingement of small fish. Potential contact between fish and pump will be minimized and/or avoided by constructing an open basin prior to commencing dewatering. The open basin will be inspected for fish, which will be salvaged and placed in the active flow of Dry Creek adjacent to the work zone by a qualified biologist.*
- *All disturbed soils in the Project area will undergo erosion control treatment prior to October 15 and/or immediately after construction is terminated at the completion of the Project. Treatment includes seeding and the application of sterile straw mulch. Any disturbed soils on a gradient greater than 30 percent will have erosion control blankets installed. Areas temporarily disturbed on the banks of Dry Creek in the Project area will be seeded with native herbaceous plant species in accordance with Appendix F (Revegetation Planting and Erosion Control Specifications) on the approved 2017 NES.*

Impact BIO-4: Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites (*less than significant*).

The Project occurs in a rural portion of eastern Stanislaus County with adjacent agricultural land uses. 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. The lack of dense nearby development provides ample space for both diurnal and nocturnal 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 bridge and would not significantly affect vegetation corridors and existing upland wildlife passage beneath the bridge.

Impact BIO-5: Conflict with any local policies or ordinances protecting biological resources, such as the County General Plan oak canopy retention standards (*no impact*).

The Project does not conflict with any local policies or ordinances protecting biological resources. The Stanislaus County General Plan (2015) Open Space and Conservation Element calls for all discretionary projects with potential impacts to have an oak woodland management plan. Measure BIO-7 includes implementation of Appendix G (Oak Woodland Management Plan) of the approved 2017 NES. The Oak Woodland Management Plan describes the approach for managing the valley oak trees that will be impacted by the replacement of Tim Bell Road Bridge (38C-0073) over Dry Creek. The Oak Woodland Management Plan describes goals, methods of implementation, and monitoring requirements in accordance with guidance provided by University of California Oak Woodland Conservation Workgroup.

Impact BIO-6: Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan (*no impact*).

The Project is not located in an area covered by a habitat or natural community conservation plan.

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3.4 Cultural Resources

This section identifies the regulatory and environmental setting for cultural resources. For the purposes of this section, *cultural resources* consist of historic-period and prehistoric archaeological sites, and built environment resources.

Archaeological resources consist of the physical remains of past human activity that have been preserved in the ground but no longer take the form of a standing structure (e.g., a house or building) and can date to the prehistoric or historic period. *Built environment resources* consist of extant buildings, structures, objects, sites, or districts.

3.4.1 Existing Conditions

3.4.1.1 Regulatory Setting

Federal

National Historic Preservation Act

Archaeological and built environment resources (buildings and structures) are protected through the NHPA of 1966, as amended (54 USC 300101 et seq.) and its implementing regulations: Protection of Historic Properties (36 CFR Section 800).

Prior to implementing an *undertaking* (e.g., issuing a federal permit), federal agencies (e.g., USACE) are required by Section 106 of the NHPA to consider the effects of the undertaking on historic properties and to afford the Advisory Council on Historic Preservation (ACHP and the State Historic Preservation Officer (SHPO) a reasonable opportunity to comment on any undertaking that would adversely affect properties eligible for listing in the NRHP. NHPA Section 101(d)(6)(A) allows properties of traditional religious and cultural importance to a tribe to be determined eligible for inclusion in the NRHP. Under the NHPA, a find is significant if it meets the NRHP listing criteria under 36 CFR Part 60.4, as stated below.

> The quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association and:
>
> a) that are associated with events that have made a significant contribution to the broad patterns of our history, or
>
> b) that are associated with the lives of persons significant in our past, or
>
> c) that embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction, or
>
> d) that have yielded, or may be likely to yield, information important in prehistory or history.

Federal review of projects is normally referred to as the Section 106 process. The Section 106 process involves step-by-step procedures that are described in detail in the implementing regulations (36 CFR Section 800) and summarized here.

- Establish a federal undertaking.
- Delineate the Area of Potential Effects (APE).

- Identify and evaluate historic properties in consultation with the SHPO and interested parties.
- Assess the effects of the undertaking on properties that are eligible for inclusion in the NRHP.
- Consult with the SHPO, other agencies, and interested parties to develop an agreement that addresses the treatment of historic properties and notify ACHP.
- Proceed with the project according to the conditions of the agreement.

The proposed Project would use federal HBP funds from the FHWA and is subject to Section 106 of NHPA as described above.

State

The State of California implements the NHPA through its statewide comprehensive cultural resource preservation programs. The California Office of Historic Preservation (OHP), an office of the California Department of Parks and Recreation, implements the policies of the NHPA on a statewide level. The OHP also maintains the California Historical Resources Inventory. The State Historic Preservation Officer (SHPO) is an appointed official who implements historic preservation programs within the state's jurisdiction.

California Environmental Quality Act

CEQA, as codified in PRC Sections 21000 et seq. and implemented via the State CEQA Guidelines (14 CCR Section 15000 et seq.), is the principal statute governing the environmental review of projects in the state. To be considered a historical resource, a resource must be at least 50 years old. In addition, the State CEQA Guidelines define a *historical resource* as listed below.

a. A resource listed in the California Register of Historical Resources (CRHR).

b. A resource included in a local register of historical resources, as defined in PRC Section 5020.1(k) or identified as significant in a historical resource survey meeting the requirements of PRC Section 5024.1(g).

c. Any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California, provided the lead agency's determination is supported by substantial evidence in light of the whole record. The CRHR is "an authoritative listing and guide to be used by state and local agencies, private groups, and citizens in identifying the existing historical resources of the state and to indicate which resources deserve to be protected, to the extent prudent and feasible, from substantial adverse change" (PRC Section 5024.1[a]). The CRHR criteria are based on NRHP criteria (PRC Section 5024.1[b]). Certain resources are determined by CEQA to be automatically included in the CRHR, including California properties formally eligible for or listed in the NRHP. To be eligible for listing in the CRHR as a historical resource, a prehistoric or historic-period resource must be significant at the local, state, and/or federal level under one or more of the following criteria.

    1) Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.

    2) Is associated with the lives of persons important in our past.

    3) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or,

4) Has yielded, or may be likely to yield, information important in prehistory or history [14 CCR Section 4852(b)].

For a resource to be eligible for the CRHR, it must also retain enough integrity to be recognizable as a historical resource and to convey its significance. A resource that does not retain sufficient integrity to meet the NRHP criteria may still be eligible for listing in the CRHR.

CEQA requires lead agencies to determine if a proposed project would have a significant effect on important historical resources or unique archaeological resources. If a lead agency determines that an archaeological site is a historical resource, the provisions of PRC Section 21084.1 and State CEQA Guidelines Section 15064.5 would apply. If an archaeological site does not meet the State CEQA Guidelines criteria for a historical resource, then the site may meet the threshold of PRC Section 21083.2 regarding unique archaeological resources. A *unique archaeological resource* is an archaeological artifact, object, or site that meets any of the following criteria.

- Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.
- Has a special and particular quality such as being the oldest of its type or the best available example of its type.
- Is directly associated with a scientifically recognized important prehistoric or historic event or person (PRC Section 21083.2[g]).

The State CEQA Guidelines note that if a resource is neither a unique archaeological resource nor a historical resource, the effects of the project on that resource shall not be considered a significant effect on the environment (14 CCR Section 15064[c][4]).

Madera Oversight Coalition, Inc. v. County of Madera and Tesoro Viejo, Inc. (2011)

In the past, it was common practice for many CEQA practitioners to provide performance-based mitigation for cultural resources, stipulating that further evaluation and treatment of resources would be performed in the future. The 2011 decision from the *Madera Oversight Coalition, Inc. v. County of Madera and Tesoro Viejo, Inc.* (2011 [199 Cal. App.4th 48, 81]) case determined this practice to be unacceptable under CEQA and required evaluation of cultural resources subject to CEQA to be performed at a level sufficient to characterize the resources prior to EIR certification, instead of waiting until preconstruction or construction stages of a project. Additionally, the case determined that if preservation of the resource in the place it is located, the preferred mitigation under CEQA (14 CCR Section 15126.4[b][3]) is not employed, the EIR should disclose why that is not feasible. Cultural resources evaluations in this EIR have been completed consistent with the *Madera Oversight* decision.

Discovery of Human Remains

Section 7050.5 of the California Health and Safety Code states the following.

(a) Every person who knowingly mutilates or disinters, wantonly disturbs, or willfully removes any human remains in or from any location other than a dedicated cemetery without authority of law is guilty of a misdemeanor, except as provided in Section 5097.99 of the [California Public Resources Code (CPRC)]. The provisions of this subdivision shall not apply to any person carrying out an agreement developed pursuant to subdivision (l) of Section 5097.94 of the [CPRC] or to any person authorized to implement Section 5097.98 of the [CPRC].

(b) In the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby

area reasonably suspected to overlie adjacent remains until the coroner of the county in which the human remains are discovered has determined, in accordance with Chapter 10 (commencing with Section 27460) of Part 3 of Division 2 of Title 3 of the [California] Government Code [CGC], that the remains are not subject to the provisions of Section 27491 of the [CGC] or any other related provisions of law concerning investigation of the circumstances, manner and cause of any death, and the recommendations concerning the treatment and disposition of the human remains have been made to the person responsible for the excavation, or to his or her authorized representative, in the manner provided in Section 5097.98 of the [CPRC]. The coroner shall make his or her determination within two working days from the time the person responsible for the excavation, or his or her authorized representative, notifies the coroner of the discovery or recognition of the human remains.

(c) If the coroner determines that the remains are not subject to his or her authority and if the coroner recognizes the human remains to be those of a Native American, or has reason to believe that they are those of a Native American, he or she shall contact, by telephone within 24 hours, the [Native American Heritage Commission (NAHC)] (California Health and Safety Code Section 7050.5).

Of particular note to cultural resources is subsection (c), requiring the coroner to contact the NAHC within 24 hours if discovered human remains are determined to be Native American in origin. After notification, the NAHC will follow the procedures outlined in PRC Section 5097.98, which include notification of the most likely descendant (MLD), if possible, and recommendations for treatment of the remains. The MLD will have 24 hours after notification by the NAHC to make recommendations (PRC Section 5097.98). In addition, knowing or willful possession of Native American human remains or artifacts taken from a grave or cairn is a felony under State law (PRC Section 5097.99).

Local

Stanislaus County General Plan

The following goals, policies, and implementation measures from Conservation/Open Space Element of the County's General Plan, Conservation/Open Space Element are related to cultural resources (Stanislaus County 2015a).

- **Goal Eight** – Preserve areas of national, state and regional and local historical importance.
    - **Policy Twenty-Four** – The County will support the preservation of Stanislaus County's cultural legacy of historical and archaeological resources for future generations.
        - **Implementation Measure 3** – The County shall work with the County Historical Society, and other organizations and interested individuals to study, identify and inventory archaeological resources and historical sites, structures, buildings and objects.
        - **Implementation Measure 4** – The County will cooperate with the State Historic Preservation Officer to identify and nominate historical structures, objects, buildings and sites for inclusion under the Historic Preservation Act.
        - **Implementation Measure 5** – The County shall utilize the CEQA process to protect archaeological or historic resources. Most discretionary projects require review for compliance with CEQA. As part of this review, potential impacts must be identified and mitigated.

- **Implementation Measure 6** – The County shall make referrals to the Office of Historic Preservation and the Central California Information Center as required to meet CEQA requirements.

- **Policy Twenty-Five** – "Qualified Historical Buildings" as defined by the State Building Code shall be preserved.
  - **Implementation Measure 1** – Whenever possible, the County Building Inspection Division shall utilize the provisions of the State Building Code that allow historical buildings to be restored without damaging the historical character of the building.

3.4.1.2 Environmental Setting

The following information has been summarized from the following documents:

- Archaeological Survey Report for the Tim Bell Road Bridge Over Dry Creek Replacement Project (Far Western 2019)
- Historical Resource Evaluation Report Tim Bell Road Bridge Over Dry Creek Replacement Project (JRP 2019)
- Results of Extended Phase I Excavation for the Tim Bell Road Bridge over Dry Creek Replacement Project (Far Western 2020)
- Finding of Adverse Effect, Tim Bell Road Over Dry Creek Bridge Replacement Project (JRP 2020a)
- Historic Property Survey Report, Tim Bell Road Over Dry Creek Bridge Replacement Project (JRP 2020b)

Archeological Resources: In 2017, Far Western Anthropological Research Group, Inc., (Far Western) conducted an archaeological inventory, which included a review of background information relevant to the project area, a records search, Native American outreach, a buried site sensitivity assessment, and a pedestrian survey of the area of potential effect (APE). No resources were identified in the Native American Heritage Commission's Sacred Land Files, nor were any specific concerns raised by any Native American parties. Three previously recorded historic-era resources were identified in the APE based on the records search: an irrigation ditch; the Road to Ford; and Tim Bell Road Bridge. Far Western did not identify any additional archaeological resources in the APE. Based on the buried site sensitivity assessment, Far Western recommended Extended Phase I (XPI) subsurface testing.

Far Western conducted XPI fieldwork in the APE on 29 August 2019. The goal of the study was to determine the presence or absence of buried archaeological resources in areas where deep and/or extensive project ground disturbance will occur within areas of Moderate or Highest potential for buried archaeological resources. Far Western excavated six trenches, placed as close as feasible to Project impacts in sensitive areas. No archaeological materials or laterally extensive, intact buried soils with archaeological potential, were identified during this study. Based on these negative results as well as stratigraphic observations and overall trench coverage, the probability of encountering buried archaeological resources in the tested portion of the APE, and where deep Project-related ground disturbance will occur, is low.

An initial request for a search of the Sacred Lands file and a list of interested individuals was sent to the Native American Heritage Commission in 2013. The Commission responded on November 14, 2013. No sacred sites were identified. The Commission provided a list of Native American interested parties.

Letters were sent to each, soliciting their comments, on November 21, 2013. The Tuolumne Band of Me-wuk responded with a letter stating that they had no concerns about the Project. No additional follow-up was conducted at the time, as the cultural resources study was postponed.

A request for an updated search of the Sacred Lands file and list of interested individuals was sent to the Commission in 2017. The Commission response dated March 24, 2017, again reported that no sacred sites were identified. A letter was sent to all listed parties on April 6, 2017. Far Western conducted follow-up phone calls on April 20 and 27, 2017, with some additional follow-up emails conducted on May 8, 2017. If contacts were not available by phone, voice messages were left or emails were sent. Only one response has been received to date. In a phone call on April 20, 2017, Mr. Tiger Paulk of the California Valley Miwok Tribe stated that the tribe would like to be notified if any Native American archaeological finds are made during the Project.

Built Environment Resources: The APE includes two built environment properties. Tim Bell Road Bridge (No. 38C0073), was previously determined eligible for listing in the NRHP. The property at 4331 Tim Bell Road (APN 008-001-036) required evaluation for this Project and does not meet the criteria for listing in the NRHP. A full evaluation of the property at 4331 Tim Bell Road under NRHP / CRHR is included in the Project HRER (JRP 2019). In accordance with Section 15064.5(a)(2)-(3(C)) of the CEQA Guidelines, using the criteria outlined in Section 5024.1 of the California Public Resources Code, Tim Bell Road Bridge is listed in the CRHR and is a historical resource for the purposes of CEQA, and the property at 4331 Tim Bell Road is not a historical resource for the purposes of CEQA.

The Tim Bell Road Bridge over Dry Creek is the sole historic property in the APE. The bridge was found eligible for listing in the NRHP as part of the Bridge Inventory conducted by Caltrans during the 1980s. It was determined eligible under CRHR Criterion C as embodying distinctive characteristics of type, period, and method of construction. Built in 1925, the Tim Bell Road Bridge is significant for illustrating the inventiveness with which California engineers utilized reinforced concrete in the early decades of the twentieth century. This remote rural road did not carry the traffic to warrant a major expenditure, and thus the county surveyor's solution for providing a permanent structure at the least cost was to pour a reinforced concrete arch and to use timber for the remainder of the structure including the spandrel columns, floorbeams, and decking. Although this confluence of reinforced concrete and timber stringer technologies is unique among bridges Caltrans owns and inspects in the state, the bridge is significant at the local level. The boundaries of the historic property are the footprint of the structure, including its abutments. Its period of significance is 1925 when the bridge was built.

The Tim Bell Road Bridge retains sufficient historic integrity to convey its significance. The bridge is in its original location and retains its rural agricultural setting. The bridge's design has remained much as it was when originally built. The original wooden base for the road deck was replaced in 1979 with a corrugated metal that was covered with new asphalt. Although this decking is visible from the sides of the bridge, it does not overtly detract from the structure's overall design as a combined concrete and timber bridge. Many of the bridge's timber members have been replaced over time, but such replacements have been with lumber of similar dimensions and layout. Some untreated wood has been replaced with pressure treated wood over the years. The timber railing also appears to be replacement, although of similar design to the original. Sufficient retention of the bridge's features reveals the workmanship that was invested in the structure and provides the historic sense of time, along with a direct link to local early bridge design, such that the bridge retains integrity of workmanship, feeling, and association.

Paleontological Resources: Paleontological resources are the fossilized remains of organisms that are preserved in the geologic record. Fossils are protected by federal, state, and local environmental laws

and regulations. The Society of Vertebrate Paleontology standards and guidelines indicate that sedimentary rock units with a high potential for containing significant nonrenewable paleontological resources are those within which vertebrate or significant invertebrate fossils have been previously determined to be present, or likely to be present. The potential paleontological importance of the project area can be assessed by identifying the rock units that are over 10,000 years old within the underlying landform.

3.4.2 Environmental Impacts

3.4.2.1 Methods of Analysis

This Draft EIR analyzes whether the Project would have the potential to adversely affect existing cultural resources. The identified resources within the APE/ ADI have been examined for their significance and the potential for the proposed Project to result in impacts on that significance. CEQA requires an assessment of a project's potential effects on significant historical resources (i.e., those that are listed or eligible for listing in the CRHR or in a local register or survey that meets the requirements of PRC Sections 5020.1[k] and 5024.1[g]). This assessment entails the following steps.

- Identify potential historical resources.
- Evaluate the significance of identified historical resources.
- Evaluate the anticipated effects of a project on all significant historical resources.

Under CEQA, only effects on significant resources are considered potentially significant, so only those impacts require detailed analysis.

California Register of Historic Resources (CRHR) Criteria:

The criteria for the National Register are nearly identical to the California Register. To qualify for listing in the California Register of Historic Resources (CRHR) 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, Section 4850 et seq). Criteria include:

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

3.4.2.2 Thresholds of Significance

In accordance with Appendix G of the State CEQA Guidelines, the proposed Project would be considered to have a significant effect if it would result in any of the conditions listed below.

- Cause a substantial adverse change in the significance of a historical resource pursuant to Section15064.5?

- Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section15064.5?
- Disturb any human remains, including those interred outside of formal cemeteries.
- Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

3.4.2.3 Impacts and Mitigation Measures

Impact CUL-1: Cause a substantial adverse change in the significance of a historical resource as pursuant to Section15064.5 (Significant Unavoidable Impact)

The Tim Bell Road Bridge (Bridge 38C0073) was previously determined eligible for listing in the NRHP to which SHPO concurred in 1987. The bridge's eligibility was reaffirmed in the Caltrans Historic Bridge Inventory updates in 2003. Based on its NRHP status, the structure is listed in the California Register of Historical Resources (CRHR) and is considered a historical resource for the purposes of the CEQA. The Tim Bell Road Bridge is eligible under NRHP Criterion C and CRHR Criterion 3 for its type, period, and method of construction, significant for illustrating the inventiveness with which California engineers utilized reinforced concrete in the early decades of the twentieth century.

Built in 1925, the Tim Bell Road Bridge is significant for illustrating the inventiveness with which California engineers utilized reinforced concrete in the early decades of the twentieth century. This remote rural road did not carry the traffic to warrant a major expenditure, and thus the county surveyor's solution for providing a permanent structure at the least cost was to pour a reinforced concrete arch and to use timber for the remainder of the structure including the spandrel columns, floorbeams, and decking. The boundaries of the historic property are the footprint of the structure, including its abutments. Its period of significance is 1925 when the bridge was built.

Public Resource Codes (PRC) section 21084.1 states in part "*A project that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment. For purposes of this section, an historical resource is a resource listed in, or determined to be eligible for listing in, the California Register of Historical Resources…*" PRC section 5020.1(q) defines a 'substantial adverse change' to an historical resource as "*Substantial adverse change includes demolition, destruction, relocation, or alteration such that the significance of an historical resource would be impaired (PRC Section 5020.1(q)).*" The Project will remove and replace the Tim Bell Road Bridge which has been determined eligible for listing in the CRHR. Per PRC section 21084.1 the Project will result in a '*substantial adverse change in the significance of an historical resource*' by removing the bridge and therefore the Project will have a significant effect on the environment.

Mitigation of significant impacts must lessen or eliminate the physical impact that the Project will have on the historical resource. This is often accomplished through redesign of a project to eliminate objectionable or damaging aspects of the Project. The County has committed to implementation of measures CULT-1, CULT-2, and CULT-3 to reduce impacts. The demolition of a historic structure cannot be mitigated to less than significant. Even with the implementation of measures CULT-1, CULT-2, and CULT-3 this is a significant unavoidable impact.

Measure CULT-1 (HAER)

- *Prior to the start of construction, Caltrans shall contact the regional Historic American Building Survey/Historic American Engineering Record/Historic American Landscape Survey (HABS/HAER/HALS) coordinator at the National Park Service Interior Regions 8, 9, 10, and 12 Regional Office (NPS) to request that NPS stipulate the level of and procedures for completing*

the documentation. Within ten (10) days of receiving the NPS stipulation letter, Caltrans shall send a copy of the letter to all consulting parties for their information.

- *Caltrans will ensure that all recordation documentation activities are performed or directly supervised by architects, historians, photographers, and/or other professionals meeting the qualification standards in the Secretary of Interior's Professional Qualification Standards (36 CFR 61, Appendix A).*
- *Upon receipt of the NPS written acceptance letter, Caltrans will make archival, digital and bound library-quality copies of the documentation and provide them to the [insert appropriate parties], the [relevant formation center] and the California State Library.*
- *Caltrans shall notify SHPO that the documentation is complete and all copies distributed, as outlined in C, and include the completion of the documentation in the annual report. All field surveys shall be completed prior to the start of construction.*

Measure CULT-2 (Informational Plaque)

- *The County will design, produce, and install a permanent metal plaque on a concrete or boulder mount at a publicly accessible site in close, visual proximity to the Tim Bell Road Bridge crossing. The plaque will provide a brief history of the historic Tim Bell Road Bridge, its engineering features, and its significance. The SHPO and Caltrans will be provided 30 days to review and comment on the design and text of the new plaque before it is produced and installed.*

Measure CULT-3 (Informational Booklet)

- *The County will prepare and produce a booklet regarding the Tim Bell Road Bridge and its use within the broader contextual history of Stanislaus County. The booklet will be paperback not to exceed 10 pages and will include high quality black and white images of the Tim Bell Road Bridge, copies of historic photographs and/or drawings, as appropriate, and text describing the Tim Bell Road Bridge, its design, construction, and use. Data from the HAER report prepared under CULT-1 will be used to produce the booklet.*
- *The County will submit a draft copy of the booklet to Caltrans District 10 for review and approval prior to making the booklet available to recipients. Following approval by Caltrans District 10, the County will produce hardcopies for distribution to local libraries, as well as local historical societies, organizations, and museums, including but not limited to the McHenry Museum in Modesto; California State University, Stanislaus, Library Special Collections; Stanislaus County Public Library, Modesto Branch, Special Collections Room; and Waterford Historical Society. One copy will be submitted to Caltrans Transportation Library and History Center in Sacramento. The County will maintain the camera-ready master booklet for up to five years and produce additional copies within that time frame if there is demand.*

Impact CUL-2: Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section15064.5 (less than significant)

Archival research, literature reviews, a buried sites sensitivity assessment, agency consultation, Native American consultation, and a pedestrian survey have revealed that no prehistoric/Native American features or deposits have been identified within the project area (Far Western 2019). Far Western conducted XPI fieldwork in the APE on 29 August 2019. The goal of the study was to determine the presence or absence of buried archaeological resources in areas where deep and/or extensive project ground disturbance will occur within areas of Moderate or Highest potential for buried archaeological resources. Far Western excavated six trenches, placed as close as feasible to Project impacts in sensitive

areas. No archaeological materials or laterally extensive, intact buried soils with archaeological potential, were identified during this study (Far Western 2020). Based on these negative results as well as stratigraphic observations and overall trench coverage, the probability of encountering buried archaeological resources in the tested portion of the APE, and where deep Project-related ground disturbance will occur, is low. Project impacts are less than significant.

Impact CUL-3: Disturbance of any human remains, including those interred outside of formal cemeteries (less than significant)

No known human remains are present within the project area. There is the possibility of accidental discoveries of human remains during construction-related ground-disturbing activities. Should human remains be discovered during the excavation portion of the Project, the project description includes contract provisions that will require County notification and compliance with California Health and Safety Code Section 7050.5 and California Public Resources Code Sections 5097.5 and 5097.9 et seq.

Impact CUL-4: Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature (less than significant with mitigation)

The Society of Vertebrate Paleontology (SVP) standards and guidelines indicate that sedimentary rock units with a high potential for containing significant nonrenewable paleontological resources are those within which vertebrate or significant invertebrate fossils have been previously determined to be present, or likely to be present (SVP 2010).

Published geologic mapping shows the Project the site is generally underlain by Mehrten Formation which consists of gray andesitic sandstone, brown to pink claystone, and gray sandy to gravelly andesitic mudstone. The northern portion of the site is generally underlain by Lower Member Modesto Formation, which consists of alluvial silt, sand and gravel locally derived from the Sierra Nevada Foothills, and by Mehrten Formation. The channel of Dry Creek transverses east and west through the project area and generally consists of Post-Modesto Deposits, which consists of undifferentiated alluvium locally derived from the Sierra Nevada Foothills.

Table 3-6-2 (Paleontological Resources by Geologic Unit) of the County General Plan Draft Environmental Impact Report (DEIR) provides the paleontological sensitivity rating for the rock units in the County (Stanislaus County 2016b). Table 3-5 below lists the geologic units underlaying the project area and includes data from County General Plan Draft Table 3.6-2 (Paleontological Resources by Geologic Unit).

Table 3-5 Paleontological Sensitivity of Geologic Units in the Project Area

Geologic Unit	Age	Fossils	UCMP[1] Vertebrate Records in County	Paleontological Sensitivity
Modesto Formation	Pleistocene	Includes horse, mammoth camel, pocket gopher, bison, and ground sloth	10	High
Mehrten Formation	Tertiary	Includes extinct horse, primitive rhinoceros, camel, and tortoise	232	High

[1] University of Californian Museum of Paleontology

Figure 3.6-5 (Paleontological Sensitivity) of the County General Plan DEIR identifies the project area as having high paleontological sensitivity (Stanislaus County 2016b). A significant impact would occur if

the Project were to directly or indirectly destroy a unique paleontological resource or site. With implementation of CULT-4 the Projects potential impact to paleontological resources would be considered less than significant.

Measure CULT-4 (Paleontological Resources)

- *A qualified paleontologist will prepare a Paleontological Monitoring Plan based on 65% design.*
- *The qualified paleontologist would designate a paleontological monitor to be present during qualifying earthmoving activities, as described in the Paleontological Monitoring Plan.*
- *The Resident Engineer will notify the qualified paleontologist in advance of the start of construction activity and would attend any safety training programs for the proposed Project. The proposed Project paleontologist would meet with the Resident Engineer and construction contractor at a preconstruction meeting to develop an agreed upon communication plan and provide for worker safety. All project personnel involved with excavation or drilling activities in paleontologically sensitive areas will receive a paleontological awareness training session prior to commencement of work.*
- *If paleontological resources are discovered during earthmoving activities, the construction crew would immediately cease work within a 60-foot radius of the find, and immediately notify the Resident Engineer. In the event that paleontological resources are discovered, fossil specimens would be properly collected and sufficiently documented to be of scientific value. Collection, documentation, and storage standards will be provided in the Paleontological Monitoring Plan.*
- *Upon the completion of excavation and/or drilling activities in paleontologically sensitive areas, the paleontologist will prepare a Paleontological Monitoring and Findings Report summarizing the results of the monitoring. The report will provide a summary of the field and laboratory methods, site geology and stratigraphy, faunal list, and a brief statement of the significance and relationship of the site to similar fossil localities. Full copies of the final Paleontological Monitoring and Findings Report will be deposited with the repository institution.*

3.4.3 References

Far Western Anthropological Research Group, Inc. 2019. Archaeological Survey Report for the Tim Bell Road Bridge Over Dry Creek Replacement Project, Stanislaus County, California. Federal Aid Project No. BRLO-5938(189). Prepared for Caltrans District 10, Stockton, CA.

Far Western Anthropological Research Group, Inc. 2020. Results of Extended Phase I Excavation for the Tim Bell Road Bridge over Dry Creek Replacement Project, Stanislaus County, California. Federal Aid Project No. BRLO-5938(189). Prepared for Caltrans District 10, Stockton, CA.

JRP Historical Consulting, LLC. March 2019. Historical Resource Evaluation Report, Tim Bell Road Over Dry Creek Bridge Replacement Project, Stanislaus County, California, Federal Project No.: BRLO-5938(189). Prepared for Caltrans District 10.

JRP Historical Consulting, LLC. March 2020 (2020a). Finding of Adverse Effect, Tim Bell Road Over Dry Creek Bridge Replacement Project, Stanislaus County, California, Federal Project No.: BRLO-5938(189). Prepared for Caltrans District 10.

JRP Historical Consulting, LLC. March 2020 (2020b). Historic Property Survey Report, Tim Bell Road Over Dry Creek Bridge Replacement Project, Stanislaus County, California, Federal Project No.: BRLO-5938(189). Prepared for Caltrans District 10.

Society of Vertebrate Paleontology. 2010. Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources. Prepared by: Society of Vertebrate Paleontology Impact Mitigation Guidelines Revision Committee.

Stanislaus County. Adopted 23 August 2016 (2016a). Stanislaus County general plan 2015.

Stanislaus County. April 2016 (2016b). Stanislaus County General Plan and Airport Land Use Compatibility Plan Update Draft Program EIR.

3.5 Hazards and Hazardous Materials

This section identifies existing conditions and discusses the regulatory setting for hazards and hazardous materials and analyzes the potential impacts. The primary concerns pertaining to hazardous materials in the Project area is their use, transportation, storage, and handling (i.e., potential accidents or spills). This chapter is based on the Phase I Initial Site Assessment (ISA) prepared for the Project (Parikh Consultants, Inc. 2018).

3.5.1 Existing Conditions

3.5.1.1 Regulatory Setting

Federal

Comprehensive Environmental Response, Compensation, and Liability Act

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA, commonly known as *Superfund*, provides a Federal "Superfund" to clean up uncontrolled or abandoned hazardous-waste sites as well as accidents, spills, and other emergency releases of pollutants and contaminants into the environment. Through CERCLA, EPA was given power to seek out those parties responsible for any release and assure their cooperation in the cleanup.

CERCLA was enacted by Congress on December 11, 1980 and created a tax on the chemical and petroleum industries and provided broad Federal authority to respond directly to releases or threatened releases of hazardous substances that may endanger public health or the environment. Over five years, $1.6 billion was collected and the tax went to a trust fund for cleaning up abandoned or uncontrolled hazardous waste sites. The enactment of CERCLA:

- Established prohibitions and requirements concerning closed and abandoned hazardous waste sites;
- Provided for liability of persons responsible for releases of hazardous waste at these sites; and
- Established a trust fund to provide for cleanup when no responsible party could be identified.

Amended in 1986, the act establishes two primary actions: (1) to coordinate short-term removal of hazardous materials; and (2) to coordinate and manage the long-term removal of hazardous materials identified on the EPA's National Priorities List (NPl). The NPL is a record of known or threatened releases of hazardous substances, pollutants, or contaminants. A national database and management system, known as the Comprehensive Environmental Response, Compensation, and Liability Information System, is used by EPA to track activities at hazardous waste sites considered for cleanup under CERCLA. CERCLA also maintains provisions and guidelines dealing with closed and abandoned waste sites and tracks amounts of liquid and solid media treated at sites on the NPL or sites that are under consideration for the NPL.

On 17 October 1986 the Superfund Amendments and Reauthorization Act (SARA) amended the CERCLA act of 1980. The SARA reflected EPA's experience in administering the complex Superfund program during its first six years and made several important changes and additions to the program. SARA changes include:

- Stressing the importance of permanent remedies and innovative treatment technologies in cleaning up hazardous waste sites;
- Requiring Superfund actions to consider the standards and requirements found in other State and Federal environmental laws and regulations;
- Providing new enforcement authorities and settlement tools;
- Increasing State involvement in every phase of the Superfund program;
- Increasing the focus on human health problems posed by hazardous waste sites;
- Encouraging greater citizen participation in making decisions on how sites should be cleaned up; and
- Increasing the size of the trust fund to $8.5 billion.

SARA also required EPA to revise the Hazard Ranking System to ensure that it accurately assessed the relative degree of risk to human health and the environment posed by uncontrolled hazardous waste sites that may be placed on the NPL.

Occupational Safety and Health Standards

With the Occupational Safety and Health Act of 1970, Congress created the Occupational Safety and Health Administration (OSHA) to assure safe and healthful working conditions for working men and women by setting and enforcing standards and by providing training, outreach, education and assistance. Under the OSHA law, employers are responsible for providing a safe and healthful workplace for their workers.

Resource Conservation and Recovery Act of 1976 (42 United States Code Sections 6901–6987)

The Resource Conservation and Recovery Act (RCRA) is the primary law governing the disposal of solid and hazardous waste. Congress passed RCRA on October 21, 1976 to address the increasing problems the nation faced from our growing volume of municipal and industrial waste. The RCRA, which amended the Solid Waste Disposal Act of 1965, set national goals for:

- Protecting human health and the environment from the potential hazards of waste disposal.
- Conserving energy and natural resources.
- Reducing the amount of waste generated.
- Ensuring that wastes are managed in an environmentally sound manner.

The RCRA established three distinct, yet interrelated, programs to achieve these goals:

- The solid waste program, under RCRA Subtitle D, encourages states to develop comprehensive plans to manage nonhazardous industrial solid waste and municipal solid waste, sets criteria for municipal solid waste landfills and other solid waste disposal facilities, and prohibits the open dumping of solid waste.
- The hazardous waste program, under RCRA Subtitle C, establishes a system for controlling hazardous waste from the time it is generated until its ultimate disposal — in effect, from “cradle to grave.”

- The underground storage tank (UST) program, under RCRA Subtitle I, regulates underground storage tanks containing hazardous substances and petroleum products.

Asbestos National Emission Standards for Hazardous Air Pollutants (NESHAP)

EPA's air toxics regulation for asbestos is intended to minimize the release of asbestos fibers during activities involving the handling of asbestos. Air toxics regulations under the Clean Air Act specify work practices for asbestos to be followed during demolitions and renovations of all facilities, including, but not limited to, structures, installations, and buildings (excluding residential buildings that have four or fewer dwelling units). The regulations require a thorough inspection where the demolition or renovation operation will occur. When buildings are under renovation, they are not being demolished, but asbestos-containing building material may be removed or disturbed.

The Asbestos NESHAP requires specific work practices to control the release of asbestos fibers. To help ensure that the work practice standards of the Asbestos NESHAP are followed during a demolition or renovation operation, the asbestos NESHAP requires at least one onsite representative trained in the regulatory provisions and the means of compliance. This trained individual needs to receive refresher training every two years, including: applicability of the rule; notifications; material identification; control procedures for removal; adequate wetting; local exhaust ventilation; negative pressure enclosures; glove-bag procedures; High Efficiency Particulate Air (HEPA) filters; waste disposal work practices; reporting and recordkeeping; and, asbestos hazards and worker protection.

State

Asbestos Regulations

Title 8 CCR Section 1529 regulates asbestos exposure in all construction work and defines permissible exposure limits and work practices. Typically, removal or disturbance of more than 100 square feet of material containing more than 0.1% asbestos must be performed by a registered asbestos abatement contractor, but associated waste labeling is not required if the material contains 1% or less asbestos. When the asbestos content of materials exceeds 1%, virtually all requirements of the standard become effective. With respect to potential worker exposure, notification, and registration requirements, the California Division of Occupational Safety and Health (Cal/OSHA) defines asbestos-containing construction material as construction material that contains more than 0.1% asbestos (8 CCR 341.6).

Hazardous Waste Control Act

The California equivalent of the RCRA is the Hazardous Waste Control Act (HWCA). HWCA created the State Hazardous Waste Management Program, which is similar to the RCRA program but generally more stringent. The HWCA establishes requirements for the proper management of hazardous substances and wastes with regard to criteria for:

- Identification and classification of hazardous wastes;
- Generation and transportation of hazardous wastes;
- Design and permitting of facilities that recycle, treat, store, and dispose of hazardous wastes;
- Treatment standards;
- Operation of facilities;
- Staff training;

- Closure of facilities; and
- Liability requirements.

Emergency Services Act

Under the California Emergency Services Act, the State developed an emergency response plan to coordinate emergency services provided by all governmental agencies. The plan is administered by the California Office of Emergency Services (OES). OES coordinates the responses of other agencies, including EPA, the Federal Emergency Management Agency, the California Highway Patrol, water quality control boards, air quality management districts, and county disaster response offices. Local emergency response teams, including fire, police, and sheriff's departments, provide most of the services to protect public health.

California Health and Safety Codes

The California Environmental Protection Agency (Cal-EPA) has been granted primary responsibility by EPA for administering and enforcing hazardous materials management plans within California. Cal-EPA defines a hazardous material more generally than EPA as a material that, because of its quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released (26 CCR 25501).

State regulations include detailed planning and management requirements to ensure that hazardous materials are properly handled, stored, and disposed of to reduce human health risks. In particular, the State has acted to regulate the transfer and disposal of hazardous waste. Hazardous waste haulers are required to comply with regulations that establish numerous standards, including criteria for handling, documenting, and labeling the shipment of hazardous waste (26 CCR 25160 et seq.).

Cortese List

Cal-EPA maintains the Hazardous Wastes and Substances Site (Cortese) List, a planning document used by state and local agencies and developers to comply with CEQA requirements in providing information about the location of hazardous materials release sites. The list must be updated at least once per year, per Government Code Section 65962.5. The California Department of Toxic Substances Control (DTSC), State Water Resources Control Board (SWRCB), and California Department of Resources Recycling and Recovery all contribute to the site listings.

California Public Resources Code Sections 4201–4204

This section of the California Public Resources Code (PRC) was amended in 1982 to require the California Department of Forestry and Fire Protection (CAL FIRE) to classify Fire Hazard Severity Zones within State Responsibility Areas (SRAs). CAL FIRE classifies lands within SRAs by severity of fire hazard present to identify measures to retard the rate of spreading and reduce the potential intensity of uncontrolled fires that threaten to destroy resources, life, or property.

Local

County of Stanislaus

The County's General Plan Safety Element includes goals, policies, and implementation measures related to hazards and hazardous materials, including those listed below.

- **Policy One** – The County will adopt (and implement, as necessary) plans inclusive of the Multi-Jurisdictional Hazard Mitigation Plan, to minimize the impacts of natural and man-made disasters.
    - **Implementation Measure 6** – The County has adopted a Multi-Jurisdictional Hazard Mitigation Plan, and will implement and evaluate the Plan on a regular basis as necessary to comply with state and federal laws. This includes implementing the mitigation actions of the Plan through the Safety Element.
  - **Goal Two** – Minimize the effects of hazardous conditions that might cause loss of life and property.
  - **Policy Six** – All new development shall be designed to reduce safety and health hazards.
  - **Policy Thirteen** – The Department of Environmental Resources shall continue to coordinate efforts to identify locations of hazardous materials and prepare and implement plans for management of spilled hazardous materials as required.
    - **Implementation Measure 2** – The County has prepared a Hazardous Waste Management Plan which is the guideline for managing hazardous waste in this County. The goals, objectives, conclusions, recommendations, and implementation measures of that plan are hereby incorporated as a part of the Safety Element, along with any modifications which may result from state review of the Hazardous Waste Management Plan.

Certified Uniform Program Agency

Cal-EPA can delegate responsibility for many of its programs to a local government through certification as a Certified Uniform Program Agency (CUPA). A CUPA is responsible for implementing a unified hazardous materials and hazardous waste management program. This program was established under the amendments to the California Health and Safety Code made by Senate Bill 1082 in 1993. California Health and Safety Code 25505 requires handlers of hazardous materials to submit business plans to the CUPA if hazardous materials inventories meet or exceed established thresholds. A CUPA can be a county, city, or joint powers authority that demonstrates its ability to administer the program. The local CUPA for the proposed Project is the Hazardous Materials Division of Stanislaus County Environmental Resources Department.

Stanislaus County Multi-Jurisdictional Hazards Mitigation Plan

The Stanislaus County Local Hazards Mitigation Plan (LHMP) is designed to meet the requirements of the Disaster Mitigation Act of 2000, which allows for eligibility for certain hazard mitigation (i.e., disaster loss reduction) programs for the Federal Emergency Management Agency (FEMA). Formulation of the LHMP was based on hazard identification and risk assessment of potential natural hazards that could affect Stanislaus County; a review of the County's capability to reduce hazards impacts; and, recommendations to further reduce vulnerability to potential disasters. The most recent of the LHMP was adopted by FEMA and Stanislaus County in July 2017 (Stanislaus County Office of Emergency Services 2017)

Stanislaus County Code, Title 9 Health and Safety

Title 9 (Health and Safety), of the Stanislaus County Code includes several chapters (9.02,9.04, 9.08, 9.09, 9.10, and 9.12) pertaining to the collection and management of solid waste.

3.5.1.2 Environmental Setting

A database search was conducted to identify environmental regulatory records associated with the Project area and nearby properties that would indicate environmental conditions (i.e., reported releases of hazardous substances and/or petroleum products), which may have the potential to adversely impact the Project area and surrounding vicinity.

In accordance with ASTM International Standard E1527-13 and part of the ISA, a computerized radius search of pertinent federal, state, and tribal environmental record databases was performed, including a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 (The Cortese list) (ISA, Parikh Consultants, Inc. 2018). GeoTracker is the SWRQCB (a division of the California DWR) data management system for sites that impact groundwater or have the potential to impact groundwater. GeoTracker's online database contains sites that require groundwater cleanup as well as permitted facilities that could impact groundwater. The DTSC EnviroStor Database is an online search and Geographic Information System (GIS) tool for identifying sites that have known contamination or sites for which there may be reasons to investigate further. It also identifies facilities that are authorized to treat, store, dispose, or transfer (TSDF) hazardous waste.

The database searches indicate that no sites occur in the Project area and that only one site occurs within one mile of the Project. The one site is located at 15724 Claribel Road and was listed for potential contamination of soil with diesel fuel. The cleanup status of the site in the databases is "*Completed - Case Closed as of 10/3/2007*".

Site Inspection: A site inspection was performed on 20 January 2018 and consisted of a drive-by and walk-through of the area of study, and observation of problem sites or observed areas of contamination. During the site visit, no evidence of surface spills or surface staining was observed. Areas of soil discoloration were not observed. However, it should be noted that spills associated with pesticides and herbicides usually do not leave staining or soil discoloration.

Aerial Lead Deposition: USGS maps show the Tim Bell Road and the bridge present since 1925, therefore the existing bridge has supported vehicular traffic since the early 20th Century. The traffic flow has not been heavy, however as leaded gasoline was introduced in the 1940's and used in automobiles through the 1980s, due to historical long term vehicular activity, some potential exists for surface soils to be contaminated with lead in excess of the hazardous waste thresholds outlined in the lead variance plan issued to Caltrans by DTSC and Aerially Deposited Lead Soil Management Plan. As indicated by DTSC and Caltrans, the source of the lead is from the exhaust of cars burning leaded gasoline.

Asbestos Containing Materials: The current bridge was built in 1925. Based on the information available there are no bearing pads for the bridge support. Asbestos containing materials in the bridge deck are not expected. Naturally occurring asbestos (NOA) can be released from serpentine and ultramafic rocks when the rock is broken or crushed. The Project is not located within an area known to contain NOA or an area "more likely to contain naturally occurring asbestos" (California Department of Conservation 2000).

Agricultural Operations: A review of historical data indicates that the area around the bridge has been in agricultural use since the 1950s. Based on the site visit, the areas proposed to the south and north of Dry Creek for road expansion are not likely impacted due to agricultural usage. This is because these areas have a slope towards Dry Creek that does not make them suitable for staging and chemical storage areas. The only area where staging may have taken place is further north of the bridge in the vicinity of the driveway to access to APN 008-001-036.

According to historical records, and DTSC guidance documents, use of pesticide and herbicides containing arsenic and DDT was prominent in the Central Valley's agricultural areas from about 1950 to 1970. Arsenic and DDT do not readily attenuate and tend to accumulate in the surface soil. Roadsides are often used as staging areas where agricultural chemicals are mixed prior to application to the farmland. There is a potential for the soils in the soils in the area of proposed modification adjacent to APN 008-001-036 to be impacted with pesticides and herbicides at levels that exceed the EPA Region 9 Regional Screening Levels for construction worker. Arsenic is likely to be present in surface soils since older herbicides were made up of organic compounds containing arsenic. The arsenic from herbicides is likely to raise the total arsenic concentration above the regional background concentrations. Although no surface staining or stressed vegetation was observed at the proposed right of way, the spills of such contaminants at levels that cause a potential risk to construction workers do not necessarily leave staining or stressed vegetation.

3.5.2 Environmental Impacts

3.5.2.1 Methods of Analysis

The analysis of hazards and hazardous materials is based on the Project ISA (Parikh Consultants, Inc. 2018). The Project ISA was performed between 8 and 31 January 2018 and included the following scope of work:

- Site visit and visual inspection of exterior of the project vicinity
- Review previous environmental reports in the project vicinity
- Review project background, including recent aerial photographs
- Review computer database government record search of hazardous waste sites within one-mile-radius of the project site
- Review of area hydrogeology
- Review of available agency records for the project vicinity

The environmental baseline for the analysis consists of the hazards and hazardous materials that are known to occur in the Project area.

3.5.2.2 Thresholds of Significance

In accordance with Appendix G of the State CEQA Guidelines, the proposed Project would be considered to have a significant effect if it would result in any of the conditions listed below.

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?
- 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?
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

- 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?
- For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?
- Expose people or structures, either directly or indirectly to a significant risk of loss, injury or death involving wildland fires?

3.5.2.3 Impacts and Mitigation Measures

Impact HAZ-1: Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? (less than significant)

Small amounts of hazardous materials would be 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 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.

Impact HAZ-2: Creation of a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment (less than significant with mitigation)

There is a potential for the soils in the area of proposed modification adjacent to APN 008-001-036 to be impacted with pesticides and herbicides, specifically arsenic and dichloro-diphenyl-trichloroethane (DDT) at levels that exceed the EPA Region 9 Regional Screening Levels for worker safety (Parikh Consultants, Inc. 2018). Implementation of HAZ-1 will reduce potential impacts to less than significant.

Measure HAZ-1 (Agricultural Chemicals)

- *Prior to construction a testing program for agricultural chemicals including heavy metals such as arsenic will be implemented to determine if soils adjacent APN 008-001-036 that will be disturbed by the proposed Project exceed regulatory thresholds or screening levels for worker safety. Identifying the level of contamination will guide disposal options for the excavated soil.*
- *Soils in the Project area that exceed regulatory thresholds or screening levels for worker safety will be disposed of at a landfill with the appropriate acceptance standard.*
- *The construction contract will require all on-site personnel comply with standards found in the Construction Safety Orders and General Industry Safety Orders as defined by Cal/OSHA.*

Impact HAZ-3: Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? (no impact)

No existing or proposed schools occur within 0.25 mile of the Project site. The closest school is the Connecting Waters Charter School located 5.5 miles southwest of the Project area. 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.

Impact HAZ-4: Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment (no impact)

The database searches indicate that no Government Code Section 65962.5 ('Cortese List') sites occur in the Project area. One non-Government Code Section 65962.5 site occurs within one mile of the Project. The one site is located at 15724 Claribel Road and was listed for potential contamination of soil with diesel fuel. The cleanup status of the site in the databases is "*Completed - Case Closed as of 10/3/2007*".

Impact HAZ-5: For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area (no impact)

The Project is not located within an airport land use plan area or within two miles of a public or public use airport. A potential private air strip occurs 0.95 mile southeast of the Tim Bell Road Bridge.

Impact HAZ-6: Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan (less than significant)

Construction of the proposed Project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. Tim Bell Road in the Project area will be closed to through traffic during construction. A detour will be provided for adjacent local residences and first responders. The existing bridge will remain in place during construction and be used as a detour for local traffic. The local detour will cross under the new bridge and falsework. This local detour alignment minimizes impacts to an existing active walnut orchard and Dry Creek compared to a detour alignment that remained on the east side of Tim Bell Road. The Project contractor would be required to prepare a traffic management plan that must be approved by the County. Access for emergency vehicles through the Project area would be maintained at all times. This impact would be less than significant, and no mitigation is required.

Impact HAZ-7: Exposure of people or structures to a significant risk of loss, injury, or death involving wildland fires (less than significant)

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 Project is not located in a '*Fire Hazard Severity Zone in the State Responsibility AREA (SRA)*' per the 2007 CAL FIRE, Fire Hazard Severity Zones in SRA maps. These maps determine geographical areas where the State of California is primarily financially responsible for preventing and suppressing forest fires. The Project area is identified as a 'Local Responsibility Area (LRA)- Unzoned' per the 2007 CAL FIRE, Fire Hazard Severity Zones in SRA map for Stanislaus County. The Project is in an 'Unzoned' area and is not classified as a very high fire hazard severity zone.

3.5.3 References

California Department of Conservation. August 2000. A general location guide for ultramafic rocks in California – Areas more likely to contain naturally occurring asbestos. Division of Mines and Geology, open-file report 2000-19. ftp://ftp.consrv.ca.gov/pub/dmg/pubs/ofr/ofr_2000-019.pdf

California Department of Forestry and Fire Protection. Adopted by CAL FIRE on 7 November 2007 (accessed February 2020). Fire Hazard Severity Zones in State Responsibility Areas, Stanislaus County. Available: https://osfm.fire.ca.gov/media/6540/fhszs_map50.jpg.

Parikh Consultants, Inc. 14 December 2018. Phase I Initial Site Assessment Tim Bell Road Bridge Over Dry Creek Bridge Replacement Project, Stanislaus County, California. Prepared for Stanislaus County.

Stanislaus County Office of Emergency Services. 2017. Stanislaus County Local Hazards Mitigation Plan.

3.6 Hydrology, Water Quality, and Water Resources

This section describes the regulatory and environmental setting, evaluates potential project impacts, and proposes mitigation measure as needed to reduce impacts to hydrology, water quality, and water resources.

3.6.1 Existing Conditions

3.6.1.1 Regulatory Setting

Federal

Clean Water Act

Several sections of the Clean Water Act (CWA) pertain to the regulation of impacts waters of the United States. The term *waters of the United States* generally refers to all surface waters, such as all navigable waters and their tributaries, all interstate waters and their tributaries, all wetlands adjacent to these waters, and all impoundments of these waters. The CWA sections discussed below pertain to the Project.

The EPA is charged with protecting the quality of waters of the United States. In California, the State Water Board administers CWA Sections 303, 401 and 402, and United States Army Corps of Engineers (USACE) has jurisdiction and permit authority over waters of the United States under CWA Section 404.

Section 303 and 305—Impaired Waters

The State of California adopts water quality standards to protect beneficial uses of waters of the state as required by Section 303(d) of the CWA and the Porter-Cologne Act. Section 303(d) of the CWA established the total maximum daily load (TMDL) process to guide the application of state water quality standards. TMDLs have the ultimate goal of reducing the amount of the pollutant entering the waterbody to meet water quality objectives. In order to identify candidate waterbodies for TMDL analysis, a list of water quality–limited segments was generated by the State Water Board. These waterbodies are impaired by the presence of pollutants such as sediment and are more sensitive to disturbance because of this impairment.

CWA Section 305(b) requires states to develop a report assessing statewide surface water quality. Both CWA requirements are being addressed through the development of a 303(d)/305(b) Integrated Report. The SWRCB developed the statewide *Final 2014/2016 California Integrated Report (Clean Water Act Section 303(d) List / 305(b) Report)* based on the Integrated Reports from each of the nine RWQCBs (SWRCB 2020). The 2014/2016 California Integrated Report was approved by the State Water Board on 3 October 2017, and approved by EPA on 6 April 2018.

Section 401—Water Quality Certification

Under Section 401 of the Clean Water Act (33 U.S.C. 1341), applications for a federal permit or license for any activity that may result in a discharge to a water body, require a State Water Quality Certification to ensure that the proposed activity complies with state water quality standards.

Section 402—National Pollutant Discharge Elimination System (NPDES)

Section 402(p) of Clean Water Act establishes a permit under the NPDES program for discharges of storm water resulting from ground disturbing construction activities, such as grading. For ground disturbing activities impacting less than one acre, compliance with the County's grading ordinance satisfies the requirements of NPDES. For ground disturbing construction activities in excess of one acre, a NPDES Phase II permit from the RWQCB is required. The preparation of a Stormwater Pollution Prevention Plan (SWPPP) is a requirement of the NPDES Phase II permit.

Section 404—Dredge/Fill Permitting and Section 10 of the Rivers and Harbors Act

The Corps and the U.S. Environmental Protection Agency regulate the discharge of dredge and fill material into "waters of the United States" under Section 404 of the Clean Water Act (33 U.S.C. 1344). The Corps issues permits for certain dredge and fill activities in waters of the U.S. pursuant to the regulations in 33 CFR 320-330.

Section 10 of the Rivers and Harbors Act, also administered by USACE, requires permits for all structures (such as riprap) and activities (such as dredging) in navigable waters of the United States.

National Flood Insurance Program

The U.S. Congress established the National Flood Insurance Program (NFIP) with the passage of the National Flood Insurance Act of 1968. The NFIP is a Federal program enabling property owners in participating communities to purchase insurance as a protection against flood losses in exchange for State and community floodplain management regulations that reduce future flood damages. A Flood Insurance Rate Map is the official map of a community prepared by FEMA to delineate both the special flood-hazard areas and the flood risk premium zones applicable to the community.

Executive Order 11988 (Floodplain Management)

EO 11988 directs all federal agencies to avoid, to the extent possible, long- and short-term adverse impacts associated with the occupancy and modification of floodplains, and to avoid direct and indirect support of floodplain development wherever there is a practicable Alternative. Requirements for compliance are outlined in 23 CFR 650A titled "Location and Hydraulic Design of Encroachment on Floodplains."

If the project involves significant encroachment onto the floodplain, the final environmental document (final environmental impact statement or finding of no significant impact) must include the following:

- The reasons why the project must be located in the floodplain
- The alternatives considered and why they were not practicable
- A statement indicating whether the action conforms to applicable state or local floodplain protection standards

State

Porter-Cologne Water Quality Control Act

California Water Code Section 13260 requires "any person discharging waste, or proposing to discharge waste, in any region that could affect the waters of the state to file a report of discharge (an application

for waste discharge requirements)." Under the Porter-Cologne Act definition, waters of the state are "any surface water or groundwater, including saline waters, within the boundaries of the state." Although all waters of the United States that are within the borders of California are also waters of the state, the reverse is not true. California retains authority to regulate discharges of waste into any waters of the state, regardless of whether USACE has concurrent jurisdiction under CWA Section 404.

The Porter-Cologne Act was established and is implemented by the State Water Board and nine RWQCBs. The State Water Board is the primary state agency responsible for protecting the quality of the state's surface and groundwater supplies, or *waters of the state*. More broadly defined than waters of the United States, waters of the state are any surface water or groundwater, including saline waters, within the boundaries of the state. The RWQCBs are responsible for implementing CWA Sections 303(d), 401, and 402 mentioned above.

The Porter-Cologne Act authorizes the State Water Board to draft state policies regarding water quality. The act requires projects that are discharging, or proposing to discharge, wastes that could affect the quality of the state's water to file a Report of Waste Discharge with the appropriate RWQCB.

The Porter-Cologne Act also requires that State Water Board or a RWQCB adopt basin plans for the protection of water quality. Basin plans are updated and reviewed every three years and provide the technical basis for determining Waste Discharge Requirements (WDRs), taking enforcement actions, and evaluating clean water grant proposals. In basin plans, RWQCBs designate beneficial uses for all waterbody segments in their jurisdictions and then set criteria necessary to protect these uses. Consequently, the water quality objectives developed for particular water segments are based on the designated use and vary depending on such use.

In addition, the State Water Board identifies waters failing to meet standards for specific pollutants, which are then state-listed in accordance with CWA Section 303(d). If it is determined that waters are impaired for one or more pollutants and the standards cannot be met through point-source or nonpoint-source controls (NPDES permits or WDRs), then the CWA requires the establishment of TMDLs.

National Pollutant Discharge Elimination System Construction General Permit

The General NPDES Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order 2009-0009-DWQ, NPDES No. CAS000002) (Construction General Permit) regulates stormwater discharges for construction activities under CWA Section 402. Dischargers whose projects disturb 1 or more acres of soil, or whose projects disturb less than 1 acre but are part of a larger common plan of development that in total disturbs 1 or more acres, are required to obtain coverage under the Construction General Permit. The Project would involve more than 1 acre of land disturbance, and therefore must obtain coverage under the Construction General Permit.

National Pollutant Discharge Elimination System General Municipal Stormwater Permit

CWA Section 402 mandates permits for municipal stormwater discharges, which are regulated under the NPDES General Permit for MS4s (MS4 Permit).

Stanislaus County and the City of Ceres are approved permittees under the SWRCB's Phase II Small MS4 permit. The Project lies entirely outside that "red zone", as defined by the County's NPDES permit coverage map, and is not subject to the SWRCB Phase II Small MS4 permit. Areas covered by the permit are subject to the County's Post-Construction Standards Plan (discussed below).

State Water Board Low Impact Development Policy

The State Water Board is advancing Low Impact Development (LID) in California as a means of complying with municipal stormwater permits. On 20 January 2005, the State Water Board adopted the LID Policy, which promotes the idea of sustainability to be considered during the design and planning process for future development. LID incorporates, in part, site design, the use of vegetated swales and retention basins, and minimizing impermeable surfaces. Implementation of these features to manage stormwater will maintain predevelopment runoff rates and volumes, benefit water supply, and contribute to water quality protection.

Regional and Local

Stanislaus County Post-Construction Standards Plan

The Stanislaus County Post-Construction Standards Plan, effective 1 July 2015, is a guidance document for post-construction stormwater design measures. The Plan defines a "Regulated Project" as a project creating and/or replacing more than 5,000 square feet of impervious surface. Regulated Projects include new and redevelopment projects on public or private land that fall under the planning and permitting authority of the municipality. Redevelopment is defined as any land-disturbing activity that results in the creation, addition, or replacement of exterior impervious surface areas on a site on which some previous development has occurred. If a redevelopment project results in an increase of more than 50 percent of the impervious surface of a previously existing development, runoff from the entire project, consisting of all existing, new, and/or replaced impervious surfaces, must be included in the selection and sizing of Site Design Measures and Treatment Control Measures to the extent feasible.

DEWATERING: CVRWQCB Order R5-2016-0076-01 (NPDES Permit No. CAG995002). *General Waste Discharge Requirements/NPDES Permit for Limited Threat Discharges to Surface Waters* adopted on 14 October 2016, modified on 28 October 2016, and amended by Order R5-2018-0002 on 1 February 2018, authorizes discharge to waters of the U.S. for the following tiers of wastewater:

- Tier 1A: Relatively clean discharges of less than 0.25 million gallons per day (MGD) and/or less than 4 months in duration.
- Tier 1B: Relatively clean discharges greater than or equal to 0.25 MGD and/or greater than or equal to 4 months in duration.
- Tier 2: Discharges that may contain toxic organic constituents, volatile organic compounds, pesticides, inorganic constituents, chlorine, and/or other chemical constituents that require treatment prior to discharge.
- Tier 3: Discharges of wastewater from hard rock mines.

A Notice of Intent must be completed, as described in Attachment J of the General Order, to obtain authorization for discharges to surface water.

Stormwater Management Plan

Stanislaus County's Stormwater Management Plan (SWMP) consists of six minimum control measures established by SWRCB for Phase II stormwater discharges. Implementation of these control measures is expected to result in significant reductions of pollutants discharged into receiving water bodies.

Each control measure contains BMPs necessary for proper stormwater management. The BMPs contain specific tasks to meet the objective of that control measure. The SWMP is intended to be a living

document with BMPs added and deleted as new management practices arise and old management practices are found ineffective.

Regional Water Quality Control Board Basin Plan

The Project is located within the jurisdictional area of the Central Valley RWQCB, which established a General Basin Plan for the Sacramento and San Joaquin River basins designating beneficial uses, establishing water quality objectives, and containing plans and policies for all waters of the basin.

3.6.1.2 Environmental Setting

Surface Water Hydrology

The Project site is located within the Upper Tuolumne Hydrologic Unit (Hydrologic Unit Code 18040009). Dry Creek is the only aquatic feature in the Project area. In the Project area Dry Creek is an intermittent stream with an average width of approximately 70 feet. Most of the creek in the Project area is bordered by riparian valley oak woodland. The channel is low-gradient with slow-moving water, muddy pools, and a bed of silty to sandy sediments. Dry Creek appears to be fed primarily by precipitation run-off in the winter and spring, and by agricultural irrigation run-off in the summer and fall.

Dry Creek originates in Tuolumne County approximately 12.8 air miles east of the Project site, north of the community of La Grange. Dry Creek is tributary to the Tuolumne River, approximately 16.5 air miles southwest of the Project site in the City of Modesto. Based on a review of aerial photographs (Google Earth 2017) and observations made at Tim Bell Road and other road crossings of Dry Creek, flow in Dry Creek varies substantially from the upper watershed, where flows are ephemeral to intermittent, to the downstream confluence with the Tuolumne River, where flows are perennial. Tim Bell Road crosses the creek at a location where the creek ceases to have surface flow in many years. Dry Creek was flowing during fieldwork on 11 September 2013 and 21 May 2014. Dry Creek was not flowing on 23 March 2014 and 29 March 2015 based on aerial photographs (Google Earth 2017). In many aerial photographs, areas upstream of the BSA are often observed with large puddles interspersed with bare, dry creekbed. At Tim Bell Road, the creek is generally full and flowing during the summer.

Groundwater

The Project occurs in the boundaries of the Modesto sub-basin (basin 5-022-02) of the San Joaquin Valley Groundwater Basin, DWR 2020).

Water Quality

The Project is located within the boundaries of the Water Quality Control Plan (Basin Plan) for the California Regional Water Quality Control Board (RWQCB), Central Valley Region (Region 5). As per the *Final California 2014/ 2016 Integrated Report (303(d) List/305(b) Report)* (SWRCB 2018), Dry Creek in the Project area is a 303(d)-listed waterbody. The lower 34 miles of Dry Creek is a 303(d) List/305(b), Class 5 waterbody due to (Sycamore Environmental 2020):

- **Chlorpyrifos:** An organophosphate insecticide, acaricide and miticide used primarily to control foliage and soil-borne insect pests on a variety of food and feed crops. The source of the Chlorpyrifos is unknown. No TMDL proposed; this pollutant is being addressed through Basin Plan requirements established under Central Valley Regional Water Quality Control Board (CVRWQCB)

CRWQCB-CVR resolution R5-20140041, and implemented through Board established Waste Discharge Requirements for agricultural discharges.

- **Indicator Bacteria/ Escherichia coli:** Bacteria found in the environment, foods, and intestines of people and animals. The source of the *E. coli* is unknown. Expected TMDL Completion Date is 2027.
- **Unknown Toxicity:** The source is unknown. Expected TMDL Completion Date is 2027.
- **Dissolved Oxygen:** This is the amount of oxygen dissolved in solution. The source is unknown. Expected TMDL Completion Date is 2027.
- **Diuron:** Diuron is a systemic substituted phenylurea herbicide. The source is agriculture. This listing is being addressed through the implementation of the Central Valley Regional Water Quality Control Board Irrigated Lands Regulatory program (ILRP) Waste Discharge Requirements (WDRs) for Growers within the Eastern San Joaquin River Watershed that are Members of the Third-Party Group (Order R5-2012-0016) and in Waste Discharge Requirements General Order for Discharges from Irrigated Lands within the Central Valley Region for Dischargers not Participating in a Third-party Group (Order R5-2013-0100).

Category 5 includes waterbodies where water quality standards are not met and a TMDL is required, but not yet completed, for at least one of the pollutants being listed for this segment. TMDL's have not been completed for any the listed pollutants. The TMDL completion date is 2027 for indicator bacteria/ Escherichia coli, unknown toxicity, and dissolved oxygen. Chlorpyrifos and Diuron are being addressed through the implementation of other Central Valley Regional Water Quality Control Board programs.

Beneficial surface water uses for Dry Creek include those listed for New Don Pedro Reservoir to San Joaquin River in Chapter II, Table 2-1 of the Basin Plan (CVRWQCB 2018). Ground water uses are those listed in the Basin Plan as applying to all ground waters (CVRWQCB 2018) (Table 3-6).

Table 3-6. New Don Pedro Reservoir to San Joaquin River Beneficial Uses

		MUN	Agriculture		Industry			Recreation			Freshwater Habitat		Migration		Spawning		WILD	NAV
		MUN	AGR		PROC	IND	POW	REC-1		REC-2	Warm	Cold	MIGR		SPWN		WILD	NAV
		Municipal and domestic Supply	Irrigation	Stock watering	Process	Service supply	Power	Contact	Canoe and Rafting	Other Noncontact	Warm	Cold	Warm	Cold	Warm	Cold	Wildlife habitat	Navigation
New Don Pedro Reservoir to San Joaquin River	Surface Water	X	X	X	--	--		X	X	X	X	X	--	X	X	X	X	--
	Ground Water	X	X	X	X	X	--	--	--	--	--	--	--	--	--	--	--	--

Flooding

The Project occurs on FEMA/FIRM panel 06099C0380E (effective date: 26 September 2008) for unincorporated Stanislaus County. FEMA/FIRM panel 06099C0380E designates the Project area as Zone X (areas determined to be outside the 0.2% annual chance floodplain). However, approximately 3.6 miles downstream of Tim Bell Road on panel 06099C0380E, there is a Limit of Study (LOS) for Dry Creek. At this LOS, there is an identified Zone A floodplain, which is defined as an area inundated during the 1% annual chance (100-year) flood with no base flood elevations determined. Additionally, even further downstream, within the City of Modesto, beginning on FIRM panel 06099C0354E, there is Zone AE regulatory floodway along Dry Creek.

Multiple data sources were considered in support of hydrologic analyses for Dry Creek at the Tim Bell Road bridge, including but not limited to, regional regression analysis using USGS flood-frequency equations, statistical analysis annual peak stream flow data at a gaging station on Dry Creek, and a review of detailed hydrologic studies published by FEMA (WRECO 2017).

A flood frequency analysis was performed to predict the peak design flows for Dry Creek using extracted annual peak flows from the gaging station at Crabtree Road. The 100-year peak flow was calculated to be 10,400 cubic feet per second (cfs) at the gaging station using a Log-Pearson Type III distribution. By applying a factor based on the ratio of the drainage areas at the gaging station and Project site, the 100-year peak flow at the Project site was estimated to be 15,080 cfs (WRECO 2017).

Based on the results of the hydraulic modeling, there would be localized increases in water surface elevation in the vicinity of the new bridge crossing over Dry Creek of up to 0.2 feet for the 100-year design flow. With the removal of the existing bridge, there would be localized decreases in water surface elevation upstream of the existing bridge crossing (WRECO 2017).

According to the existing conditions hydraulic model generated in support of this Project, the 100-year water surface elevation is well above the top of deck of the existing bridge. The minimum soffit elevation of the proposed bridge design would be approximately 2 feet above the 100-year water surface elevation (WRECO 2017).

3.6.2 Environmental Impacts

This section describes the impact analysis related to hydrology and water quality for the Project. It describes the methods used to determine the impacts of the Project and lists the thresholds used to conclude whether an impact would be significant. Measures to mitigate (i.e., avoid, minimize, rectify, reduce, eliminate, or compensate for) significant impacts accompany each impact discussion as applicable.

3.6.2.1 Methods of Analysis

Analysis focused on issues related to surface hydrology, flood hazards, groundwater supply, and surface and groundwater quality. The key construction-related impacts were identified and evaluated qualitatively based on the physical characteristics of the Project site and the magnitude, intensity, location, and duration of activities.

3.6.2.2 Thresholds of Significance

The Project would be considered to have a significant effect if it would result in any of the conditions listed below.

- Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality.
- Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin.
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:
    - Result in substantial erosion or siltation on- or off-site
    - substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;
    - Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or
    - Impede or redirect flood flows?
- In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?
- Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

3.6.2.3 Impacts and Mitigation Measures

Impact WQ-1: Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality. (*less than significant with mitigation*)

Construction of the proposed project could introduce sediments and other contaminants typically associated with construction into stormwater runoff. Stormwater flowing over the project features during construction could carry various pollutants downstream such as sediment, nutrients, bacteria

and viruses, oil and grease, heavy metals, organics, pesticides, and miscellaneous waste. These pollutants could originate from soil disturbances, construction equipment, building materials, and workers. Erosion potential and water quality impacts are always present during construction and occur when protective vegetative cover is removed and soils are disturbed. In the case of the proposed Project, potential impacts will result primarily from grading and excavation associated with removal of the old bridge and installation of the new bridge and road approaches.

Removal of the existing bridge foundations and construction of the new bridge foundations will involve work in the creek channel. Construction of the new bridge will require excavation into rock, likely below groundwater. The bottoms 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. 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.

Stormwater runoff from the new bridge structure and approaches will drain to Dry Creek as it does under existing conditions. An approximately 245-foot long bioswale will be located on the east side of Tim Bell Road on the south side of the creek to the top of the bank above Dry Creek. From the end of the bridge to the top of the bank, the swale will be rock-lined to prevent erosion to the bluff. RSP will be placed at the end of the rock-lined swale. From the north side of Dry Creek on the east side of Tim Bell Road, an approximately 1,265-foot long bioswale will drain into Dry Creek. The swale will continue from the outlet for approximately 65 feet and will drain onto RSP placed on the top of the northern bank above Dry Creek. The bridge deck will drain into a catch basin with a vertical outlet. Erosion control aggregate will be placed at the outlet above the ordinary high-water mark (OHWM).

The SWRCB is responsible for implementing portions of the Clean Water Act and has issued a statewide General Permit for Stormwater Discharges Associated with Construction and Land Disturbance (Water Quality Order 2009-0009-DWQ as amended) for construction activities. The SWRCB is in the process of reissuing this statewide Construction General Permit. In the Project area, the Construction General Permit is implemented and enforced by the Central Valley Regional Water Quality Control Board (CVRWQCB). Projects resulting in disturbance of one acre or more are required to obtain coverage under the Construction General Permit. The proposed Project will require coverage under the SWRCB Construction General Permit in effect at the time of construction.

In accordance with the requirements of the Construction General Permit, prior to construction of the proposed Project, a risk assessment must be prepared and submitted to the CVRWQCB to determine the project's risk level and associated water quality control requirements. These requirements will, at a minimum, include the preparation and implementation of a SWPPP identifying specific best management practices (BMPs) to be implemented and maintained on the site in order to comply with the applicable effluent standards.

The Construction General Permit requires that construction sites are inspected before and after storm events and every 24 hours during extended storm events. Inspections identify any BMP maintenance requirements and evaluates the effectiveness of the BMPs.

Compliance with the various requirements of the SWRCB statewide general permit for construction would and Caltrans Construction Site Best Management Practices ensure that water quality impacts during the construction phase of the proposed project would be minimized.

Implementation of the habitat avoidance, revegetation measures and water quality BMPs in mitigation measures BIO-1 (Valley elderberry longhorn beetle) and BIO-8 (Dry Creek) as well as adherence to Project permit requirements will ensure long-term soil stabilization and protection of water quality during construction and reduce potential impacts to less than significant.

Impact WQ-2: Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin. (no impact)

The Project would not involve any withdrawals from an aquifer or groundwater table and would not interfere with groundwater recharge. No impact will occur and no mitigation is required.

Impact WQ-3: Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would; 1)result in substantial erosion or siltation on- or off-site, 2) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site, 3) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff, or 4) impede or redirect flood flows? (less than significant).

The Project does not involve the alteration of the course of Dry Creek. The July 2017 Location Hydraulic Study prepared by WRECO concludes the Project '*would result in insignificant changes to the existing floodplain inundation limits and flood elevations*' and that '*the net increase in impervious surface area is insignificant compared with the overall watershed area for Dry Creek at Tim Bell Road, which is approximately 110.3 sq. miles.*'

The Project would result in approximately 19,357 square feet of new impervious surfaces (new bridge, road approaches and new driveway alignment). The 2017 *Stanislaus County Post Construction Program Flowchart* shows that if a project is not located within the 'NPDES Red Zone' (2016 Stanislaus County NPDES Red Zone Map) then "This project is not applicable to Post Construction Program requirements". The Tim Bell Road Project area is located outside the 'NPDES Red Zone' and the requirements of the Stanislaus County Post-Construction Standards Plan do not apply.

Neither the proposed bridge nor approach roadway would be overtopped during the 100-year flood event. Impacts are less than significant, and no mitigation is required.

Impact WQ-4: In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation? (less than significant)

The Project occurs on FEMA/FIRM panel 06099C0380E (effective date: 26 September 2008) for unincorporated Stanislaus County. FEMA/FIRM panel 06099C0380E designates the Project area as Zone X (areas determined to be outside the 0.2% annual chance floodplain). Given the distance from coastal areas and any large bodies of water the Project is not located in a tsunami or seiche hazard zone. Per County General Plan DEIR Figure V-3 (Stanislaus County Dam Inundation Hazards) the Project is located on the outer edge or immediately outside the Don Pedro dam inundation area. The Project does not occur in a designated flood hazard, tsunami, or seiche zone.

According to the existing conditions hydraulic model generated in support of this Project, the 100-year water surface elevation is well above the top of deck of the existing bridge (WRECO 2017). Therefore, the existing bridge, as well as a portion of the road approach north of the bridge, would be inundated during the base flood. The minimum soffit elevation of the proposed bridge design would be approximately 2 feet above the 100-year water surface elevation. The bridge spans over the oxbow on the north side of Dry Creek would also be elevated and neither the proposed bridge nor approach roadway would be overtopped during the 100-year flood event.

Impact WQ-5: Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan? (less than significant)

The proposed Project does not include activities that would be expected to generate or use any of the pollutants that contribute to Dry Creek being a 303(d)-listed waterbody. The proposed Project would not negatively affect any of the designated beneficial uses for surface and groundwater presented in the Water Quality Control Plan (Basin Plan) for the Sacramento and San Joaquin River Basins. The impact would be less than significant, and no mitigation is required.

3.6.3 References

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Sycamore Environmental Consultants, Inc. February 2020. Water Quality Assessment Technical Memorandum, Tim Bell Road over Dry Creek Bridge (38C-0073) Replacement Project, Stanislaus County, CA.

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3.7 Noise

This section identifies existing conditions and discusses the regulatory setting for noise and vibration, in the Project area and analyzes potential noise and vibration impacts from the proposed Project. The findings of this section are based on the Noise Study Report (NSR) prepared for the proposed Project (Illingworth & Rodkin, Inc. 2019).

3.7.1 Existing Conditions

3.7.1.1 Regulatory Setting

Federal, state, and local agencies regulate various aspects of environmental noise. Generally, the federal government sets noise standards for transportation-related noise sources closely linked to interstate commerce. The state government sets noise standards for transportation noise sources such as automobiles, light trucks, and motorcycles. Noise sources associated with industrial, commercial, and construction activities are generally subject to local control through noise ordinances and general plan policies.

Federal

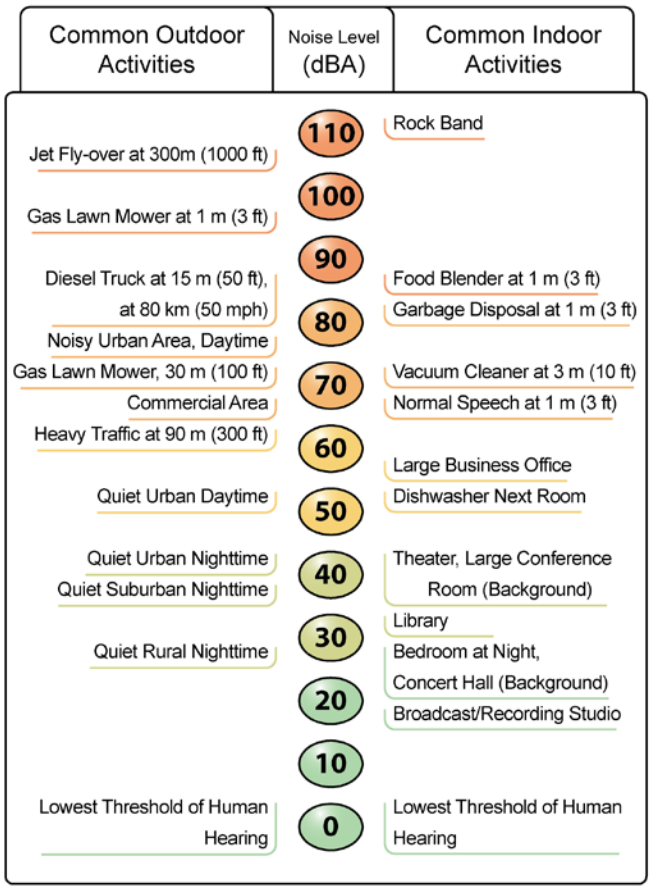
For highway transportation projects with federal involvement, the Federal-Aid Highway Act of 1970 and the associated implementing regulations (23 CFR 772) govern the analysis and abatement of traffic noise impacts. The regulations require that potential noise impacts in areas of frequent human use be identified during planning and design of a highway project, and include noise abatement criteria (NAC) used to determine when a noise impact would occur. NAC differ depending on the type of land use – or "Activity Category" – under analysis. Table 3-7 identifies NAC for the different Activity Categories. Figure 3-4 shows the noise levels of common activities.

Table 3-7. Noise Abatement Criteria

Activity Category	NAC, Hourly A-Weighted Noise Level, Leq(h)	Description of activity category
A	57 (Exterior)	Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose.
B[1]	67 (Exterior)	Residential.
C[1]	67 (Exterior)	Active sport areas, amphitheaters, auditoriums, campgrounds, cemeteries, day care centers, hospitals, libraries, medical facilities, parks, picnic areas, places of worship, playgrounds, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, recreation areas, Section 4(f) sites, schools, television studios, trails, and trail crossings.

D	52 (Interior)	Auditoriums, day care centers, hospitals, libraries, medical facilities, places of worship, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, schools, and television studios.
E	72 (Exterior)	Hotels, motels, offices, restaurants/bars, and other developed lands, properties, or activities not included in A–D or F.
F	No NAC—reporting only	Agriculture, airports, bus yards, emergency services, industrial, logging, maintenance facilities, manufacturing, mining, rail yards, retail facilities, shipyards, utilities (water resources, water treatment, electrical, etc.), and warehousing.
G	No NAC—reporting only	Undeveloped lands that are not permitted.
[1] Includes undeveloped lands permitted for this activity category.		

Figure 3-4. Noise Levels of Common Activities



State

California Environmental Quality Act (CEQA)

CEQA requires a baseline versus build analysis to assess whether a proposed project will result in a noise impact. If a proposed project is determined to cause a substantial increase in noise levels, CEQA requires that feasible mitigation measures be incorporated into the project.

Local

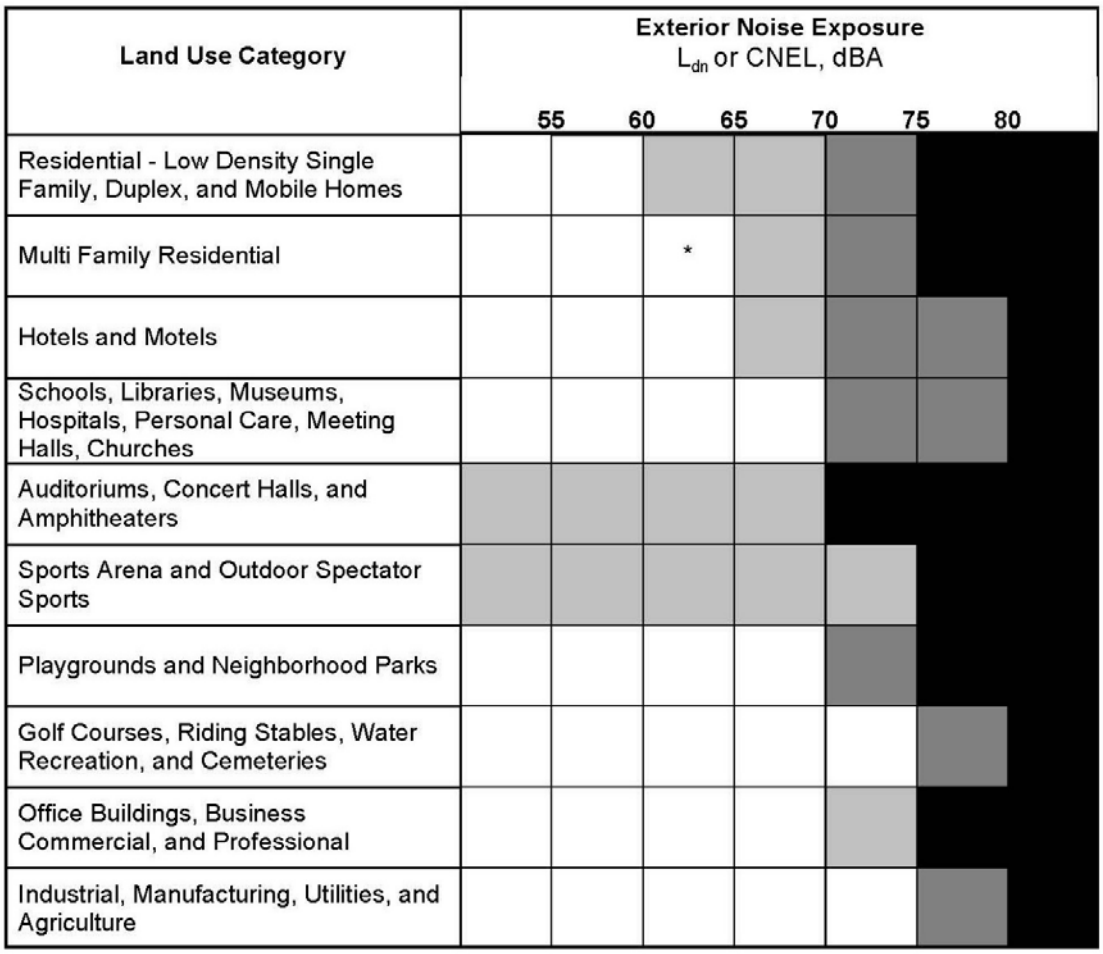
Stanislaus County: Table 3-8 below provides the noise guidelines contained in the Stanislaus County (Stanislaus County, 2016a). The guidelines are intended to illustrate noise levels that allow the full range of activities normally associated with a given land use (only relevant land uses shown). For example, exterior noise levels in the range of 50 to 60 day-night average sound level (Ldn) (or community noise equivalent level [CNEL]) are generally considered acceptable for residential land uses, because these levels will usually allow normal outdoor and indoor activities such as sleep and communications to occur without interruption.

The Stanislaus County General Plan Noise Element includes policies for noise control within unincorporated areas, as follows (Stanislaus County, 2016a).

- **Policy Two**: It is the policy of Stanislaus County to develop and implement effective measures to abate and avoid excessive noise exposure in the unincorporated areas of the County by requiring that effective noise mitigation measures be incorporated into the design of new noise generating and new noise sensitive land uses.
- **Policy Three**: It is the objective of Stanislaus County to protect areas of the County where noise sensitive land uses are located.
    - **Implementation Measure One**: Require the evaluation of mitigation measures for projects that would cause the Ldn at noise sensitive uses to increase by 3 dBA or more and exceed the "normally acceptable" level, cause the Ldn at noise-sensitive uses to increase 5 dBA or more and remain "normally acceptable," or cause new noise levels to exceed the noise ordinance limits (after adoption).

Stanislaus County (Code 10.46.060) limits construction activity that creates sound levels greater than 75 decibels, on average, from occurring after 7:00 PM and before 7:00 AM (Stanislaus County, 2016b).

Table 3-8. County General Plan DEIR Figure 3.12-1 (Land Use Compatibility for Community Noise Environments) (Stanislaus County 2016a)



** Interior noise levels shall not exceed 45 Ldn in all new residential units (single and multi family). Development sites exposed to noise levels exceeding 60 Ldn shall be analyzed following protocols in Appendix Chapter 12, Section 1208, A, Sound Transmission Control, 1998 California Building Code.*

NORMAL ACCEPTABLE
Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special insulation requirements.

CONDITIONALLY ACCEPTABLE
Specified land use may be permitted only after detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design.

NORMALLY UNACCEPTABLE
New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.

CLEARLY UNACCEPTABLE
New construction or development should generally not be undertaken because mitigation is usually not feasible to comply with noise element policies.

Exemptions: Title 10 (Public Peace, Morals, and Welfare), Chapter 10.46 (Noise Controls), Section 10.46.080 (Exemptions) list several activities that are exempt from the provisions of the Nosie Control Ordinance. Section 10.46.080.J states "*Public Entity or Public Utility Activity. This chapter shall not apply to construction or maintenance activities performed by or at the direction of any public entity or public utility.*"

3.7.1.2 Environmental Setting

A field investigation was conducted to identify land uses that could be subject to traffic and construction noise impacts from the Project. No Activity Category A land uses (lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose) were identified along the project corridor.

The only noise-sensitive land use identified during the noise survey along the project corridor was Activity Category B – Residential. One residence occurs approximately 350 feet south of the southern project limits and one residence occurs approximately 35 feet west of Tim Bell Road north of the existing bridge. The primary existing noise source at receptors located along the project alignment is occasional vehicles or farm equipment traveling along Tim Bell Road. Land use surrounding the Project is agriculture. Land uses along the project corridor that are not noise-sensitive include Activity Category F (agricultural land etc.).

3.7.2 Environmental Impacts

This section describes the impact analysis related to noise for the Project. It describes the methods used to determine the impacts of the Project and lists the thresholds used to conclude whether an impact would be significant. Impacts are determined to be less than significant, less than significant with mitigation, or significant and unavoidable; there can also be no impact. Measures to mitigate (i.e., avoid, minimize, rectify, reduce, eliminate, or compensate for) significant impacts accompany each impact discussion, as needed.

3.7.2.1 Methods of Analysis

Under CEQA, the baseline noise level is compared to the build noise level. The assessment entails looking at the setting of the noise impact and then how large or perceptible any noise increase would be in the given area. Key considerations include: the uniqueness of the setting, the sensitive nature of the noise receptors, the magnitude of the noise increase, the number of residences affected, and the absolute noise level.

The Caltrans approved Project NSR included noise measurements and calculations of future noise levels with the construction and operation of the project. The FHWA Traffic Noise Model (TNM) 2.5, was used to calculate existing and future traffic noise levels and analyze traffic noise impacts. The model was validated based on measured noise and traffic conditions documented during the field survey. Following validation, noise levels were assessed in TNM under Existing, 2040 No Build, and 2040 Build conditions.

Although all land uses are evaluated, the focus is on locations of frequent human use that would benefit from a lowered noise level. Accordingly, the impact analysis focuses on locations with defined outdoor activity areas, which included one residential yard. The NSR identifies three receptor locations: R-1 and R-2 are sensitive receptors in the backyard of the residences located on the west side of Tim Bell Road

north of the bridge and R-3 is not a sensitive receptor and is located adjacent to an abandoned barn on the same parcel. There are no other noise sensitive noise receptors, such schools, libraries, churches, hospitals, etc., in the project area.

3.7.2.2 Thresholds of Significance

In accordance with Appendix G of the CEQA Guidelines, the Project would be considered to have a significant effect if it would result in any of the conditions listed below.

- Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?
- Generation of excessive ground-borne vibration or ground-borne noise levels?
- For a project located within -the vicinity of a private airstrip or-an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

3.7.2.3 Impacts and Mitigation Measures

Impact NOI-1: Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? (less than significant)

Operational Nosie: Traffic noise modeling results and predicted traffic noise impacts for existing and design year conditions are shown in Table 3-8 and discussed below. The Project is not anticipated to affect future traffic volumes; therefore, the results of the Existing and No Build scenarios are identical.

Table 3-9. Calculated Noise Levels (Illingworth & Rodkin, Inc. 2019)

Receptor ID	Location	Loudest-Hour Noise Levels, Leq[h] dBA			Change from Existing, dBA		Activity Category (NAC)	Impact[1]
		Existing	No Build	Build	No Build	Build		
R-1	Residence Side yard	55	56	48	1	-7	B(67)	None
R-2	Residence Side yard	44	44	41	0	-3	B(67)	None
R-3	Abandoned Barn	44	45	42	0	-2	F	None

As shown in Table 3-9, the loudest-hour noise levels at Existing and Proposed Category B land uses are calculated to range from 44 to 55 dBA Leq[h] under Existing conditions, from 44 to 56 dBA Leq[hr] under No Build conditions, and from 41 to 48 dBA Leq[h] under Build conditions. Future Build noise levels are calculated to decrease by 2 to 7 dBA below Existing conditions at these use areas due to the horizontal and vertical alignment changes of the roadway and the solid 2-foot 8-inch

barrier proposed at the northern edge of shoulder, on top of the retaining wall, in front of the private residence. Build traffic noise levels are not predicted to approach or exceed the Noise Abatement Criteria (NAC) at any noise sensitive areas of frequent human use in the project vicinity. Additionally, noise level increases would not be considered substantial.

The Predicted noise levels at the receptors do not exceed the 'Normally Acceptable' threshold contained in the County General Plan DEIR Figure 3.12-1 (Land Use Compatibility for Community Noise Environments) (Stanislaus County 2016b). Project impacts are less than significant with respect to future operational noise.

Construction Noise: 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, time of day, and similar factors. These increases would be temporary. Table 3-10 presents the construction noise levels calculated for each major activity of the project. The maximum and average noise levels anticipated during each activity of construction are shown in Table 3-10, based on calculations conducted in FHWA's Roadway Construction Noise Model (RCNM) for typical roadway construction projects.

Table 3-10 Maximum and Average Noise Levels per FHWA's Roadway Construction Noise Model

Construction Phase	Maximum Noise Level (Lmax, dBA)	Hourly Average Noise Level (Leq[h], dBA)
Demolition	84	78
Earthwork	76	78
Paving	79	79
Structures (without Pile Driving)	77	78
Vibratory Pile Driving	95	88
Utilities	75	79

Roadway improvement construction activities typically occur for relatively short periods of time in any specific location as construction proceeds along the project's alignment. Construction noise would mostly be of concern in areas where heavy construction would be concentrated for extended periods of time in areas adjacent to noise sensitive receptors, where noise levels from individual pieces of equipment are substantially higher than ambient conditions, or when construction activities would occur during noise-sensitive early morning, evening, or nighttime hours.

Ambient noise levels at the residence are typically in the range of 45 to 55 dBA Leq. Construction located within 100 feet of this residence would generate average noise levels that could exceed ambient daytime noise levels by 23 dBA Leq[h] or more. Construction noise levels generated by construction activities adjacent to Dry Creek, which is located about 600 feet south of the residence, would be about 16 dBA lower than the levels in Table 3-10, resulting in noise levels of 63 to 64 dBA Leq during most construction activities and about 73 dBA Leq during vibratory pile driving. Section 10.46.080.J of Stanislaus County Code addressing noise control states "*Public Entity or Public Utility Activity. This chapter shall not apply to construction or maintenance activities performed by or at the direction of any public entity or public utility.*"

While the Project is exempt from the Stanislaus County Code regarding noise the following noise reduction best management practices will be implemented by the Project to further limit this already less than significant impact:

Measure NOI-1 (Construction Noise)

- The Project will implement Caltrans Standard Specification 14-8.02, "Noise Control" which states 'Do not exceed 86 dBA Lmax at 50 feet from the job site from 9:00 p.m. to 6:00 a.m.'
- All construction equipment powered by internal combustion engines would be properly muffled and maintained.
- Unnecessary idling of internal combustion engines is prohibited.
- All stationary noise-generating construction equipment such as air compressors or portable power generators are to be located as far as is practical from noise sensitive uses.
- Quiet construction equipment, particularly air compressors, are to be selected whenever possible.
- Limit noise-producing signals, including horns, whistles, alarms, and bells, to safety warning purposes only.
- Control noise from construction workers' radios to a point where they are not audible at noise sensitive uses.
- Designate a "disturbance coordinator" who would be responsible for responding to any complaints about construction noise. The disturbance coordinator would determine the cause of the noise complaint (e.g., bad muffler, etc.) and would require that reasonable measures be implemented to correct the problem. Post a telephone number for the disturbance coordinator at a conspicuous location at the construction site and include in it the notice sent to neighbors regarding the construction schedule.

Impact NOI-2: Generation of excessive ground-borne vibration or ground-borne noise levels? (less than significant).

Operations: The Project would not expand the roadway or change the way in which it is used, ground-borne vibration and sound associated with operations of the road would not change substantially from the current condition.

Construction: Land uses in which groundborne vibration could potentially interfere with operations or equipment, such as research, manufacturing, hospitals, and university research operations are considered "vibration-sensitive" (Federal Transit Administration 2006). The degree of sensitivity depends on the specific equipment that would be affected by the groundborne vibration. No vibration-sensitive land uses are located within 200 feet of the Project area. Because no vibration-sensitive land uses are located within 200 feet of the Project area, temporary construction vibration would not affect vibration-sensitive land uses.

Impact NOI-3: For a project located within the vicinity of a private airstrip or-an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels? (no impact)

The Project is not located within an airport land use plan area or within two miles of a public or public use airport. A potential private air strip occurs 0.95 mile southeast of the Tim Bell Road Bridge. Noise-sensitive land uses are typically not affected when they are beyond 500 feet from the noise source. The

Project does not include housing or other residential land uses, and noise from the airstrip will not affect people working in the Project area.

3.7.3 References

Federal Highway Administration (FHWA). January 2006. *Roadway Construction Noise Model User's Guide*. FHWA-HEP-05-054, DOT-VNTSC-FHWA-05-01. https://www.fhwa.dot.gov/Environment/noise/construction_noise/rcnm/rcnm.pdf

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Chapter 4
Effects Not Found to Be Significant

4.1 Introduction

Section 15128 of the California Environmental Quality Act (CEQA) Guidelines requires that an EIR briefly describe why various environmental effects were determined not to be significant and therefore were not discussed in detail in the EIR. The **Effects Not Found to Be Significant** chapter of this EIR summarizes environmental issues that were determined not to be significant with implementation of the proposed Project. The reasons for the conclusion of non-significance are provided for each issue area.

4.2 Air Quality

Consistent with Appendix G of the CEQA Guidelines and the County's Initial Study Checklist, the proposed Project was determined to have less-than-significant impact or no impact with regard to the following issue areas:

- Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:
    - Conflict with or obstruct implementation of the applicable air quality plan?
    - 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
    - Expose sensitive receptors to substantial pollutant concentrations?
    - Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

The San Joaquin Valley Air Pollution Control District (SJVAPCD) requires projects within its boundaries to undergo an evaluation of assessing potential air quality impacts. The SJVAPCD provides a guidance document "Guidance for Assessing and Mitigating Air Quality Impacts" (GAMAQI 2015), that outlines procedures for assessing potential air quality impacts of proposed projects and for preparing the air quality section of environmental documents. A project would have a potentially significant impact if it exceeds that established thresholds levels as shown in Table 4-1.

Table 4-1. Thresholds of Significance for Criteria Pollutants

Pollutant/Precursor	Construction Emissions (tons/yr)	Operational Emissions (tons/yr)	
		Permitted Equipment and Activities	Non-Permitted Equipment and Activities
CO	100	100	100
NOx	10	10	10
ROG	10	10	10
SOx	27	27	27
PM10	15	15	15
PM2.5	15	15	15

The Project is the replacement of the existing two lane functionally obsolete bridge with a new two-lane bridge on a similar alignment. The proposed Project does not increase the capacity of Tim Bell Road and would not result in increased traffic volumes on Tim Bell Road.

The proposed Tim Bell Road project is included in the StanCOG financially constrained 2019 Federal Transportation Improvement Program (FTIP, project identification number HBP-ID 3628 and Project # 5938(189)), and the fiscally constrained 2018 Regional Transportation Plan/Sustainable Communities Strategy (RTP/ SCS, project identification number S78). The StanCOG 2019 FTIP and 2018 RTP/ SCS were found to conform by StanCOG on August 15, 2018. The design concept and scope of the proposed project is consistent with the project description in the 2018 RTP/ SCS, 2019 FTIP, and the "open to traffic" assumptions of the StanCOG Air Quality Conformity Analysis approved by FHWA on December 3, 2018.

The Tim Bell Road Project was included in the regional emissions analysis conducted by StanCOG for the conforming 2018 Regional Transportation Plan (StanCOG 2018). The plan is in conformity, and therefore, the individual projects contained in the plan are conforming projects and will have air quality impacts consistent with those identified in the state implementation plans (SIPs) for achieving the Ambient Air Quality Standards (AAQS). The Project will not 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.

The SJVAPCD's Indirect Source Rule (ISR) 9510 is intended to reduce a project's impact on air quality through project design elements or mitigation by payments of applicable off-site mitigation fees. ISR 9510 section 4.0 (Exemptions) lists several project types that are exempt from its requirements. Per sections 4.4.2 of ISR 9510 below the Tim Bell Road Project is an existing road subject to District Rule 8061 and exempt from ISR 9510.

"4.4.2 Transportation development projects that consist solely of:

4.4.2.1 A modification of existing roads subject to District Rule 8061 that is not intended to increase single occupancy vehicle capacity"

The SJVAPCD' has instituted fugitive dust requirements under Regulation VIII (includes Rules 8011, 8021, 8031, 8341, 8051, 8061,8071, and 8081) that require projects to take actions to reduce ambient concentrations of fine particulate matter (PM10). Regulation VIII requires property owners,

contractors, developers, equipment operators, farmers and public agencies to control fugitive dust emissions from specified outdoor fugitive dust sources. Regulation VIII specifies the following measures to control fugitive dust:

- Apply water to unpaved surfaces and areas.
- Use non-toxic chemical or organic dust suppressants on unpaved roads and traffic areas Limit or reduce vehicle speed on unpaved roads and traffic areas.
- Maintain areas in a stabilized condition by restricting vehicle access.

The proposed Project does not increase the capacity of Tim Bell Road and would not result in increased traffic volumes on Tim Bell Road.

Sensitive air quality receptors include receptors such as residences, schools, daycare centers, nursing homes, and hospitals. No schools, daycare centers, nursing homes, or hospitals occur within on mile of the Project area. One residence occurs approximately 350 feet south of the southern project limits and one residence occurs approximately 35 feet west of Tim Bell Road north of the existing bridge. Land use surrounding the Project is agriculture.

Construction emissions were estimated for the Project using the Sacramento Metropolitan Air Quality Management District's Road Construction Emissions Model (RCEM), Version 9.0.0. 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 4-2 regarding type of construction equipment and use duration were used in the RCEM. Other Project assumptions used in the RCEM include a total 12-month construction schedule starting in 2022 and the use of water trucks. Results of the RCEM based on the Project assumptions are in Table 4-3. Given the low emissions total compared to the thresholds, a different year of construction two or three years out would not result in the Project approaching any threshold.

Table 4-2. Construction Equipment Assumptions

Construction Period	**Equipment**	
	Quantity (Running Hrs Per Day)	**Type**
Grubbing/ Land Clearing	2(6) 1(8) 1(8)	Excavator Bulldozer Signal Board
Grading/Excavation	1(6) 1(8) 2(6) 1(8) 1(8) 2(8)	Crane Bulldozer Excavator Grader Roller Loaders

	1(6) 1(8) 1(8)	Scraper Signal Board Backhoe
Drainage/Utilities/Sub-Grade	1(8) 1(8) 1(8) 1(8) 1(8) 1(8) 2(6) 1(8) 2(8)	Air Compressor Generator Set Grader Plate Compactor Pump Rough Terrain Forklift Scraper Signal Board Backhoe
Paving	1(8) 1(8) 1(8) 1(8) 1(8) 2(8)	Paver Paving Equipment Roller Signal Board Backhoe

Table 4-3. Estimated Construction Emissions

Project Phases	ROG lbs/day	CO lbs/day	NOx lbs/day	PM10 Total lbs/day	PM2.5 Total lbs/day	SOx lbs/day
Grubbing/land clearing	0.90	8.06	9.54	5.40	1.40	0.02
Grading/excavation	3.96	31.94	42.77	6.80	2.61	0.08
Drainage/utilities/sub-grade	3.27	30.26	32.51	6.44	2.36	0.06
Paving	1.01	12.97	10.08	0.53	0.46	0.02
Maximum lbs/day	3.96	31.94	42.77	6.80	2.61	0.08
Significance Threshold (tons/year)	*10*	*100*	*10*	*15*	*15*	*27*
Significance Threshold converted to lbs/day	*54.8*	*547.9*	*54.8*	*82.2*	*82.2*	*148.9*
Significant?	No	No	No	No	*No*	*No*

Notes: Data entered to emissions model: Project Start Year: 2022; Project Length (months): 12; Total Project Area (acres): 7.46; Total Soil Imported/Exported (yd^3/day): 100. Total PM10 emissions are the sum of *exhaust* and *fugitive dust* emissions.

Project construction would create short-term increases in ROG, NOx, and PM10 emissions from vehicle and equipment operation. All estimated construction emissions are below the SJVAPCD CEQA thresholds. Impacts are less than significant due to the limited nature of the Project and short-term construction period.

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.

4.3 Tribal Cultural Resources

Consistent with Appendix G of the CEQA Guidelines and the County's Initial Study Checklist, the proposed Project was determined to have less-than-significant impact or no impact with regard to the following issue areas:

- 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:
    - 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
    - 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.

Stanislaus County has not received any requests in writing from California Native American tribes to be notified under Public Resources Code Section 21074 of proposed projects in the geographic area with which the tribe is traditionally and culturally affiliated. 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.

Six trenches were excavated to determine the presence or absence of buried archaeological resources in areas where deep and/or extensive project ground disturbance will occur within areas of Moderate or Highest potential for buried archaeological resources. No archaeological materials or laterally extensive, intact buried soils with archaeological potential, were identified during this study. Figure 3.6-5 (Paleontological Sensitivity) of the County General Plan DEIR identifies the Project area as having high paleontological sensitivity (Stanislaus County 2016b). Neither pedestrian surveys by archaeologists nor subsurface testing by archaeologists identified a prehistoric site. No impact would occur.

4.4 Energy

Consistent with Appendix G of the CEQA Guidelines and the County's Initial Study Checklist, the proposed Project was determined to have less-than-significant impact or no impact with regard to the following issue areas:

- Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?
- Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Project construction would result in short-term increased energy requirements through the use of gasoline and diesel fuels for operation of heavy-duty construction equipment and vehicles. Materials manufacturing would also consume energy, although information on the intensity and quantity of fuel used during manufacturing is currently unknown and beyond the scope of project-level environmental

analyses. An analysis of energy associated with materials manufacturing is considered speculative and is not presented in this document.

The use of heavy-duty trucks and construction equipment would result in a temporary increase in fuel consumption in the study area relative to the existing condition. As discussed in the Air Quality section construction emissions do not exceed the County's significance thresholds for criteria pollutants. The Project construction emissions resulting from the use of gasoline and diesel fuels for operation of heavy-duty construction equipment are below the significance thresholds. Therefore, the fuel used to generate construction emissions is not considered excessive or wasteful.

Operation of the new bridge would not result in a long-term continuous use of electricity because bridge lighting is not part of the design. Operation of the new bridge would have a minimal effect on local or regional energy supplies. There would be no effect on peak- or base-period demands for electricity or other forms of energy.

The energy use associated with construction and operation of the proposed Project would not conflict with applicable state or local energy legislation, policies or standards and would not be considered wasteful, inefficient, or unnecessary. The impact on energy use would be less than significant.

4.5 Geology and Soils

Consistent with Appendix G of the CEQA Guidelines and the County's Initial Study Checklist, the proposed Project was determined to have less-than-significant impact or no impact with regard to the following issue areas:

- Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:
    - Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42
    - Strong seismic ground shaking?
    - Seismic-related ground failure, including liquefaction?
    - Landslides?
- Result in substantial soil erosion or the loss of topsoil?
- 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?
- Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?
- 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 issues associated with soils and geology focus on the potential for a project to expose people or structures to risks associated with rupture of a known earthquake fault or other seismic activity, loss of soil integrity such as liquefaction or subsidence, and other geologic and soils risks such as expansive soils. In addition, issues of erosion and sediment control are relevant (see also Section 3.6).

For the proposed Tim Bell Road bridge replacement project, risks associated with geology and soils conditions were studied as part of preliminary engineering design work, and will continue to be studied using standard industry practices such as geotechnical investigations. A preliminary foundation report was produced by Parikh Consultants Inc. (2018). The preliminary foundation report states (Parikh 2018):

> "*The site is located outside the designated State of California Alquist-Priolo Earthquake Fault Zones for active faulting and no mapped evidence of active or potentially active faulting was found for the site. The potential for fault rupture at the site appears to be low.*"

All final design and other pre-construction engineering design work would follow Stanislaus County design standards, Caltrans Highway Design Manual, and engineering reference standards published by AASHTO including the *Policy on Geometric Design of Highways and Streets* (the "Green Book") and *LRFD Bridge Design Specifications*. By following standard industry practices, all geology and soils risks would be minimized such that impacts would be less than significant.

4.6 Greenhouse Gas Emissions

Consistent with Appendix G of the CEQA Guidelines and the County's Initial Study Checklist, the proposed Project was determined to have less-than-significant impact or no impact with regard to the following issue areas:

- Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?
- Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

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 Tim Bell Road and would not increase operational GHG levels. The discussion below therefore focuses on construction related GHG emissions of the Project.

Construction of the proposed Project would generate short-term emissions of greenhouse gases. The 2015 SJVAPCD *Guidance for Assessing and Mitigating Air Quality Impacts* document states the following:

> *'In the absence of scientific evidence supporting establishment of a numerical threshold, the District policy applies performance based standards to assess project-specific GHG emission impacts on global climate change.'*

As stated in the text of the 2015 SJVAPCD Guidance, the policy provides for a tiered approach in assessing significance of project specific GHG emission increases:

> *'Projects complying with an approved GHG emission reduction plan or GHG mitigation program which avoids or substantially reduces GHG emissions within the geographic area in which the project is located would be determined to have a less than significant individual and cumulative impact for GHG emissions.'*

The proposed Project is identified as project identification number S78 in StanCOG's 2018 Regional Transportation Plan/Sustainable Communities Strategy (MTP/SCS) (StanCOG 2018a). The 2018 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 2018 MTP/SCS analysis.

Potential impacts resulting from GHG emissions during project construction and operation are less than significant due to the following:

- The Project does not increase the capacity of Tim Bell Road
- The Project is included as project S78 in the StanCOG 2018 RTP/SCS.
- GHG emissions from construction would likely be offset by improvements related to the lifetime and maintenance intervals of the bridge and approach roadway.

4.7 Land Use and Planning

Consistent with Appendix G of the CEQA Guidelines and the County's Initial Study Checklist, the proposed Project was determined to have less-than-significant impact or no impact with regard to the following issue areas:

- Would the project physically divide an established community?
- Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

The Project replaces and existing bridge with and does not include activities that could lead to dividing an established community.

The proposed Tim Bell Road project is included in the StanCOG financially constrained 2019 FTIP (project identification number HBP-ID 3628 and Project # 5938(189)), and the fiscally constrained 2018 RTP/SCS (project identification number S78). The individual projects contained in the plan will have air quality impacts consistent with those identified in the state implementation plans (SIPs) for achieving the Ambient Air Quality Standards (AAQS).

The Project is consistent with the County General Plan. This document evaluates potential impacts resulting from the proposed Project and provides mitigation measures to reduce potentially significant impacts to less than significant (excluding cultural resources). The Project would not cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted to avoid or mitigate any such impact (excluding cultural resources).

4.8 Mineral Resources

Consistent with Appendix G of the CEQA Guidelines and the County's Initial Study Checklist, the proposed Project was determined to have less-than-significant impact or no impact with regard to the following issue areas:

- Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?
- Would the project 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?

Sand and gravel resources are the primary mineral resources of economic importance in Stanislaus County (Stanislaus County 2016a). The Project area is not located in a designated 'Aggregate Resource Area' per Appendix III-A of the County General Plan (Stanislaus County 2016a). Map plate 2C of the Mineral Land Classification of Stanislaus County shows the Project located in an area classified as Mineral Resource Zone (MRZ) 3a. Areas classified as MRZ 3a are "*Areas containing known mineral occurrences of undetermined mineral resource significance. Further exploration work within these areas could result in the reclassification of specific localities into MRZ-2a or MRZ-2b categories.*"

The Project is not designated as a 'Aggregate Resource Area' per Plate 8 of the Mineral Land Classification of Stanislaus County and the County General Plan. An Aggregate Resource Area is an area deemed available for mining based on criteria set by the State Mining and Geology Board. The Project would not result in the loss of availability of a known mineral resource of mineral resource recovery site. No impact will occur.

4.9 Population and Housing

Consistent with Appendix G of the CEQA Guidelines and the County's Initial Study Checklist, the proposed Project was determined to have less-than-significant impact or no impact with regard to the following issue areas:

- Would the Project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?
- Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

The purpose of the Project is to correct the existing deficiencies of the Tim Bell Road Bridge by replacing it with a new structure that meets the current Stanislaus County standards and the AASHTO guidelines. The Project would not increase the capacity of Tim Bell Road and would not induce any changes in land use or density.

Project construction could result in a temporary increase in construction jobs, but it is anticipated these jobs would be filled by construction-related companies in Modesto and Stanislaus County and would not result in changed demands for housing. Operation of the project would not result in any changes in employment related to maintenance, repair, and inspection of the upgraded roads and bridge because these activities would occur as a part of regular and ongoing maintenance and inspection activities.

Therefore, no increased short-term or long-term demands for housing or related services would occur as the result of the Project.

4.10 Public Services

Consistent with Appendix G of the CEQA Guidelines and the County's Initial Study Checklist, the proposed Project was determined to have less-than-significant impact or no impact with regard to the following issue areas:

- Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:
    - Fire protection?
    - Police Protection?
    - Schools?
    - Parks?
    - Other public facilities?

The potential environmental impacts resulting from replacement of the existing Tim Bell Road Bridge over Dry Creek (governmental facility) are evaluated in this document and mitigation provided to reduce potential significant impacts. No other new or physically altered governmental facilities would be needed.

4.11 Recreation

Consistent with Appendix G of the CEQA Guidelines and the County's Initial Study Checklist, the proposed Project was determined to have less-than-significant impact or no impact with regard to the following issue areas:

- 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?
- Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

The Modesto Reservoir Regional Park, operated by Stanislaus County Parks & Recreation is located approximately 1.6 miles southeast of the Project. No other parks or other recreational facilities occur in the Project area or within 2 miles. The Project will not affect the use or operation of the Modesto Reservoir Regional Park. The proposed project replaces an existing bridge and does not increase the capacity of Tim Bell Road. The Project is not growth inducing and does not include the construction of or expansion of recreational facilities.

4.12 Transportation

Consistent with Appendix G of the CEQA Guidelines and the County's Initial Study Checklist, the proposed Project was determined to have less-than-significant impact or no impact with regard to the following issue areas:

- Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?
- Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)
- Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?
- Result in inadequate emergency access.
- Result in inadequate parking capacity.

This section is based largely on the *Traffic Evaluation for the Tim Bell Road Bridge Replacement* technical memorandum prepared for the (Fehr & Peers 2017). The Three-County Model (travel demand model), recently updated as part of the San Joaquin Valley Model Improvement Project and used in the evaluation of the StanCOG 2014 RTP/SCS, was used to forecast daily roadway segment volumes (Fehr & Peers 2017).

The County General Plan provides level of service (LOS) criteria for roadways based on daily volume. LOS is a general measure of traffic operating conditions whereby a letter grade, from A (free-flow) to F (over-capacity), is assigned. LOS E represents "at-capacity" operations. These grades represent the perspective of drivers and are an indication of the comfort and convenience associated with driving. Stanislaus County strives to maintain LOS D or better operations for motorized vehicles on all roadway segments.

Tim Bell Road is classified as a two-lane minor collector in the Stanislaus County General Plan and Airport Land Use Compatibility Plan Update Draft Program EIR (Stanislaus County 2016b). Table 4-4 presents the daily traffic volume (both directions) on Tim Bell Road and vehicle classification based on data collected in February 2017.

Table 4-4. Existing Daily Traffic Volumes on Tim Bell Bridge by Vehicle Classification

	Passenger Cars & Motorcycles	Buses	Trucks by Axle				Total
			2	3	4	5	
Volume	258	0	18	1	5	0	282
Percent of Total Traffic	91.5%	0%	6.4%	0.4%	1.8%	0%	100%

Source: Fehr & Peers 2017

Replacement of the existing bridge would not change the amount of traffic on Tim Bell Road because it is not a new development or growth inducing project.

Appendix K (Project List) of the 2018 RTP/SCS includes the proposed Project as fiscally constrained project number 'S78' (StanCOG 2018a). Appendix A (Project List) of the 2019 FTIP includes the proposed Project as fiscally constrained project '*S78*' (StanCOG 2018b). Since the Project was included

and analyzed in these plans, and the design and scope have not changed the Project is consistent with both the 2018 RTP/SCS and 2019 FTIP.

Table 4-5 presents the daily volumes on study area roadways and existing LOS. All of the study area roadways currently operate at LOS D or better conditions.

Table 4-5. Existing Level of Service on Study Area Roadways

Roadway	Daily Traffic Volume	LOS
Tim Bell Road (two-lane minor collector)	282	A
Claribel Road east of Tim Bell Road (two lane minor collector)	235	A
Ellenwood Road west of Oakdale-Waterford Hwy (two-lane major collector)	641	A
Oakdale-Waterford Hwy south of Ellenwood Road	7,501	D
State Route 132 west of Tim Bell Road (two-lane minor arterial)	7,400	D
Source: Stanislaus County 2016b, Fehr & Peers 2017		

The Three-County Model (travel demand model) indicates substantive traffic growth on the Oakdale-Waterford Highway and SR 132; however, for Tim Bell Road and the other study roadways the model indicates future traffic volumes would remain similar to existing conditions. Based on the General Plan the population in Stanislaus County is anticipated to increase by about 1.6% per year over the next 20 years. To ensure future year volumes were not underestimated, the roadway volumes on Tim Bell Road, Claribel Road, and Ellenwood Road were increased by 1.6% per year to determine future year volumes in both 2021 and 2040. Table 4-6 presents the future year volumes and anticipated LOS. The analysis results indicate that Tim Bell Road (Tim Bell Road Bridge) would operate at LOS A in year 2021 and 2040 as a two-lane roadway. The Project is consistent with the County General Plan policy of maintaining LOS D or better for all County roadways.

Table 4-6. Future Year Level of Service on Study Area Roadways

Roadway	Year 2021		Year 2040	
	Daily Traffic Volume	LOS	Daily Traffic Volume	LOS
Tim Bell Road (two-lane minor collector)	310	A	390	A
Claribel Road east of Tim Bell Road (two lane minor collector)	260	A	330	A
Ellenwood Road west of Oakdale-Waterford Hwy (two-lane major collector)	690	A	880	A
Oakdale-Waterford Hwy south of Ellenwood Road	7,990	D	10,270	D
State Route 132 west of Tim Bell Road (two-lane minor arterial)	7,650	D	8,800	D
Source: Fehr & Peers 2017				

Per the StanCOG *Final Non-Motorized Transportation Master Plan* (Plan, October 2013) no existing or planned bicycle facilities occur on Tim Bell Road. Per Figure 2.13 (Countywide Potential Pedestrian Demand and Priority Pedestrian Areas) of the Plan the Project area does not have any demand for

pedestrian facilities and is not a Priority Pedestrian Area (StanCOG 3013). The Project is consistent with the StanCOG *Final Non-Motorized Transportation Master Plan.*

The proposed Project replaces an existing functionally obsolete two-lane bridge with a new two-lane bridge on substantiality the same alignment to meet current Stanislaus County standards and AASHTO design guidelines. The Project does not increase the capacity of Tim Bell Road and is not growth inducing.

When the State of California passed State Bill (SB) 743 in 2013, it was to "more appropriately balance the needs of congestion management with statewide goals related to infill development, promotion of public health through active transportation, and reduction of greenhouse gas emissions." Commonly known as State Bill (SB) 743, Public Resources Code section 21099 directed the Office of Planning and Research to develop guidelines for assessing transportation impacts based on vehicle miles traveled (VMT). With the certification and adoption of the changes to the CEQA Guidelines in 2018 "automobile delay, as described solely by level of service [LOS] or similar measures of vehicular capacity or traffic congestion shall not be considered a significant impact on the environment."

Section 15064.3 of the CEQA Guidelines establishes specific considerations for evaluating a project's transportation impacts. The CEQA Guidelines identify vehicle miles traveled (VMT), which is the amount and distance of automobile travel attributable to a project, as the most appropriate measure of transportation impacts. Per Section 15.64.3(b)(2) "*Transportation projects that reduce, or have no impact on, vehicle miles traveled should be presumed to cause a less than significant transportation impact.*" The proposed Project does not increase the capacity of Tim Bell Road, Project impacts are less than significant.

The Project will not increase hazards because of design features. The purpose of the Project is to correct the existing deficiencies of the Tim Bell Road Bridge by replacing it with a new structure that meets the current Stanislaus County standards and the AASHTO guidelines by providing:

- Improved sight distance,
- Improved bridge deck geometry and approach roadway alignment removes the existing "s-curve",
- A safe design speed,
- An increased bridge deck width of 26 feet (two 11-foot travel lanes with two 2-foot shoulders)
- A bridge structure the allows AASHTO permit truck loads,
- A new bridge barrier system, and
- A bridge structure that passes the 100-year high water elevation and 50-year high water elevation plus 2 feet.

Tim Bell Road in the Project area will be closed to through traffic during construction. A detour will be provided for adjacent local residences. The existing bridge will remain in place during construction and be used as a detour for local traffic and emergency service responders. The local detour will cross under the new bridge and falsework. This local detour alignment minimizes impacts to an existing active walnut orchard and Dry Creek compared to a detour alignment that remained on the east side of Tim Bell Road. 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 with local law enforcement and emergency services providers. Project impacts are less than significant.

No existing delineated parking areas occur in the Project area. The Project does not include removing existing parking or providing new parking. No impact will occur.

4.13 Utilities and Service Systems

Consistent with Appendix G of the CEQA Guidelines and the County's Initial Study Checklist, the proposed Project was determined to have less-than-significant impact or no impact with regard to the following issue areas:

- Require or result in the relocation or construction of new water or expanded wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?
- Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years
- 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?
- Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?
- Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

The proposed Project design includes the following stormwater drainage improvements. An approximately 245-foot long bioswale will be located on the east side of Tim Bell Road on the south side of the creek to the top of the bank above Dry Creek. From the end of the bridge to the top of the bank, the swale will be rock-lined to prevent erosion to the bluff. RSP will be placed at the end of the rock-lined swale. From the north side of the creek on the east side of Tim Bell Road, an approximately 1,265-foot bioswale will drain into Dry Creek. The bridge deck will drain into a catch basin with a vertical outlet. Erosion control aggregate will be placed at the outlet above the ordinary high-water mark (OHWM). The swale will continue from the outlet for approximately 65 feet and will drain onto RSP placed on the top of the northern bank above Dry Creek. On the west side of Tim Bell Road north of the creek, a 330-foot drainage ditch will drain into corrugated metal pipe under the driveway and aggregate erosion control. From that outlet, a bioswale will continue another 700 feet before crossing underneath the bridge to merge with the bioswale on the east side of the bridge. The inclusion of bioswales in the Project design and their construction as part of the overall Project will not cause significant negative environmental effects.

There are overhead utility lines on the east side of Tim Bell Road south of the existing bridge that cross the road at the northern "s-curve", and continue up the west side of the road to the north end of the project area. Existing telecommunication lines (copper/ fiber optic) are underground south of the existing bridge, then run through conduit attached to the downstream side of the bridge deck. North of the bridge, the telecommunication lines are underground on the west side of Tim Bell Road. These utilities will require relocation due to construction. Relocation of overhead utility lines may require the County, utility provider, or their contractors to trim or remove trees prior to construction. The inclusion of utility relocations in the Project design and their implementation as part of the overall Project will not cause significant negative environmental effects.

Operation and maintenance of the replacement bridge following construction would not be expected use additional water supplies. Future routine maintenance may include pressure washing and other minor water uses.

The Project does not require wastewater services.

Solid waste generated by the Project would be limited to construction debris. Solid waste disposal would occur in accordance with federal, state, and local regulations. Bertolotti Disposal and Transfer Station and Gilton Solid Waste Management provide residential, commercial, and industrial solid waste services in cities and unincorporated portions of Stanislas County. The Fink Road Sanitary Landfill is a Class III landfill for nonhazardous municipal solid waste; the facility is owned by Stanislaus County and operated by the Stanislaus County Department of Environmental Resources. Class 1 facilities that accept hazardous waste are located in Kings and Kern counties.

The Fink Road Sanitary Landfill is permitted to receive 2,400 tons of solid waste a day through 2023; per the 2016 County General Plan DEIR it is currently at approximately 50% of its permitted capacity. No impact will occur.

The Project would conform to all applicable state and federal solid waste management regulations and reduction statutes. No impact will occur.

4.14 Wildfire

Consistent with Appendix G of the CEQA Guidelines and the County's Initial Study Checklist, the proposed Project was determined to have less-than-significant impact or no impact with regard to the following issue areas:

- If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:
    - Substantially impair an adopted emergency response plan or emergency evacuation plan?
    - Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?
    - Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?
    - Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

The Project is not located in a '*Fire Hazard Severity Zone in the State Responsibility AREA (SRA)*' per the 2007 CAL FIRE, Fire Hazard Severity Zones in SRA maps. These maps determine geographical areas where the State of California is primarily financially responsible for preventing and suppressing forest fires. The Project area is identified as a 'Local Responsibility Area (LRA)- Unzoned' per the 2007 CAL FIRE, Fire Hazard Severity Zones in SRA map for Stanislaus County. The Project is in an 'Unzoned' area and is not classified as a very high fire hazard severity zone.

4.15 References

Fehr & Peers. 8 June 2017. Memorandum, Traffic Evaluation for the Tim Bell Road Bridge Replacement Report. Prepared for: HDR. Prepared by: Fehr & Peers

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Chapter 5
Alternatives

5.1 Alternatives Overview

CEQA requires that an EIR include a reasonable range of feasible alternatives to the proposed Project that meet most or all project objectives while reducing or avoiding one or more significant impacts of the project. According to State CEQA Guidelines Section 15126.6(f), the range of alternatives required in an EIR is governed by a "rule of reason" that requires an EIR to set forth only those alternatives necessary to allow a reasoned choice. An EIR need not consider every conceivable alternative to a project. Instead, the discussion of alternatives must "focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project." Where a potential alternative is examined but not chosen as one of alternatives, the State CEQA Guidelines require that an EIR briefly discuss the reasons the alternative was dismissed. An EIR is not required to consider alternatives which are infeasible. In addition to a range of alternatives, an EIR must discuss the "No-Project Alternative," which describes the reasonably foreseeable probable future conditions if the project is not approved (State CEQA Guidelines Section 15126.6).

The lead agency must consider the alternatives discussed in an EIR before acting on a project. The agency is not required to adopt an alternative that may have environmental advantages over the project if specific economic, social, or other conditions make the alternative infeasible (PRC Section 21002).

This chapter describes the alternatives to the Tim Bell Road Bridge Replacement Project and compares the anticipated environmental impacts of the alternatives to those of the proposed Project, analyzed in Chapter 3, *Impact Analysis*, Sections 3.1 through 3.13.

5.2 Alternatives Development

The County prepared a *Bridge Replacement Feasibility Report* in 2015 to evaluate rehabilitation of the bridge along with the proposed Project and two other alignment alternatives (HDR 2015). The bridge rehabilitation option was dismissed because even with implementation of the rehabilitation work the bridge would still not meet current safe design standards. The County has determined that the proposed Project and two other alignment alternatives would fulfill the CEQA requirements of meeting many of the project objectives, would be fairly feasible, and avoid or substantially lessen any significant impacts. In addition, a No-Project Alternative must be considered in an EIR. Therefore, the following alternatives are evaluated in comparison with the proposed Project described in Chapter 2 and evaluated in Chapter 3.

- No Project Alternative
- Upstream Alignment Alternative
- Middle Alignment Alternative

5.3 Alternatives Analysis

Each of the alternatives listed above are further described and analyzed in the sections below. The impacts of each alternative are qualitatively compared to the impacts of the proposed Project in terms of impact type and severity.

5.3.1 No Project Alternative

Section 15126.6(e)(2) of the State CEQA Guidelines requires an EIR to include an analysis of the No-Project Alternative. Evaluation of the No-Project Alternative allows decision makers to compare the impacts of approving the proposed Project with the impacts of not approving the proposed Project. The No-Project Alternative assumes that the proposed Project would not be implemented but does not necessarily preclude use or development of the Project site. Rather, the No-Project Alternative evaluated in this Draft EIR considers "what would be reasonably expected to occur in the foreseeable future if the proposed Project were not approved, based on current plans and consistent with available infrastructure and community services" (State CEQA Guidelines Section 15126.6 [e][2]).

For this Draft EIR, the No-Project Alternative assumes that the existing bridge would remain and continue to be maintained. As discussed in Chapter 2, *Project Description*, Section 2.2, the bridge has a sufficiency rating of 53.3 due to several deficiencies including: load capacity, geometrics, barrier, hydraulics, seismic, and foundations. Under the No Project Alternative the bridge will continue to deteriorate leading to a possible catastrophic structure collapse during a high water event and the eventual closure of the bridge to the public.

5.3.1.1 Impact Analysis

Aesthetics

The No-Project Alternative would result in no impacts on aesthetics because use of the existing bridge would not change. There would be no construction-related removal of the existing bridge structure or vegetation or change in views from the roadway, or residential uses. No new roadway approaches or bridge structure would be introduced to the visual setting. The No-Project Alternative, like the proposed Project, does not include new light sources and would not result in impacts on scenic vistas or resources because there are no designated scenic highways or other resources in the Project area.

Agricultural and Forestry

The No-Project Alternative would result in no impacts on agricultural and forestry resources because use of the existing bridge would not change. No land under Williamson Act contract would need to be acquired as with the proposed Project. No orchard tree removal would be needed as with the proposed Project. No Prime Farmland, Unique Farmland, or Farmland of Statewide Importance would be converted. No timber resources occur in the Project area. Impacts would be less than the proposed Project.

Air Quality

The No-Project Alternative would not result in impacts on air quality. Construction related short-term construction emissions would not be generated and there would be no potential to exceed SJVAPCD's

thresholds or expose sensitive receptors to substantial pollutant concentrations. No change in traffic volume or circulation would occur and as a result, no change in operational emissions would occur. Since the existing bridge would not be demolished, there would be no potential for exposure to agricultural chemicals (potentially present in adjacent soil) or nuisance odors. Impacts would be less than the proposed Project.

Biological Resources

Under the No-Project Alternative, annual maintenance activities could potentially result in temporary disturbances to nesting migratory birds and minor vegetation management. However, no ground disturbance or loss of habitat or wetlands would occur. Impacts would be less than the proposed Project.

Cultural Resources

In accordance with Section 15064.5(a)(2)-(3) of the CEQA Guidelines, using the criteria outlined in Section 5024.1 of the California Public Resources Code, Tim Bell Road Bridge is listed in the CRHR and is a historical resource for the purposes of CEQA, and the property at 4331 Tim Bell Road is not a historical resource for the purposes of CEQA. Six trenches were excavated to determine the presence or absence of buried archaeological resources in areas where deep and/or extensive project ground disturbance will occur within areas of Moderate or Highest potential for buried archaeological resources. No archaeological materials or laterally extensive, intact buried soils with archaeological potential, were identified during this study. Figure 3.6-5 (Paleontological Sensitivity) of the County General Plan DEIR identifies the Project area as having high paleontological sensitivity (Stanislaus County 2016b). The No-Project Alternative would not result in impacts to the Tim Bell Road Bridge. The potential to disturb or destroy buried archaeological resources or previously unknown human remains would remain unchanged. Operation and maintenance of the existing bridge and roads would not be expected to affect previously identified historical resources. Impacts would be less than the proposed Project. Because there would be no ground-disturbing construction activities, the No-Project Alternative would not impact paleontological resources.

Tribal Cultural Resources

Stanislaus County has not received any requests in writing from California Native American tribes to be notified under Public Resources Code Section 21074 of proposed projects in the geographic area with which the tribe is traditionally and culturally affiliated. 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.

During the NHRP Section 106 process an initial request for a search of the Sacred Lands file and a list of interested individuals was sent to the Native American Heritage Commission in 2013. The Commission responded on November 14, 2013. No sacred sites were identified. The Commission provided a list of Native American interested parties. Letters were sent to each, soliciting their comments, on November 21, 2013. The Tuolumne Band of Me-wuk responded with a letter stating that they had no concerns about the project.

A request for an updated search of the Sacred Lands file and list of interested individuals was sent to the Commission in 2017. The Commission response dated March 24, 2017, again reported that no sacred sites were identified. A letter was sent to all listed parties on April 6, 2017. Far Western conducted follow-up phone calls on April 20 and 27, 2017, with some additional follow-up emails conducted on

May 8, 2017. If contacts were not available by phone, voice messages were left or emails were sent. Only one response has been received to date. In a phone call on April 20, 2017, Mr. Tiger Paulk of the California Valley Miwok Tribe stated that the tribe would like to be notified if any Native American archaeological finds are made during the project.

The No-Project Alternative would not impact tribal cultural resources as none have been identified to date. Impacts would be similar to the proposed Project.

Energy

Under the No-Project Alternative energy use would remain the same as current condition. Impacts would be less than the proposed Project.

Geology and Soils

Under the No-Project Alternative, there would be no immediate impacts related to geologic hazards, such as those associated with fault rupture, strong ground shaking, and soil erosion, because the project would not be built.

Impacts under the No-Project Alternative similar to slightly less than the proposed Project.

Greenhouse Gas Emissions

The No-Project Alternative would not result in impacts to GHG emissions. Short-term construction emissions would not be generated and there would be no potential to exceed regional significance thresholds of CO2e. There would likewise be no change in traffic conditions and as a result, no impact on operational GHG emissions. Impacts would be less than the proposed Project.

Hazards and Hazardous Materials

The proposed Project Initial Site Assessment states there is a potential for the soils in the area of proposed modification adjacent to APN 008-001-036 to be impacted with pesticides and herbicides, specifically arsenic and dichloro-diphenyl-trichloroethane (DDT) at levels that exceed the EPA Region 9 Regional Screening Levels for worker safety (Parikh Consultants, Inc. 2018).

Under the No-Project Alternative there would be no construction activity, which would preclude construction related use and potential accidental release of hazardous materials (including soils impacted with pesticides and herbicides). The No-Project Alternative would not introduce new fire hazards or risk to people and structures in the Project area. Future maintenance of the existing bridge could include the use of potential hazardous materials (e.g. paint, treated lumber). 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. Impacts under the No Project Alternative would be similar to less than the proposed Project.

Hydrology/Water Quality

Under the No-Project Alternative no impacts to hydrology and water quality would occur. No grading or other ground disturbance would occur and there would be no potential for temporary increases in sediment loads and pollutants to Dry Creek or degradation of water quality. There would be no increase in the use of chemicals or pollutants associated with construction activities and as a result, no increase in hazardous materials in stormwater and no change in flow rates and drainage patterns of stormwater runoff. Impacts would be less than the proposed Project.

Land Use and Planning

The No-Project Alternative would not result changes to land use in the study area and would not divide an established community. No temporary or permanent easements of private lands for transportation uses would be needed. Impacts would be similar to less than the proposed Project.

Mineral Resources

The No-Project Alternative would not result changes the availability of a known mineral resource. Impacts would be similar to the proposed Project.

Noise and Vibration

The No-Project Alternative would result in no new noise or vibration related impacts. Short-term construction noise would not be generated and there would be no potential to exceed the County construction noise thresholds. Impacts would be less than the proposed Project.

Population and Housing

The purpose of the Project is to correct the existing deficiencies of the Tim Bell Road Bridge by replacing it with a new structure that meets the current Stanislaus County standards and the AASHTO guidelines. Neither the No-Project Alternative nor the proposed Project would induce population growth or displace people or housing. Impacts would be similar to the proposed Project.

Public Services

Public services would not be affected under the No Project Alternative. The proposed Project includes the replacement of the existing bridge (governmental facilities). No other new or physically altered governmental facilities would be needed. Impacts would be less than the proposed Project.

Recreation

The Modesto Reservoir Regional Park, operated by Stanislaus County Parks & Recreation is located approximately 1.6 miles southeast of the Project. No other parks or other recreational facilities occur in the Project area or within 2 miles. The proposed Project will not affect the use or operation of the Modesto Reservoir Regional Park. The proposed Project is not growth inducing and does not include the construction of or expansion of recreational facilities. Impacts would be similar to the proposed Project.

Transportation

The No-Project Alternative would not result in any construction-related traffic or circulation impacts in the Project area. Under this alternative the current deficiencies would continue. The proposed Project will replace the existing deficient bridge with one that meets the current Stanislaus County standards and the AASHTO guidelines. Like the proposed Project the No-Project Alternative would not increase the capacity of Tim Bell Road as described in Section 4.12. The proposed Project will have greater temporary traffic impacts that the No-Project Alternative. Under the proposed Project Tim Bell Road in the Project area will be closed to through traffic during construction. The existing bridge will remain in place during construction and be used as a detour for local traffic and emergency service responders. The No-Project Alternative would have fewer temporary impacts than the proposed Project. The No-Project Alternative would have greater overall impacts because it would retain the existing bridge and the current deficiencies would continue.

Utilities, and Service Systems

Utilities would not be affected under the No Project Alternative. No utility or communications infrastructure relocations or associated activities including vegetation trimming or removal would occur. The existing bridge would remain in place and the current deficiencies would continue. Like the proposed Project the No Project Alternative is not a land development project and no new or expanded water or wastewater treatment facilities or storm water drainage facilities would be needed. No construction-related increase in fuel consumption would occur. As with to the proposed Project, there would be no change in demand for electric power or other energy sources and no inefficient or wasteful use of energy resources would occur. Impacts would be less than the proposed Project.

Wildfire

The Project location is not in a '*Fire Hazard Severity Zone in the State Responsibility AREA (SRA)*' per the 2007 CAL FIRE, Fire Hazard Severity Zones in SRA maps. The Project area is identified as a 'Local Responsibility Area (LRA)- Unzoned' per the 2007 CAL FIRE, Fire Hazard Severity Zones in SRA map for Stanislaus County. The Project location is in an 'Unzoned' area and is not classified as a very high fire hazard severity zone. Impacts would be similar to the proposed Project.

5.3.2 Upstream Alignment Alternative

5.3.2.1 Description

The Upstream Alignment Alternative crosses Dry Creek east of and upstream from the existing bridge. This Alternative allows for the 100-year flood to be crossed with the shortest bridge. The Upstream Alignment Alternative consists of two horizontal curves in different directions both with 750 feet radius, connected by tangent segment. The preliminary construction cost estimate for this Alternative is $6.47 million. The Upstream Alignment Alternative has the largest right of way impacts to property owners and creates a less safe alignment compared to the proposed Project which only has one curve. Following are some of the primary advantages and disadvantages for this alternative:

- Primary Advantages
    - Shortest bridge structure of three build alternatives.
    - Lowest construction costs of three build alternatives.
    - New bridge would pass the 100-year high water elevation.
    - Removes 5% grade on bridge.
    - Existing bridge and Tim Bell Road can be used during construction.
- Primary Disadvantages
    - Requires approximately 2.2 acre of permanent right of way thus adding cost to overall project.
    - Splits APN 008-001-056 and would significantly impacts farming and business operations of the land owner. Compensation for the impacts to farming and business operations would add additional cost to the project.
    - 30 mph curve will remain at south end of project.

- Potentially may have longest PS&E delivery schedule leading to extra construction cost.
- Potential to result in the most orchard tree removal.

5.3.2.2 Impact Analysis

Aesthetics

As discussed in section 3.1 of this document the Project VIA (HDR 2019) evaluates the proposed Project's impacts to visual/ aesthetic resources. Section 3.1 concludes that:

> 'The project would generate only minor changes to visual resources. An existing roadway's alignment would be changed; an existing bridge would be relocated, lengthened, and elevated; existing agricultural land would remain essentially intact, and the functioning of the existing natural waterway would actually be improved, especially during floods. Consequently, change to visual resources would be low to moderate. Viewer exposure (the number of people viewing) and viewer sensitivity (their concern about visual change) from public locations is low. Consequently, the viewer response to these changes would also be low. Therefore, visual impacts are low-moderate.
>
> The relocation and reconstruction of the Tim Bell Road Bridge over Dry Creek would not dramatically alter the visual character of the agricultural landscape and the roadway corridor. It would generate low changes to visual character of Dry Creek and moderate changes to the visual character of the floodplain. Viewer exposure and viewer sensitivity, for both neighbors and travelers would be low. Elevating the proposed roadway above the 100-year floodplain would serve as evacuation route for the community and would minimize floodplain encroachment, the elevated roadway would also be beneficial to travelers by providing them with a view of the geographical context of Dry Creek, the surrounding terrain, and the land use patterns of Stanislaus County. Consequently, adverse visual impacts caused by Tim Bell Bridge Replacement Project would be low.'

The primary differences between the Upstream Alignment Alternative and the proposed Project include:

- Upstream Alignment Alternative requires a greater amount (± 2.2 ac) of permanent right of way acquisition than the proposed Project (± 1.35 ac)
- The Upstream Alignment Alternative does not require closure of Tim Bell Road to through traffic.
- The Upstream Alignment Alternative has the shortest bridge length.
- The Upstream Alignment Alternative would result in greater impacts to farming and business operations on APN 008-001-056.
- The Upstream Alignment Alternative would likely require removal of more existing orchard trees on APN 008-001-056 than the proposed Project.

Both the Upstream Alignment Alternative and the proposed Project share the following characteristics: the exiting roadway alignment would be changed (to varying degrees), an existing bridge would be relocated, an existing bridge would be relocated, lengthened, and elevated. The Upstream Alignment Alternative would have visual/ aesthetic impacts similar to slightly greater than the proposed Project.

Agricultural and Forestry

The proposed Project will result in temporary and permanent impacts to forest land (as defined in Public Resources Code section 12220(g)). Temporary impacts to forest land will result from trees and vegetation removal to allow construction of the proposed Project. Approximately 0.07 ac of Valley Oak Woodland will be converted by construction of the replacement bridge. The Upstream Alignment Alternative would have similar impacts.

Both the Upstream Alignment Alternative and proposed Project would require relocation of existing irrigation infrastructure on APN 008-001-056. The Upstream Alignment Alternative would require more permanent right of way be acquired from APN 008-001-056 which is under Williamson Act contract. The Upstream Alignment Alternative requires the removal of more existing orchard trees on APN 008-001-056 and would have greater impacts to the farming and business operations on APN 008-001-056 than the proposed Project.

Impacts to agricultural and forestry resources would be greater than the proposed Project.

Air Quality

The types of air quality impacts under the Upstream Alignment Alternative would be similar to those of the proposed Project. There would be no difference in operational emissions between the Upstream Alignment Alternative and the proposed Project.

Because the Upstream Alignment Alternative requires greater permanent right of way and likely greater overall ground disturbance than the proposed Project the Upstream Alignment Alternative would likely result in higher short-term criteria pollutant emission levels than the proposed Project. Similar to the proposed Project, the Upstream Alignment Alternative would be required to comply with the SJVAPCD' fugitive dust requirements under Regulation VIII (includes Rules 8011, 8021, 8031, 8341, 8051, 8061,8071, and 8081) and Caltrans Standard Specifications 14-9 to control fugitive dust. Impacts would be slightly greater than the proposed Project.

Biological Resources

The project area contains elderberry shrubs which are potential habitat for the federal-listed Valley elderberry longhorn beetle (VELB). No VELB or VELB exit holes were observed on any of the elderberry shrubs adjacent to the existing bridge. It is anticipated the elderberry shrubs also occur upstream of the current bridge in the footprint of the Upstream Alignment Alternative. Like the proposed Project elderberry shrubs located within the footprint of the replacement bridge and road approaches would require removal. The total number of elderberry shrubs in the footprint of the Upstream Alignment Alternative may be different than the number present in the proposed Project footprint. Regardless of the total number present the mitigation for removal of elderberry shrubs located within the footprint of the Upstream Alignment Alternative would following the same mitigation guidelines provided in the 2017 USFWS *Framework for Assessing Impacts to the Valley Elderberry Longhorn Beetle*.

The project area does not contain habitat for any other federal listed wildlife or plant species. The Project area provides suitable habitat for several state special-status species, including birds of prey and migratory birds, western pond turtle, burrowing owl, Swainson's hawk, pallid bat, and Western red bat. Impacts and mitigation for these species would be very similar between the Upstream Alignment Alternative and the proposed Project.

The Upstream Alignment Alternative would have similar vegetation removal, including native trees in the Valley oak woodland on the bank (primarily south bank) of Dry Creek, as the proposed Project. The

Upstream Alignment Alternative would have slightly greater impacts to upland vegetation communities given the greater amount of ROW needed to complete the Project.

Like the proposed Project the Upstream Alignment Alternative would not have any impacts to wetland as none are present. The Upstream Alignment Alternative would have similar impacts to Dry Creek. Temporary construction impacts would be similar to the proposed Project. Permanent impacts resulting from the placement of RSP at the bents on either side of the bridge structure to stabilize the creek bed and prevent scour would be similar to the proposed Project.

Just like the proposed Project the Upstream Alignment Alternative would not interfere substantially with the movement of wildlife, conflict with any local policies or ordinances protecting biological resources, or conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan.

The Upstream Alignment Alternative would have similar to slightly greater impacts than the proposed Project.

Cultural Resources

The Tim Bell Road Bridge over Dry Creek is the sole historic property in the APE. The Tim Bell Road Bridge (Bridge 38C0073) was previously determined eligible for listing in the NRHP to which SHPO concurred in 1987. The bridge's eligibility was reaffirmed in the Caltrans Historic Bridge Inventory updates in 2003. Based on its NRHP status, the structure is listed in the CRHR and is considered a historical resource for the purposes of the CEQA. The Tim Bell Road Bridge is eligible under NRHP Criterion C and CRHR Criterion 3 for its type, period, and method of construction, significant for illustrating the inventiveness with which California engineers utilized reinforced concrete in the early decades of the twentieth century.

During the NHRP Section 106 process an initial request for a search of the Sacred Lands file and a list of interested individuals was sent to the Native American Heritage Commission in 2013. The Commission responded on November 14, 2013. No sacred sites were identified. The Commission provided a list of Native American interested parties. Letters were sent to each, soliciting their comments, on November 21, 2013. The Tuolumne Band of Me-wuk responded with a letter stating that they had no concerns about the project.

A request for an updated search of the Sacred Lands file and list of interested individuals was sent to the Commission in 2017. The Commission response dated March 24, 2017, again reported that no sacred sites were identified. A letter was sent to all listed parties on April 6, 2017. Far Western conducted follow-up phone calls on April 20 and 27, 2017, with some additional follow-up emails conducted on May 8, 2017. If contacts were not available by phone, voice messages were left or emails were sent. Only one response has been received to date. In a phone call on April 20, 2017, Mr. Tiger Paulk of the California Valley Miwok Tribe stated that the tribe would like to be notified if any Native American archaeological finds are made during the project.

Neither pedestrian surveys by archaeologists nor subsurface testing by archaeologists identified a prehistoric site. No archaeological materials or laterally extensive, intact buried soils with archaeological potential, were identified.

Both the Upstream Alignment Alternative and the proposed Project would remove the existing historic bridge and include excavations in areas identified in the County General Plan DEIR as being paleontological sensitive. Impacts would be similar to the proposed Project.

Tribal Cultural Resources

Stanislaus County has not received any requests in writing from California Native American tribes to be notified under Public Resources Code Section 21074 of proposed projects in the geographic area with which the tribe is traditionally and culturally affiliated. 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.

During the NHRP Section 106 process an initial request for a search of the Sacred Lands file and a list of interested individuals was sent to the Native American Heritage Commission in 2013. The Commission responded on November 14, 2013. No sacred sites were identified. The Commission provided a list of Native American interested parties. Letters were sent to each, soliciting their comments, on November 21, 2013. The Tuolumne Band of Me-wuk responded with a letter stating that they had no concerns about the project.

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The Upstream Alignment Alternative would not impact tribal cultural resources as none have been identified to date. Impacts would be similar to the proposed Project.

Energy

The energy use associated with construction and operation of the Upstream Alignment Alternative would not conflict with applicable state or local energy legislation, policies or standards and would not be considered wasteful, inefficient, or unnecessary. The Upstream Alignment Alternative may have slightly higher fuel consumption than the proposed Project during construction given the potentially larger area of ground disturbance. Impacts would be similar to the proposed Project.

Geology and Soils

Risks associated with geology and soils conditions were studied as part of preliminary engineering design work, and will continue to be studied using standard industry practices such as geotechnical investigations. A preliminary foundation report was produced by Parikh Consultants Inc. (2018). The preliminary foundation report states (Parikh 2018):

> "*The site is located outside the designated State of California Alquist-Priolo Earthquake Fault Zones for active faulting and no mapped evidence of active or potentially active faulting was found for the site. The potential for fault rupture at the site appears to be low.*"

All final design and other pre-construction engineering design work, regardless of the alternative selected, would follow Stanislaus County design standards, Caltrans Highway Design Manual, and engineering reference standards published by AASHTO including the *Policy on Geometric Design of Highways and Streets* (the "Green Book") and *LRFD Bridge Design Specifications*. By following standard industry practices, all geology and soils risks would be minimized such that impacts would be less than significant.

Impacts to geology and soils would be similar to the proposed Project.

Greenhouse Gas Emissions

Per Section 5.6 potential impacts resulting from GHG emissions during construction and operation of the proposed Project are less than significant due to the following:

- The Project does not increase the capacity of Tim Bell Road
- The Project is included as project S78 in the StanCOG 2018 RTP/SCS.
- GHG emissions from construction would likely be offset by improvements related to the lifetime and maintenance intervals of the bridge and approach roadway.

The Upstream Alignment Alternative would have less than significant impacts to GHG for the same reasons as the proposed Project. The Upstream Alignment Alternative may have slightly higher fuel consumption/ exhaust emissions than the proposed Project during construction given the potentially larger area of ground disturbance. Impacts would be similar to slightly greater than the proposed Project.

Hazards and Hazardous Materials

Impacts under the Upstream Alignment Alternative would be similar to those under the proposed Project. Small amounts of hazardous materials would be transported and used during construction activities of the Upstream Alignment Alternative or the proposed Project (i.e., equipment maintenance, fuel, solvents, and roadway resurfacing, and re-striping materials). Hazardous materials used during construction and operation of the Upstream Alignment Alternative would be required to comply with all applicable local, state, and federal standards associated with the handling, transport, and storage of hazardous materials, similar to the proposed Project. 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. Neither Upstream Alignment Alternative or the proposed Project would introduce new fire hazards or risk to people and structures in the Project area.

Like the proposed Project the Upstream Alignment Alternative would have the potential to disturb soils impacted with agricultural pesticides and herbicides, specifically arsenic and dichloro-diphenyl-trichloroethane (DDT) at levels that exceed the EPA Region 9 Regional Screening Levels for worker safety (Parikh 2018). The mitigation measure associated with agricultural chemicals for the proposed Project would apply equally to the Upstream Alignment Alternative. Impacts would be similar to the proposed Project.

Hydrology/Water Quality

The types of hydrology and water quality impacts resulting from the Upstream Alignment Alternative would be similar to those under the proposed Project, but of a greater magnitude. The shift of the bridge and road approaches to a new upstream alignment would likely result in greater soil disturbance than the proposed project due to the topography. The Upstream Alignment Alternative may require additional drainage improvements beyond those need for the proposed Project. Like the proposed Project the Upstream Alignment Alternative would be designed to pass the 100-year flood event and would not involve the alteration of the course of Dry Creek. Construction BMPs and federal, state, and local regulations would apply to this alternative addressing hydrological and water quality impacts. Potential impacts are similar between the Middle Alignment Alternative and the proposed Project.

Land Use and Planning

As with the proposed Project, the Upstream Alignment Alternative would not result in a physical division of an established community and would improve the safety and efficiency of the roadway. The Upstream Alignment Alternative would also be consistent with policies adopted for the purposes of avoiding or minimizing impacts on environmental resources. Impacts would be similar to the proposed Project.

Mineral Resources

The Project is the replacement of an existing bridge. The bridge will not affect the availability of or ability to extract known mineral resources. Sand and gravel resources are the primary mineral resources of economic importance in Stanislaus County (Stanislaus County 2016a). The Project area is not located in a designated 'Aggregate Resource Area' per Appendix III-A of the County General Plan (Stanislaus County 2016a). Neither the Upstream Alignment Alternative or the proposed Project would impact mineral resources.

Noise

For the proposed Project traffic noise modeling results and predicted traffic noise impacts for existing and design year conditions are discussed is section 3.13.2. The results show that future build (proposed Project) noise levels are calculated to decrease by 2 to 7 dBA below existing conditions at the three receptor sites included in the study. The reduction is due to the horizontal and vertical alignment changes of the roadway and the solid 2-foot 8-inch barrier proposed at the northern edge of shoulder, on top of the retaining wall, in front of the private residence on APN 008-001-036. The Upstream Alignment Alternative would likely result in a similar reduction of future operational noise levels.

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, time of day, and similar factors. Project noise modeling shows that construction noise levels anticipated during each activity of construction would be below the maximum and average noise for typical roadway construction projects based on the calculations conducted in FHWA's Roadway Construction Noise Model (RCNM). Construction noise associated with the Upstream Alignment Alternative would be similar to the proposed Project.

Population and Housing

None of the project alternatives increase the capacity of Tim Bell Road and would not induce any changes in land use or density. The purpose of the Project is to correct the existing deficiencies of the Tim Bell Road Bridge by replacing it with a new structure that meets the current Stanislaus County standards and the AASHTO guidelines. Neither the Upstream Alignment Alternative nor the proposed Project would induce population growth or displace people or housing. Impacts would be the same as the proposed Project.

Public Services

The Upstream Alignment Alternative like the proposed Project includes the replacement of the existing bridge (governmental facilities). No other new or physically altered governmental facilities would be needed. Impacts would be the same as the proposed Project.

Recreation

The Modesto Reservoir Regional Park, operated by Stanislaus County Parks & Recreation is located approximately 1.6 miles southeast of the Project. No other parks or other recreational facilities occur in the Project area or within 2 miles. Like the proposed Project the Upstream Alignment Alternative would not affect the use or operation of the Modesto Reservoir Regional Park. The Upstream Alignment Alternative is not growth inducing and does not include the construction of or expansion of recreational facilities. Impacts would be the same as the proposed Project.

Transportation

Like the proposed Project the Upstream Alignment Alternative would not increase the capacity of Tim Bell Road as described in Section 4.12. Under the Upstream Alignment Alternative Tim Bell Road and the bridge would remain open to traffic during construction whereas the proposed Project requires the closure of Tim Bell Road during construction. Both alternatives would provide access for local traffic and for emergency service responders throughout construction. Impacts would similar to the proposed Project.

Utilities, and Service Systems

There are overhead utility lines on the east side of Tim Bell Road south of the existing bridge that cross the road at the northern "s-curve", and continue up the west side of the road to the north end of the project area. Existing telecommunication lines (copper/ fiber optic) are underground south of the existing bridge, then run through conduit attached to the downstream side of the bridge deck. North of the bridge, the telecommunication lines are underground on the west side of Tim Bell Road. Both the Upstream Alignment Alternative and the proposed Project would require relocation of these utilities as part of the overall project.

Under all build alternatives evaluated the operation and maintenance of the replacement bridge following construction would not be expected to use additional water supplies. Future routine maintenance may include pressure washing and other minor water uses, similar to existing conditions. The overall Project does not require wastewater services, would not generate solid waste in excess of State or local standards, and would conform to all applicable state and federal solid waste management regulations and reduction statutes. Impacts would be similar to the proposed Project.

Wildfire

The Project location is not in a '*Fire Hazard Severity Zone in the State Responsibility AREA (SRA)*' per the 2007 CAL FIRE, Fire Hazard Severity Zones in SRA maps. The Project area is identified as a 'Local Responsibility Area (LRA)- Unzoned' per the 2007 CAL FIRE, Fire Hazard Severity Zones in SRA map for Stanislaus County. The Project location is in an 'Unzoned' area and is not classified as a very high fire hazard severity zone. Impacts would be similar to the proposed Project.

5.3.3 Middle Alignment Alternative

5.3.3.1 Description

The horizontal location of this alignment falls between the proposed Project and the Upstream Alignment Alternative. The Middle Alignment Alternative conforms to the northern end of Tim Bell Road at the same location as the Upstream Alignment Alternative and conforms to the southern end of Tim Bell Road at the same location as the proposed Project. The Middle Alignment Alternative ties to

the short 255 feet radius horizontal curve at the southern end of the alignment followed by tangent and two horizontal curves in different directions, both with 750 feet radius, connected by tangent segment. The preliminary construction cost estimate for the Middle Alignment Alternative is approximately $7.7 million. Following are some of the advantages and disadvantages for this alternative:

- Primary Advantages
    - Shorter bridge structure than the proposed Project.
    - Eliminates tight "s-curve" on south side of bridge.
    - New bridge would pass the 100-year high water elevation.
    - Removes 5% grade on bridge.
    - Existing bridge and Tim Bell Road can be used during construction.
- Primary Disadvantages
    - Requires approximately 1.6 acre of permanent right of way thus adding cost to overall project.
    - Splits APN 008-001-056 and would significantly impacts farming and business operations of the land owner. Compensation for the impacts to farming and business operations would add additional cost to the project.
    - 30 mph curve will remain at south end of project.

5.3.3.2 Impact Analysis

Aesthetics

As discussed in section 3.1 of this document the Project VIA (HDR 2019) evaluates the proposed Project's impacts to visual/ aesthetic resources. Section 3.1 concludes that:

> "The project would generate only minor changes to visual resources. An existing roadway's alignment would be changed; an existing bridge would be relocated, lengthened, and elevated; existing agricultural land would remain essentially intact, and the functioning of the existing natural waterway would actually be improved, especially during floods. Consequently, change to visual resources would be low to moderate. Viewer exposure (the number of people viewing) and viewer sensitivity (their concern about visual change) from public locations is low. Consequently, the viewer response to these changes would also be low. Therefore, visual impacts are low-moderate.
>
> The relocation and reconstruction of the Tim Bell Road Bridge over Dry Creek would not dramatically alter the visual character of the agricultural landscape and the roadway corridor. It would generate low changes to visual character of Dry Creek and moderate changes to the visual character of the floodplain. Viewer exposure and viewer sensitivity, for both neighbors and travelers would be low. Elevating the proposed roadway above the 100-year floodplain would serve as evacuation route for the community and would minimize floodplain encroachment, the elevated roadway would also be beneficial to travelers by providing them with a view of the geographical context of Dry Creek, the surrounding terrain, and the land use patterns of Stanislaus County. Consequently, adverse visual impacts caused by Tim Bell Bridge Replacement Project would be low."

The primary differences between the Middle Alignment Alternative and the proposed Project include:

- Middle Alignment Alternative requires a greater amount (± 1.6 ac) of permanent right of way acquisition than the proposed Project (± 1.35 ac)
- The Middle Alignment Alternative does not require closure of Tim Bell Road to through traffic during construction.
- The Middle Alignment Alternative would result in greater impacts to farming and business operations on APN 008-001-056.

Both the Middle Alignment Alternative and the proposed Project share the following characteristics: the exiting roadway alignment would be changed (to varying degrees), an existing bridge would be relocated, lengthened, and elevated. The Middle Alignment Alternative would have visual/ aesthetic impacts similar to slightly greater than the proposed Project.

Agricultural and Forestry

The proposed Project will result in temporary and permanent impacts to forest land (as defined in Public Resources Code section 12220(g)). Temporary impacts to forest land will result from trees and vegetation removal to allow construction of the proposed Project. Approximately 0.07 ac of Valley Oak Woodland will be converted by construction of the replacement bridge. The Middle Alignment Alternative would have similar impacts.

Both the Middle Alignment Alternative and proposed Project would require relocation of existing irrigation infrastructure on APN 008-001-056. The Middle Alignment Alternative would require more permanent right of way be acquired from APN 008-001-056 which is under Williamson Act contract. The Middle Alignment Alternative would have greater impacts to the farming and business operations on APN 008-001-056 than the proposed Project.

Impacts to agricultural and forestry resources would be greater than the proposed Project.

Air Quality

The types of air quality impacts under the Middle Alignment Alternative would be similar to those of the proposed Project. There would be no difference in operational emissions between the Upstream Alignment Alternative and the proposed Project.

Because the Middle Alignment Alternative requires greater permanent right of way and likely greater overall ground disturbance than the proposed Project the Middle Alignment Alternative would likely result in higher short-term criteria pollutant emission levels than the proposed Project. Similar to the proposed Project, the Middle Alignment Alternative would be required to comply with the SJVAPCD' fugitive dust requirements under Regulation VIII (includes Rules 8011, 8021, 8031, 8341, 8051, 8061,8071, and 8081) and Caltrans Standard Specifications 14-9 to control fugitive dust. Impacts would be slightly greater than the proposed Project.

Biological Resources

The project area contains elderberry shrubs which are potential habitat for the federal-listed Valley elderberry longhorn beetle (VELB). No VELB or VELB exit holes were observed on any of the elderberry shrubs adjacent to the existing bridge. It is anticipated the elderberry shrubs also occur upstream of the current bridge in the footprint of the Middle Alignment Alternative. Like the proposed Project elderberry shrubs located within the footprint of the replacement bridge and road approaches would require removal. The total number of elderberry shrubs in the footprint of the Middle Alignment

Alternative may be different than the number present in the proposed Project footprint. Regardless of the total number present the mitigation for removal of elderberry shrubs located within the footprint of the Upstream Alignment Alternative would following the same mitigation guidelines provided in the 2017 USFWS *Framework for Assessing Impacts to the Valley Elderberry Longhorn Beetle*.

The project area does not contain habitat for any other federal listed wildlife or plant species. The Project area provides suitable habitat for several state special-status species, including birds of prey and migratory birds, western pond turtle, burrowing owl, Swainson's hawk, pallid bat, and Western red bat. Impacts and mitigation for these species would be very similar between the Middle Alignment Alternative and the proposed Project.

The Middle Alignment Alternative would have similar vegetation removal, including native trees in the Valley oak woodland on the bank (primarily south bank) of Dry Creek, as the proposed Project. The Upstream Alignment Alternative would have slightly greater impacts to upland vegetation communities given the greater amount of ROW needed to construct the new bridge and approaches.

Like the proposed Project the Middle Alignment Alternative would not have any impacts to wetland as none are present. The Middle Alignment Alternative would have similar impacts to Dry Creek. Temporary construction impacts would be similar to the proposed Project. Permanent impacts resulting from the placement of RSP at the bents on either side of the bridge structure to stabilize the creek bed and prevent scour would be similar to the proposed Project.

Just like the proposed Project the Middle Alignment Alternative would not interfere substantially with the movement of wildlife, conflict with any local policies or ordinances protecting biological resources, or conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan.

The Middle Alignment Alternative would have similar to slightly greater impacts than the proposed Project.

Cultural Resources

The Tim Bell Road Bridge over Dry Creek is the sole historic property in the APE. The Tim Bell Road Bridge (Bridge 38C0073) was previously determined eligible for listing in the NRHP to which SHPO concurred in 1987. The bridge's eligibility was reaffirmed in the Caltrans Historic Bridge Inventory updates in 2003. Based on its NRHP status, the structure is listed in the CRHR and is considered a historical resource for the purposes of the CEQA. The Tim Bell Road Bridge is eligible under NRHP Criterion C and CRHR Criterion 3 for its type, period, and method of construction, significant for illustrating the inventiveness with which California engineers utilized reinforced concrete in the early decades of the twentieth century.

During the NHRP Section 106 process an initial request for a search of the Sacred Lands file and a list of interested individuals was sent to the Native American Heritage Commission in 2013. The Commission responded on November 14, 2013. No sacred sites were identified. The Commission provided a list of Native American interested parties. Letters were sent to each, soliciting their comments, on November 21, 2013. The Tuolumne Band of Me-wuk responded with a letter stating that they had no concerns about the project.

A request for an updated search of the Sacred Lands file and list of interested individuals was sent to the Commission in 2017. The Commission response dated March 24, 2017, again reported that no sacred sites were identified. A letter was sent to all listed parties on April 6, 2017. Far Western conducted

follow-up phone calls on April 20 and 27, 2017, with some additional follow-up emails conducted on May 8, 2017. If contacts were not available by phone, voice messages were left or emails were sent. Only one response has been received to date. In a phone call on April 20, 2017, Mr. Tiger Paulk of the California Valley Miwok Tribe stated that the tribe would like to be notified if any Native American archaeological finds are made during the project.

Neither pedestrian surveys by archaeologists nor subsurface testing by archaeologists identified a prehistoric site. No archaeological materials or laterally extensive, intact buried soils with archaeological potential, were identified.

Both the Middle Alignment Alternative and the proposed Project would remove the existing historic bridge and include excavations in areas identified in the County General Plan DEIR as being paleontological sensitive. Impacts would be similar to the proposed Project.

Tribal Cultural Resources

Stanislaus County has not received any requests in writing from California Native American tribes to be notified under Public Resources Code Section 21074 of proposed projects in the geographic area with which the tribe is traditionally and culturally affiliated. 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.

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The Middle Alignment Alternative would not impact tribal cultural resources as none have been identified to date. Impacts would be similar to the proposed Project.

Energy

The energy use associated with construction and operation of the Middle Alignment Alternative would not conflict with applicable state or local energy legislation, policies or standards and would not be considered wasteful, inefficient, or unnecessary. The Middle Alignment Alternative may have slightly higher fuel consumption than the proposed Project during construction given the potentially larger area of ground disturbance. Impacts would be similar to the proposed Project.

Geology and Soils

Risks associated with geology and soils conditions were studied as part of preliminary engineering design work, and will continue to be studied using standard industry practices such as geotechnical investigations. A preliminary foundation report was produced by Parikh Consultants Inc. (2018). The preliminary foundation report states (Parikh 2018):

> "*The site is located outside the designated State of California Alquist-Priolo Earthquake Fault Zones for active faulting and no mapped evidence of active or potentially active faulting was found for the site. The potential for fault rupture at the site appears to be low.*"

All final design and other pre-construction engineering design work, regardless of the alternative selected, would follow Stanislaus County design standards, Caltrans Highway Design Manual, and engineering reference standards published by AASHTO including the *Policy on Geometric Design of Highways and Streets* (the "Green Book") and *LRFD Bridge Design Specifications*. By following standard industry practices, all geology and soils risks would be minimized such that impacts would be less than significant.

Impacts to geology and soils would be similar to the proposed Project.

Greenhouse Gas Emissions

Per Section 5.6 potential impacts resulting from GHG emissions during construction and operation of the proposed Project are less than significant due to the following:

- The Project does not increase the capacity of Tim Bell Road
- The Project is included as project S78 in the StanCOG 2018 RTP/SCS.
- GHG emissions from construction would likely be offset by improvements related to the lifetime and maintenance intervals of the bridge and approach roadway.

The Middle Alignment Alternative would have less than significant impacts to GHG for the same reasons as the proposed Project. The Upstream Alignment Alternative may have slightly higher fuel consumption/ exhaust emissions than the proposed Project during construction given the potentially larger area of ground disturbance. Impacts would be similar to slightly greater than the proposed Project.

Hazards and Hazardous Materials

Impacts under the Middle Alignment Alternative would be similar to those under the proposed Project. Small amounts of hazardous materials would be transported and used during construction activities of the Middle Alignment Alternative or the proposed Project (i.e., equipment maintenance, fuel, solvents, and roadway resurfacing, and re-striping materials). Hazardous materials used during construction and operation of the Middle Alignment Alternative would be required to comply with all applicable local, state, and federal standards associated with the handling, transport, and storage of hazardous materials, similar to the proposed Project. 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. Neither Middle Alignment Alternative or the proposed Project would introduce new fire hazards or risk to people and structures in the Project area.

Like the proposed Project the Middle Alignment Alternative would have the potential to disturb soils impacted with agricultural pesticides and herbicides, specifically arsenic and dichloro-diphenyl-

trichloroethane (DDT) at levels that exceed the EPA Region 9 Regional Screening Levels for worker safety (Parikh Consultants, Inc. 2018). The mitigation measure associated with agricultural chemicals for the proposed Project would apply equally to the Middle Alignment Alternative. Impacts would be similar to the proposed Project.

Hydrology/Water Quality

The types of hydrology and water quality impacts resulting from the Middle Alignment Alternative would be similar to those under the proposed Project, but of a greater magnitude. The shift of the bridge and road approaches to a new upstream alignment would likely result in greater soil disturbance than the proposed project due to the topography. The Middle Alignment Alternative may require additional drainage improvements beyond those need for the proposed Project. Like the proposed Project the Middle Alignment Alternative would be designed to pass the 100-year flood event and would not involve the alteration of the course of Dry Creek. Construction BMPs and federal, state, and local regulations would apply to this alternative addressing hydrological and water quality impacts. Potential impacts are similar between the Middle Alignment Alternative and the proposed Project.

Land Use and Planning

As with the proposed Project, the Middle Alignment Alternative would not result in a physical division of an established community and would improve the safety and efficiency of the roadway. The Middle Alignment Alternative would also be consistent with policies adopted for the purposes of avoiding or minimizing impacts on environmental resources. Impacts would be similar to the proposed Project.

Mineral Resources

The Project is the replacement of an existing bridge. The bridge will not affect the availability of or ability to extract known mineral resources. Sand and gravel resources are the primary mineral resources of economic importance in Stanislaus County (Stanislaus County 2016a). The Project area is not located in a designated 'Aggregate Resource Area' per Appendix III-A of the County General Plan (Stanislaus County 2016a). Neither the Middle Alignment Alternative or the proposed Project would impact mineral resources. Impacts would be the same as the proposed Project.

Noise and Vibration

For the proposed Project traffic noise modeling results and predicted traffic noise impacts for existing and design year conditions are discussed is section 3.13.2. The results show that future build (proposed Project) noise levels are calculated to decrease by 2 to 7 dBA below existing conditions at the three receptor sites included in the study. The reduction is due to the horizontal and vertical alignment changes of the roadway and the solid 2-foot 8-inch barrier proposed at the northern edge of shoulder, on top of the retaining wall, in front of the private residence on APN 008-001-036. The Upstream Alignment Alternative would likely result in a similar reduction of future operational noise levels.

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, time of day, and similar factors. Project noise modeling shows that construction noise levels anticipated during each activity of construction would be below the maximum and average noise for typical roadway construction projects based on the calculations conducted in FHWA's Roadway Construction Noise Model (RCNM). Noise associated with the Middle Alignment Alternative would be similar to the proposed Project.

Population and Housing

The project alternatives do not increase the capacity of Tim Bell Road and would not induce any changes in land use or density. The purpose of the Project is to correct the existing deficiencies of the Tim Bell Road Bridge by replacing it with a new structure that meets the current Stanislaus County standards and the AASHTO guidelines. Neither the Middle Alignment Alternative nor the proposed Project would induce population growth or displace people or housing. Impacts would be the similar as the proposed Project.

Public Services

The Upstream Alignment Alternative like the proposed Project includes the replacement of the existing bridge (governmental facilities). No other new or physically altered governmental facilities would be needed. Impacts would be the similar as the proposed Project.

Recreation

The Modesto Reservoir Regional Park, operated by Stanislaus County Parks & Recreation is located approximately 1.6 miles southeast of the Project. No other parks or other recreational facilities occur in the Project area or within 2 miles. Like the proposed Project the Middle Alignment Alternative would not affect the use or operation of the Modesto Reservoir Regional Park. The MIddle Alignment Alternative is not growth inducing and does not include the construction of or expansion of recreational facilities. Impacts would be the similar as the proposed Project.

Transportation

Like the proposed Project the Middle Alignment Alternative would not increase the capacity of Tim Bell Road as described in Section 5.12. Under the Middle Alignment Alternative Tim Bell Road and the bridge would remain open to traffic during construction whereas the proposed Project requires the closure of Tim Bell Road during construction. Both alternatives would provide access for local traffic and for emergency service responders throughout construction. Impacts would similar to the proposed Project.

Utilities and Service Systems

There are overhead utility lines on the east side of Tim Bell Road south of the existing bridge that cross the road at the northern “s-curve”, and continue up the west side of the road to the north end of the project area. Existing telecommunication lines (copper/ fiber optic) are underground south of the existing bridge, then run through conduit attached to the downstream side of the bridge deck. North of the bridge, the telecommunication lines are underground on the west side of Tim Bell Road. Both the Middle Alignment Alternative and the proposed Project would require relocation of these utilities as part of the overall project.

Under all build alternatives evaluated the operation and maintenance of the replacement bridge following construction would not be expected use additional water supplies. Future routine maintenance may include pressure washing and other minor water uses, similar to existing conditions. The overall Project does not require wastewater services, would not generate solid waste in excess of State or local standards, and would conform to all applicable state and federal solid waste management regulations and reduction statutes. Impacts would be similar to the proposed Project.

Wildfire

The Project location is not in a '*Fire Hazard Severity Zone in the State Responsibility AREA (SRA)*' per the 2007 CAL FIRE, Fire Hazard Severity Zones in SRA maps. The Project area is identified as a 'Local Responsibility Area (LRA)- Unzoned' per the 2007 CAL FIRE, Fire Hazard Severity Zones in SRA map for Stanislaus County. The Project location is in an 'Unzoned' area and is not classified as a very high fire hazard severity zone. Impacts would be similar to the proposed Project.

5.4 Environmentally Superior Alternative

CEQA requires an EIR to examine a range of feasible alternatives to a proposed project. State CEQA Guidelines Section 15126.6(e)(2) requires that an EIR identify which of those alternatives is the environmentally superior alternative. The *environmentally superior alternative* is considered to be the alternative to the proposed project that has the least environmental impact, compared to the proposed project. If, in the course of identifying the environmentally superior alternative, the No-Project Alternative is found to be the environmentally superior alternative, then Section 15126.6(e)(2) of the State CEQA Guidelines further requires that an EIR identify which among the other alternatives is the environmentally superior alternative. Consequently, although the No-Project Alternative is evaluated and presented for comparison purposes, determination of the environmentally superior alternative in this chapter primarily reflects the differences in impacts among the remaining alternatives. Determination of the environmentally superior alternative uses the impact evaluations of the proposed Project and of each alternative in a comparative process. The impacts of each alternative are identified and compared to those of the proposed Project. The type and relative magnitude of each alternative's impacts are evaluated, and the alternative found to have the least impact, as compared to the others, is determined to be the environmentally superior alternative.

Table 5-1 provides a comparison of the level of impacts under the alternatives considered in this Draft EIR as compared to the proposed Project. In some instances, the potential effects of the build alternatives would be similar, meaning that the overall outcome of implementing the proposed Project compared to one of the build alternatives would generally result in the same type and magnitude of effects on a specific resource even though the location of the alternatives differ in some ways from the proposed Project.

As shown in Table 5-1, the No-Project Alternative is environmentally superior because it does not result in ground disturbance, loss of habitat, or other temporary and permanent construction impacts. The State CEQA Guidelines require that, if the No-Project Alternative is identified as environmentally superior, the EIR must identify an environmentally superior alternative among the other alternatives (Section 15126.6[e][2]). Of the remaining alternatives, the proposed Project is determined to be the environmentally superior alternative because it would have lesser impact than the Upstream Alignment Alternative and the Middle Alignment Alternative.

Table 5-1. Comparison of Environmental Impacts of Alternatives to the Proposed Project.

Resource Topic	Proposed Project	No-Project Alternative	Upstream Alignment Alternative	Middle Alignment Alternative
Aesthetics				
Scenic vistas	Less Than Significant (LTS)	Similar	Similar	Similar
Scenic resources	No Impact	Similar	Similar	Similar
Degrade visual character or quality	LTS with Mitigation	Less	Similar/Greater	Similar/Greater
New source of light or glare	No Impact	Similar	Similar	Similar
Agricultural and Forestry Resources				
Convert farmland	LTS	Less	Greater	Greater
Williamson Act	LTS with Mitigation	Less	Greater	Greater
Rezone of Forest land	No Impact	Similar	Same	Same
Loss of Forest land	LTS	Less	Similar/Greater	Similar/Greater
Other changes	No Impact	Similar	Same	Same
Air Quality				
Air quality plan conflict	No Impact	Similar	Similar	Similar
Cumulatively considerable net increase in criteria pollutant	LTS	Less	Similar/Greater	Similar/Greater
Objectionable odors	LTS	Less	Similar	Similar
Biological Resources				
Special-status species	LTS with Mitigation	Less	Similar	Similar
Sensitive natural communities	LTS with Mitigation	Less	Greater	Greater
Wetlands	LTS with Mitigation	Less	Similar	Similar

Resource Topic	Proposed Project	No-Project Alternative	Upstream Alignment Alternative	Middle Alignment Alternative
Wildlife movement and migration	LTS	Less	Similar	Similar
Local policies and ordinances	No Impact	Similar	Similar	Similar
Habitat conservation plan	No Impact	Similar	Similar	Similar
Cultural Resources				
Historical resources	Significant Unavoidable Impact	Less	Similar	Similar
Archaeological resources	LTS	Less	Similar	Similar
Human remains	LTS	Less	Similar	Similar
Paleontological resource	LTS with Mitigation	Less	Similar	Similar
Tribal Cultural Resources	No Impact	Similar	Similar	Similar
Energy				
Wasteful, inefficient, or unnecessary consumption	LTS	Less	Similar	Similar
Conflict with renewable energy or energy efficiency plan	LTS	Less	Similar	Similar
Geology and Soils				
Seismicity	LTS	Similar	Similar	Similar
Soil erosion	LTS	Less	Similar	Similar
Unstable geologic unit	LTS	Similar	Similar	Similar
Expansive soils	LTS	Similar	Similar	Similar
Greenhouse Gas Emissions				
Greenhouse gas emissions	LTS	Less	Similar/ Slightly Greater	Similar/ Slightly Greater
Greenhouse gas plan conflict	LTS	Less	Similar	Similar
Hazards and Hazardous Materials				
Use, transport or disposal	LTS	Less	Similar	Similar
Accidental release	LTS with Mitigation	Less	Similar	Similar
Release within 0.25 mile of school	No Impact	Similar	Similar	Similar

Resource Topic	Proposed Project	No-Project Alternative	Upstream Alignment Alternative	Middle Alignment Alternative
Government Code Section 65962.5	No Impact	Similar	Similar	Similar
Airport Land Use Plan	No Impact	Similar	Similar	Similar
Emergency response plan	LTS	Similar	Similar	Similar
Risk of loss from wildland fires	LTS	Similar	Similar	Similar
Hydrology/Water Quality				
Water quality standard violations	LTS with Mitigation	Less	Similar	Similar
Decrease groundwater supplies	No Impact	Similar	Similar	Similar
Alter drainage and result in erosion	LTS	Less	Similar	Similar
Increase rate of runoff	LTS	Less	Similar	Similar
Exceed capacity of stormwater drainage systems	LTS	Less	Similar	Similar
Risk release of pollutants due to project inundation	LTS	Less	Similar	Similar
Conflict with water quality control plan	LTS	Less	Similar	Similar
Land Use and Planning,				
Divide an established community	No impact	Similar	Similar	Similar
Conflict with land use plan	No impact	Similar	Similar	Similar
Mineral Resources				
Loss of availability of a known mineral resource	No impact	Similar	Similar	Similar
Loss of availability of a known mineral resource recovery site	No impact	Similar	Similar	Similar
Noise				
Substantial permanent or temporary increase in noise	LTS	Less	Similar	Similar
Groundborne vibration/noise	LTS	Less	Similar	Similar
Within two miles of a public airport	No impact	Similar	Similar	Similar
Population, and Housing				
Induce population growth	No Impact	Similar	Similar	Similar
Displace housing and people	No Impact	Similar	Similar	Similar
Public Services				
New/expanded facilities	LTS	Less	Similar	Similar

Resource Topic	Proposed Project	No-Project Alternative	Upstream Alignment Alternative	Middle Alignment Alternative
Recreation				
Increase use of existing parks	No impacts	Similar	Similar	Similar
Include recreational facilities	No Impacts	Similar	Similar	Similar
Transportation				
Conflict with transportation program or plan	No impact	Greater	Similar	Similar
CEQA Guidelines section 15064.3	LTS	Similar	Similar	Similar
Design hazards	No impact	Greater	Similar	Similar
Emergency access	LTS	Similar	Similar	Similar
Parking capacity	No Impacts	Similar	Similar	Similar
Utilities and Service Systems				
Relocation or construction of new utilities	LTS	Lesser	Similar	Similar
Sufficient water supplies	LTS	Lesser	Similar	Similar
Adequate wastewater treatment capacity	No impact	Similar	Similar	Similar
Landfill capacity	No impact	Lesser	Similar	Similar
Regulations related to solid waste	No impact	Similar	Similar	Similar
Wildfire				
Impair emergency response or evacuation plan	No Impact	Similar	Similar	Similar
Exacerbate wildfire risks	No Impact	Similar	Similar	Similar
Installation or maintenance of associated infrastructure	No Impact	Similar	Similar	Similar
Downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability	No Impact	Similar	Similar	Similar

5.5 Alternatives Considered but Eliminated from Further Analysis

Section 5.2 provides an accounting of the process that was undertaken by the County to evaluate various alternatives. The County prepared a *Bridge Replacement Feasibility Report* in 2015 to evaluate rehabilitation of the bridge along with the proposed Project and two other alignment alternatives.

Stanislaus County initially evaluated the feasibility of rehabilitating the existing Tim Bell Road Bridge to meet current safe design standards including Stanislaus County standards and the AASHTO guidelines. In addition to the rehabilitation work needed on the existing bridge the rehabilitation alternative would require the construction of a 700-foot slab bridge at north end of existing bridge to clear 100-year high water elevation of Dry Creek. The County concluded that a full bridge replacement would cost less than the proposed Project but would not solve the exiting deficiencies/ safety issues. The rehabilitation alternative was eliminated from further consideration because it would not meet the project objectives by resolving the exiting deficiencies/ safety issues associated with the existing bridge and approaches.

5.6 References

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HDR, Inc. January 2015. Bridge Replacement Feasibility Report, Tim Bell Road Bridge 38C0073 over Dry Creek Replacement Project. Federal Project #: STPLZ-5938(189). Prepared for Stanislaus County Department of Public Works.

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Stanislaus County. Adopted 23 August 2016 (2016a). Stanislaus County general plan 2015.

Stanislaus County. April 2016 (2016b). Stanislaus County General Plan and Airport Land Use Compatibility Plan Update Draft Program EIR.

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Chapter 6
Other CEQA Considerations

6.1 Overview

This chapter includes the following discussions and analyses required by CEQA.

- Cumulative impacts
- Growth-inducing impact
- Significant and unavoidable environmental impacts
- Significant irreversible environmental impacts
- Mitigation measures with the potential for environmental effects

6.2 Cumulative Impacts

Per the State CEQA Guidelines cumulative impacts refers to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts. The individual effects may be changes resulting from a single project or a number of separate projects. The cumulative impact from several projects is the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time (State CEQA Guidelines Section 15355).

For the purpose of this EIR, significant cumulative impacts would occur if impacts related to the implementation of the Project, combined with related environmental impacts resulting from implementation of the adopted County General Plan, adopted 2018 Regional Transportation Plan/Sustainable Communities Strategy (RTP/ SCS), build-out of land, and installation of infrastructure consistent with the General Plan Land Use Map and Circulation Map, as well as maintenance and upgrades to existing infrastructure, would result in an adverse significant effect. For an impact to be considered cumulative, these incremental impacts and potential incremental impacts must be related to the types of impacts caused by the Project and evaluated in Chapter 3, *Impact Analysis*.

The cumulative impacts analysis focuses on the environmental resources analyzed in Section 3. Additional information about the setting for each resource can be found in the individual resource sections. The cumulative setting conditions are based on the existing land uses within the study area, which exist as a result of past and present development activity. In addition, consideration was given to future projects that may occur during and shortly after the bridge construction period. Although the exact nature and extent of all future projects is not known, the known foreseeable future projects are expected to include those noted in the following subsections.

Stanislaus County General Plan: The 2015 comprehensive update to the Stanislaus County General Plan has a 20-year planning horizon (to 2035) and utilizes the population projections adopted by the Stanislaus Council of Governments' (StanCOG) 2014 Regional Transportation Plan/Sustainable

Communities Strategy. The General Plan identifies adopted goals, policies and implementation that govern development in the County. The General Plan identifies Tim Bell Road as a rural minor collector roadway that requires least 80 feet of right-of-way either because of non-ideal environments or in locations where more land is required for drainage or safety purposes.

2018 RTP/SCS: The RTP-SCS serves as a guide for transportation investment and land use across Stanislaus County throughout 2042 (an approximate 25-year horizon). It presents a roadmap for accommodating anticipated growth and development and identifies a transportation investment strategy for achieving regional goals that link air quality, land use, and transportation in the regional area. Among various goal and objectives, the StanCOG RTP/SCS identified the need to replace the existing bridge to increase safety and help preserve transportation system (StanCOG 2018). The 2018 RTP-SCS includes a list of transportation projects, many of which would contribute to improved traffic safety and help preserve transportation system in the area.

6.2.1 Analysis

All resource areas were analyzed for cumulative impacts. Based on the analysis it was determined that the proposed Project would not contribute to a cumulative impact in the resource areas listed below because either:

(1) the resource is in generally good health and the Project would result in beneficial impacts, no impacts, or minor impacts that would be fully mitigated (to a less-than-significant level under CEQA; or

(2) the resource is regulated in such a way that by implementing mitigation measures to fully compensate for the loss of the resource, and by obtaining the necessary permits and following the required regulations for impact avoidance or minimization and compensating for impacts, a significant contribution to a cumulative impact would not occur.

Based on the analysis the contribution to a cumulative impact on the following resources would not be considerable.

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

6.2.1.1 Cultural Resources

The geographic scope of cumulative impact analysis for cultural resources is the approximately 31.8 ac Project cultural area of potential effect (APE). The Tim Bell Road Bridge over Dry Creek (Bridge No. 380073) is the sole historic property in the APE. As described in section 3.4 (Cultural Resources) the bridge was found eligible for listing in the CRHP and NRHP.

Per PRC section 21084.1 the Project will result in a '*substantial adverse change in the significance of an historical resource'* by removing the bridge and therefore the Project will have a significant effect on the environment. Mitigation of significant impacts must lessen or eliminate the physical impact that the project will have on the historical resource. This is often accomplished through redesign of a project to eliminate objectionable or damaging aspects of the project. The County has committed to implementation of measures CULT-1, CULT-2, and CULT-3 to reduce impacts. The demolition of a historic structure cannot be mitigated to less than significant. Even with the implementation of measures CULT-1, CULT-2, and CULT-3 this is a significant unavoidable impact. If other reasonably foreseeable projects require the demolition or alteration of historic property, the impact in combination with the Project could be cumulatively considerable.

6.3 Growth-Inducing Impacts

Factors that influence land use and development in an area may include population and economic growth, desirability of locations, the costs and availability of developable land, physical and regulatory constraints, transportation, and the costs of sewer, water, and other utility services. This section addresses potential growth in the study area and larger region and the extent to which the proposed Project may contribute to that growth.

Transportation agencies play a role in land use changes by providing infrastructure that can improve mobility and/or open up access to new locations. New development generates travel to and from that location, and this additional travel creates demand for new transportation facilities. The relationship between transportation and land use and the degree to which one influences the other is a topic of ongoing debate.

6.3.1 Existing Conditions

Stanislaus County spans nearly 1,500 square miles and has approximately 514,000 residents (U.S. Census Bureau 2019) in its nine cities and unincorporated communities. In part because of its proximity to the Bay Area and relative lower cost of living, Stanislaus County is an agricultural county in transition. Prior to 1960, most of the county's population lived on farms; today, the population of the nine incorporated cities is nearly three times that of the unincorporated area of the county. Unprecedented population growth throughout the 1990s increased pressure to convert productive agricultural lands to non-agricultural uses. As a response to this rapid growth, voters passed the 30-Year Land Use Restriction Initiative (Measure E) in 2008, which requires any redesignation or rezoning of land in the unincorporated area from agricultural or open space use to a residential use to be approved by a majority vote of county voters at a general or special local election. The Measure E requirements run with the land, meaning land cannot be approved for non-residential use, then subsequently approved for residential use without a general or special election vote.

Stanislaus County's Measure E substantially limits the conversion of agricultural lands in Stanislaus County to non-agricultural uses. Since its enactment in 2008, no conversions of agricultural land subject to Measure E have been approved.

6.3.2 Impacts

6.3.2.1 Methodology

The proposed Project does not include construction of new housing that could directly induce population growth, nor does it include displacement of existing housing or people that would necessitate the construction of replacement housing elsewhere. The impact analysis focuses on the potential of the proposed Project to indirectly result in growth-inducing impacts and does so by answering the following questions.

- To what extent would travel times, travel cost, or accessibility to employment, shopping, or other destinations be changed? Would this change affect travel behavior, trip patterns, or the attractiveness of some areas to development over others?
- To what extent would change in accessibility affect growth or land use change—its location, rate, type, or amount?
- To what extent would resources of concern be affected by this growth or land use change?

6.3.2.2 Impact Discussion

- To what extent would travel times, travel cost, or accessibility to employment, shopping, or other destinations be changed? Would this change affect travel behavior, trip patterns, or the attractiveness of some areas to development over others?

Implementation of the proposed Project would replace the existing two lane bridge with a new two lane bridge that meets the current Stanislaus County standards and the AASHTO guidelines by providing:

- Improved sight distance,
- Improved bridge deck geometry and approach roadway alignment removes the existing "s-curve",
- A safe design speed,
- An increased bridge deck width of 26 feet (two 11-foot travel lanes with two 2-foot shoulders)
- A bridge structure the allows AASHTO permit truck loads,
- A new bridge barrier system, and
- A bridge structure that passes the 100-year high water elevation and 50-year high water elevation plus 2 feet.

Tim Bell Road is an existing roadway connecting the Waterford area to the south with Warnerville Road at the north end. The Project does not increase the capacity of Tim Bell Road. The Project would not provide new access to undeveloped areas. Rather, it would involve replacing and realigning a nonstandard bridge structure. Accessibility to employment, shopping, or other destinations is not expected to change. The Project could reduce commute and trip times for those traveling over the bridge by improving sight distance, removing the "s-curve", and providing better bridge deck and approach geometry. The reduced travel times would not be substantial and are unlikely to have an

overall effect on travel behavior, trip patterns, or the attractiveness of some areas to development over others.

- To what extent would the change in accessibility affect growth or land use change—its location, rate, type, or amount?

The Project would provide standard bridge and approach widths over the Dry Creek to accommodate one travel lane in each direction. The Project would not create additional capacity on other sections of Tim Bell Road. In a rural area, the introduction of new roadways is capable of exerting growth pressure. However, this Project proposes to replace the existing structure with a new structure the meets current standards and would not provide access to undeveloped areas. The Project would exert little to no growth pressure. The Project could reduce commute and trip times for those traveling over the bridge by improving sight distance, removing the "s-curve", and providing better bridge deck and approach geometry. The reduced travel times would not be substantial and are unlikely to have an overall effect on employment and residential location decisions such that growth would occur.

- To what extent would resources of concern be affected by this growth or land use change?

Project-related growth is not reasonably foreseeable. Although the proposed Project would install a new two lane bridge that meets the current Stanislaus County standards and the AASHTO guidelines, the Project would neither connect to undeveloped areas nor would it affect the underlying zoning in the area. The only land use change would be the incorporation of right-of-way for the bridge structure, abutments, and road approaches. Based on the analysis above, the proposed Project would not induce growth. No additional analysis related to growth is necessary.

6.4 Significant and Unavoidable Impacts

As summarized in Table S-1, all impacts that would result from the proposed Project, excluding Cultural Resources, are either less than significant or significant but reduced to less-than-significant levels after the implementation of mitigation measures. Significant and unavoidable impacts to cultural resources are summarized below.

The Tim Bell Road Bridge over Dry Creek (Bridge No. 380073) is the sole historic property in the APE. The bridge was found eligible for listing in the NRHP and CRHR as part of the Bridge Inventory conducted by Caltrans during the 1980s. It was determined eligible under Criterion C as embodying distinctive characteristics of type, period, and method of construction. The criteria for the National Register (Criteria A, B, C, and D) are nearly identical to the California Register (Criteria 1, 2, 3, and 4).

Public Resource Codes (PRC) section 21084.1 states in part "*A project that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment. For purposes of this section, an historical resource is a resource listed in, or determined to be eligible for listing in, the California Register of Historical Resources…*" PRC section 5020.1(q) defines a 'substantial adverse change' to an historical resource as "*Substantial adverse change includes demolition, destruction, relocation, or alteration such that the significance of an historical resource would be impaired (PRC Section 5020.1(q)).*" The Project will remove and replace the Tim Bell Road Bridge which has been determined eligible for listing in the CRHR. Per PRC section 21084.1 the Project will result in a '*substantial adverse change in the significance of an historical resource*' by removing the bridge and therefore the Project will have a significant effect on the environment.

Mitigation of significant impacts must lessen or eliminate the physical impact that the project will have on the historical resource. This is often accomplished through redesign of a project to eliminate objectionable or damaging aspects of the project. The County has committed to implementation of measures CULT-1, CULT-2, and CULT-3 to reduce impacts. The demolition of a historic structure cannot be mitigated to less than significant. Even with the implementation of measures CULT-1, CULT-2, and CULT-3 this is a significant unavoidable impact.

6.5 Significant Irreversible Environmental Impacts

The 2020 State CEQA Guidelines Section 15126.2(d) requires the evaluation and discussion in certain EIRs of significant irreversible changes that would be caused by a proposed project. State CEQA Guidelines Section 15127 (Limitations on Discussions of Environmental Impact) of the State CEQA Guidelines states:

> 'The information required by Section 15126.2(d) concerning irreversible changes, need be included only in EIRs prepared in connection with any of the following activities:
>
> (a) The adoption, amendment, or enactment of a plan, policy, or ordinance of a public agency;
>
> (b) The adoption by a Local Agency Formation Commission (LAFCO) of a resolution making determinations; or
>
> (c) A project which will be subject to the requirement for preparing an environmental impact statement pursuant to the requirements of the National Environmental Policy Act of 1969, 42 U.S.C. 4321–4347."

Implementation of the proposed Project would correct the existing deficiencies of the Tim Bell Road Bridge by replacing it with a new structure that meets the current Stanislaus County standards and the AASHTO guidelines by providing:

- Improved sight distance,
- Improved bridge deck geometry and approach roadway alignment removes the existing "s-curve",
- A safe design speed,
- An increased bridge deck width of 26 feet (two 11-foot travel lanes with two 2-foot shoulders)
- A bridge structure the allows AASHTO permit truck loads,
- A new bridge barrier system, and
- A bridge structure that passes the 100-year high water elevation and 50-year high water elevation plus 2 feet.

The Project does not include any of the activities listed in State CEQA Guidelines Section 15127 that would require the evaluation and discussion of significant irreversible environmental impacts. The Project is not a plan, policy, or ordinance, does not include LAFCO approvals, and does not require the preparation of a NEPA environmental impact statement. No further evaluation or documentation is required.

6.6 Mitigation Measures with the Potential for Environmental Effects under CEQA

Section 15126.4(a)(1)(D) of the CEQA Guidelines provides that, "[i]f a mitigation measure would cause one or more significant effects in addition to those that would be caused by the project as proposed, the effects of the mitigation measure shall be discussed but in less detail than the significant effects of the project as proposed." For each impact considered significant in this EIR, mitigation measures have been designed that would reduce the severity of the impact.

Mitigation to reduce the significant impacts to less-than-significant levels are identified in the impact analysis in Chapter 3. None of the measures have the potential to themselves result in significant impacts. The measures are preventative in nature or involve compensation.

6.7 References

Stanislaus Council of Governments (StanCog). 15 August 2018 (2018a). Regional transportation plan/sustainable communities strategy (RTP/ SCS). Adopted per resolution 18-03.

U.S. Census Bureau. Accessed January 2019 (2019c). 2013-2017 American community survey 5-year estimates, poverty status in the past 12 months. https://factfinder.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t

Chapter 7
Report Preparers

7.1 Stanislaus County Public Works Department—CEQA Lead Agency

Denis Bazyuk, P.E.	Project Manager

7.2 HDR

John Maniscalco, PE, SE	Project Manager

7.3 Sycamore Environmental Consultants, Inc.

Jeffery Little	Project Manager, Vice President
Mike Bower, M.S.	Assistant Project Manager, Senior Biologist

Appendix A: Notice of Preparation

NOTICE OF PREPARATION OF AN ENVIRONMENTAL IMPACT REPORT
FOR THE
TIM BELL ROAD OVER DRY CREEK - BRIDGE (38C-0073)
REPLACEMENT PROJECT

DATE: **October 24, 2018**

TO: **Interested Agencies and Individuals**

FROM: **Stanislaus County Department of Public Works**

The Stanislaus County Department of Public Works (Public Works) is preparing an Environmental Impact Report (EIR) for the Tim Bell Road over Dry Creek Bridge Replacement Project. Public Works is soliciting the view of interested persons and agencies on the scope and content of the information to be included in the EIR. Agencies should comment with regard to information relevant to the agencies' statutory responsibilities, as required by Section 15082 of the California Environmental Quality Act (CEQA) Guidelines. Public Works will also accept written comments regarding the scope and content from interested persons and organizations concerned with the Project, in accordance with the CEQA Guidelines Section 15083.

The scoping comment period begins October 24, 2018 and ends November 23, 2018. Please direct all written comments to: Stanislaus County Department of Public Works, Attention: Mr. Denis Bazyuk, 1716 Morgan Street, Modesto, CA 95358. **Individuals and organization/agency representatives are invited to provide written and oral comments at a scoping meeting that will be held on Wednesday evening, November 14, 2018 from 6:00 to 7:00 p.m. at the Waterford Community Center, 540 C Street, Waterford, CA.** Persons with disabilities that may require special accommodations at the scoping meeting should contact Denis Bazyuk at the above address, or by phone at 209-525-4130. This notice can also be found on the Stanislaus County Public Works website at http://www.stancounty.com/publicworks/projects.shtm

PROJECT LOCATION: The Tim Bell Road over Dry Creek Bridge Replacement Project is located along Tim Bell Road approximately 0.8 mile south of the intersection with Claribel Road, and approximately five miles northeast of the community of Waterford in eastern Stanislaus County (Figures 1 and 2). Tim Bell Road heads north and east from Waterford. The Stanislaus County General Plan lists Tim Bell Road as a Minor Collector with two lanes of traffic and 80 feet of right-of-way.

BACKGROUND: The existing 131-foot-long, 20-foot wide bridge was constructed in 1925. The bridge structure is a 90-foot reinforced concrete arch with open spandrel wood members and two 20-foot approach spans. The bridge is eligible for listing on the National Register of Historic Properties as an unusual example of a hybrid timber-concrete bridge. While the original timbers and deck have been replaced, the arch rings are intact and the bridge retains a fair degree of integrity of design, materials, workmanship, feeling, and association.

The bridge has a sufficiency rating of 53.3, and is currently classified as Functionally Obsolete due to several deficiencies. The bridge deck geometry and approach roadway alignment do not meet American Association of State Highway and Transportation Officials (AASHTO) standards. The bridge deck width is 20 ft, which does not meet the minimum AASHTO width of 24 ft (travel way plus 2 ft each side) for average daily traffic (ADT) below 400 vehicles. All wood spandrel caps, columns, bracing and sill plates are inadequate to support AASHTO standard truck loading. The concrete arch size is inadequate to support standard truck loading. The bridge wood barrier does not meet current AASHTO crash tested barrier capacity requirements. The bridge is overtopped during a 100-year storm. Wood spandrel bents are not adequate to resist seismic loading. The County evaluated the deficiencies and determined that bridge replacement was appropriate.

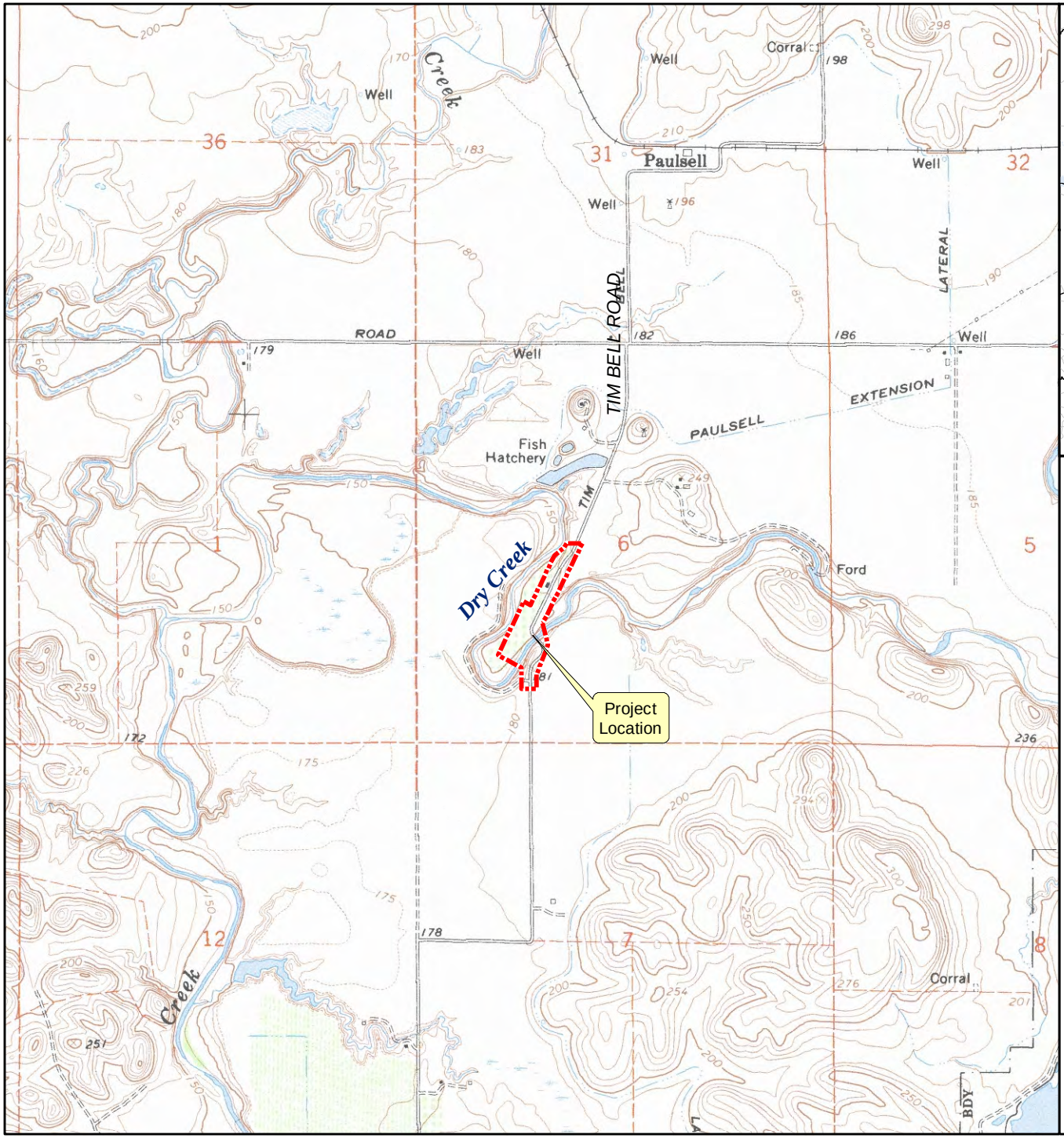
The primary objective of the project is to provide long-term safe vehicular and farm equipment across Dry Creek. The project will result in the removal of the existing, historic bridge. The demolition of a historic structure cannot be mitigated to less than significant under CEQA; therefore, the County will prepare a CEQA EIR.

PROJECT DESCRIPTION: Stanislaus County proposes to replaces the existing Tim Bell Road Bridge with a new, approximately 960-ft bridge that spans over the 100-year floodplain. The new, two-lane bridge will have a Caltrans approved 26-ft clear deck width. The deck width accommodates two 11 ft travel lanes and two 2 ft shoulders. The new alignment improves sight distance, removes the existing S-curve, and provides for a 45 miles per hour design speed. The new bridge will be shifted downstream of the existing bridge. The proposed Project includes approximately 1,900-ft of road and bridge improvements. Road improvements south of the bridge will be approximately 220 ft long to safely conform into the existing alignment. At the north end of the Project, approximately 700 ft of road improvements avoids creating an S-curve. The bridge structure type will be a cast-in-place or precast concrete slab to minimize the elevation difference between the existing road profile and new profile in front of the private residence. At Dry Creek, the bridge span will be approximately 140 to 160 ft long to clear span the ordinary high water mark elevation.

The County is evaluating two bridge types with different aesthetic features to mitigate for the removal of the historic structure (Figures 3 and 4, Bridge General Plans). The first bridge type would include a concrete arch and open spandrels over Dry Creek. The other spans would be concrete slabs. The second bridge type would be a haunched, concrete box-girder over Dry Creek. The two backing spans would be haunched. The spans over the 100-yr floodplain would be a concrete slabs.

Public Works will use Highway Bridge Program (HBP) funds to replace the existing structure to improve roadway safety and comply with the American Association of State Highway and Transportation Officials (AASHTO) design guidelines and County standards.

ENVIRONMENTAL PROCESS AND PUBLIC INPUT: Following receipt of input during the comment period, the County will prepare a Draft EIR that will describe the Project and alternatives (including a no project alternative as required by CEQA) and will identify the potential environmental effects and mitigation measures that may be necessary to minimize or avoid such effects. The Draft EIR will be made available for public review and input for a 45-day review period. The County will consider all comments received and will prepare a Final EIR which identifies any necessary changes to the Draft and provides responses to all comments on the Draft. The County Board of Supervisors will consider certification of the Final EIR prior to approval of actions required for undertaking the Project.



Tim Bell Road Over
Dry Creek Bridge (38C-0073)
Replacement
Stanislaus County, CA

Figure 1. Location Map

Project Location

2,000 1,000 0 2,000 Feet

N

Scale: 1 inch = 2,000 feet

USGS Quadrangle: Paulsell, CA (Photoinspected 1976)
o_sw0101.sid
7.5 Minute (C) Series, Albers Nad83 Mosaics (MrSID),
CASIL California USGS Digital Raster Graphics (DRG)

11094TimBellRdDryCkBridge_Fig1LocationMap.mxd

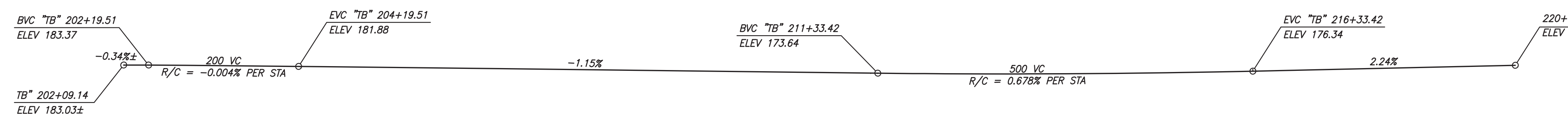
Tim Bell Road over
Dry Creek Bridge (38C-0073)
Replacement
Stanislaus County, CA

Biological Study Area (BSA)

Aerial Photograph: 13 September 2017
GEO1 Vivid DigitalGlobe Imagery
ESRI Imagery Basemap layer

Figure 2. Aerial Photograph

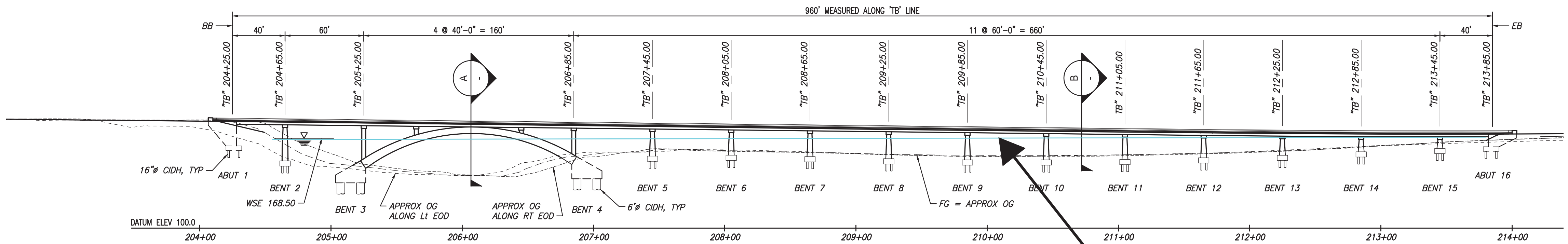
11094TimBellRdDryCkBridge_Fig2AerialPhoto.mxd



PROFILE GRADE
NO SCALE

NOTES:
- (A) PAINT "BRIDGE NO. 38C-0073 & YEAR OF CONSTRUCTION"
- (B) PAINT "TIM BELL ROAD BRIDGE"
- (C) STRUCTURE APPROACH TYPE N(30S)
- (D) STRUCTURE APPROACH TYPE N(10S)
- (E) MBGR, SEE "ROAD PLANS"
- (F) TYPE 1 RETAINING WALL

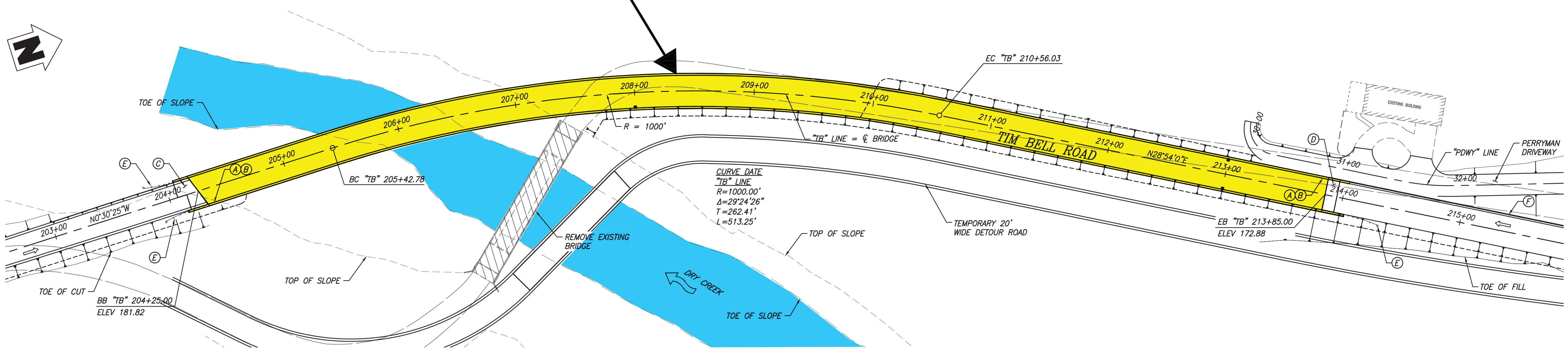
LEGEND:
- INDICATES DIRECTION OF TRAVEL
- INDICATES LIMITS OF REMOVAL
- INDICATES DIRECTION OF FLOW



ELEVATION
1" = 50'

100 year Flood High Water Elevation

New Tim Bell Road Bridge



PLAN
1" = 50'

SPANDREL ARCH OVER DRY CREEK

HDR
2365 IRON POINT ROAD
SUITE 300
FOLSOM, CA 95630
916-817-4700

811
CALL BEFORE YOU DIG

35%
03-06-18

PREPARED UNDER THE DIRECTION OF:
DATE:

NO	DESCRIPTIONS	DATE	APPROVED
	REVISIONS		

STANISLAUS COUNTY
DEPARTMENT OF PUBLIC WORKS
ENGINEERING AND OPERATIONS DIVISION
1716 MORGAN ROAD – MODESTO, CA 95358

Stanislaus County
Striving to be the best

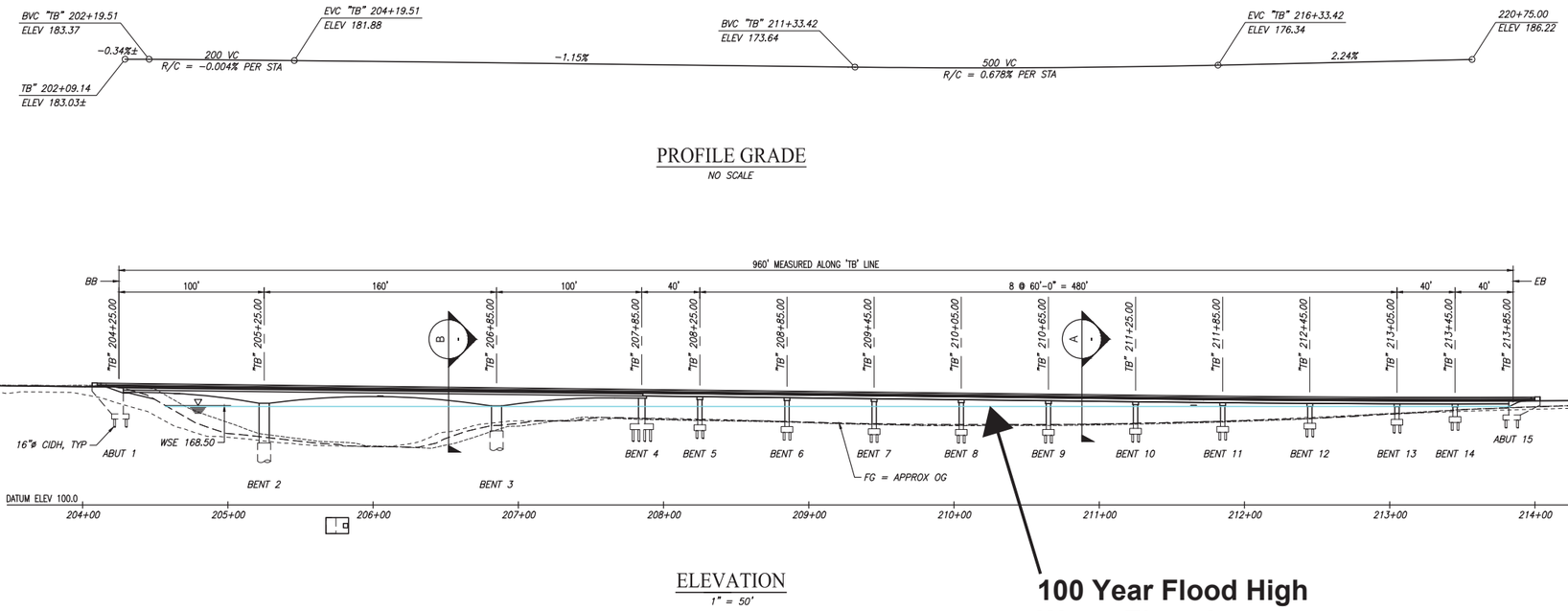
BRIDGE GENERAL PLAN
ALTERNATIVE 1

IMPROVEMENT PLANS FOR:
TIM BELL ROAD OVER DRY CREEK
BRIDGE REPLACEMENT PROJECT
STANISLAUS COUNTY, CA

JOB NO 9587
DATE 11/15/16
DR BY JG
CK BY CN
SCALE AS SHOWN

SHEET NUMBER
GP-1A
18 OF 25 SHEETS

PLOT DATE: July 16, 2018 FILE: C:\PWWORKING\SAC\D0535061\BRIDGE ARCH_GP-1__23X23FTG.DWG



PROFILE GRADE
NO SCALE

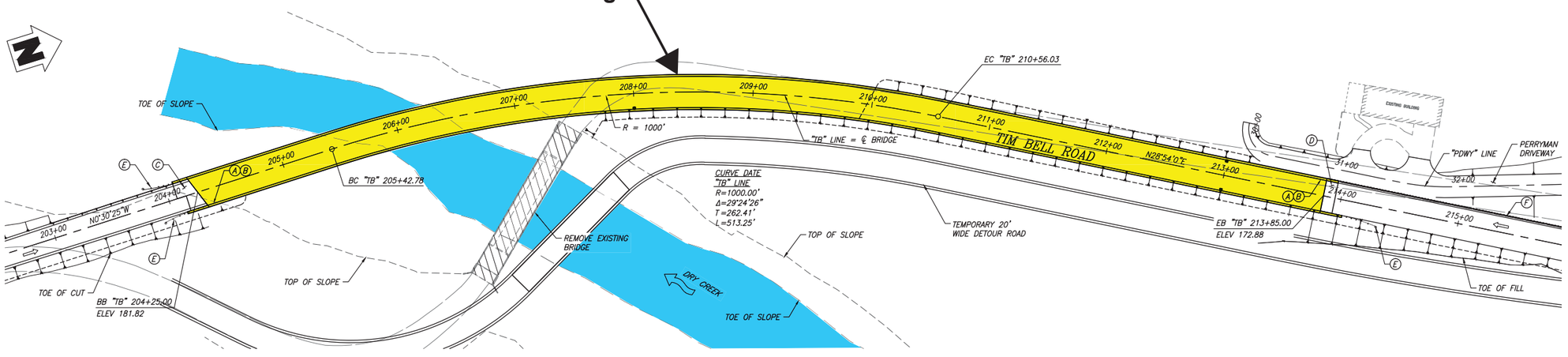
ELEVATION
1" = 50'

NOTES:

(A) PAINT "BRIDGE NO. 38C-0073 & YEAR OF CONSTRUCTION"
(B) PAINT "TIM BELL ROAD BRIDGE"
(C) STRUCTURE APPROACH TYPE N(30S)
(D) STRUCTURE APPROACH TYPE N(10S)
(E) MBGR, SEE "ROAD PLANS"
(F) TYPE 1 RETAINING WALL

LEGEND:

⇨ INDICATES DIRECTION OF TRAVEL
INDICATES LIMITS OF REMOVAL
INDICATES DIRECTION OF FLOW



PLAN
1" = 50'

BOX GIRDER ARCH OVER DRY CREEK

2365 IRON POINT ROAD
SUITE 300
FOLSOM, CA 95630
916-817-4700

CALL BEFORE YOU DIG

35% 03-06-18

PREPARED UNDER THE DIRECTION OF:

NO	DESCRIPTIONS	REVISIONS	DATE	APPROVED

DATE:

STANISLAUS COUNTY
DEPARTMENT OF PUBLIC WORKS
ENGINEERING AND OPERATIONS DIVISION
1716 MORGAN ROAD - MODESTO, CA 95358

BRIDGE GENERAL PLAN
ALTERNATIVE 2

IMPROVEMENT PLANS FOR:
TIM BELL ROAD OVER DRY CREEK
BRIDGE REPLACEMENT PROJECT
STANISLAUS COUNTY, CA

JOB NO	9587
DATE	11/15/16
DR BY	JC
CK BY	CN
SCALE	AS SHOWN

SHEET NUMBER
GP-1B
22 OF 25 SHEETS

Jul 16, 2018 - 10:50am
D:\pwworking\sac\d0535061\Bridge Arch_GP-1_23x23Tg.dwg

PLOT DATE: July 16, 2018 FILE: C:\PWWORKING\SAC\D0535061\BRIDGE ARCH_GP-1__23X23TG.DWG

TIM BELL ROAD
BRIDGE REPLACEMENT
Comment Card

General Comments: I wish the old bridge could stay but I have no say so in this matter. But I do want Alternative 1, the Spandrel Arch Bridge with historical looking railings, to give it a better look. We were told at the very first meeting that we could get a historical looking bridge. It does affect our properties on 4 corners.

Submitted by:

Name: Carolyn Hayes

Address: PO Box 1183
Waterford Ca 95386

Phone Number: 209-985-5908

E-mail: cotdeh@aol.com

COMMENTS ARE DUE BY: NOV. 23, 2018

You may submit written comments to the comment box or address below by mail or email:

Mr. Denis Bazyuk, P.E.
Stanislaus County
Department of Public Works
1716 Morgan Road
Modesto, CA 95358

bazyukd@stancounty.com

TIM BELL ROAD
BRIDGE REPLACEMENT
Comment Card

General Comments:

I AM The Land Owner ON All 4 Sides
i Bought The Ranches There AT Different Times
OVER The Years - US Neighbors ARE RELYING
ON YOU To Keep The Bridge ~~HISTORICAL~~ Looking
THAT is Very important - HISTORICAL
We Will NOT be happy With Anything Less!

OPTION #1
FIRST Meeting - We were promised a Beautiful Bridge
- All of US will hold You To Your WORDS
- My Ranches ARE BEAUTIFUL (Keep it That Way

Submitted by:

Name: DARRELL E HAYES

Address: 15337 TIM BELL RD.

Phone Number: 209-985-5909

E-mail: COTdeh@AOL.COM

COMMENTS ARE DUE BY: NOV. 23, 2018

You may submit written comments to the comment box or address below by mail or email:

Mr. Denis Bazyuk, P.E.
Stanislaus County
Department of Public Works
1716 Morgan Road
Modesto, CA 95358

bazyukd@stancounty.com

NOV 21 2018 PM 1:5

Denis Bazyuk

From: jdeboer89 <jdeboer89@gmail.com>
Sent: Friday, November 23, 2018 4:20 PM
To: Denis Bazyuk
Subject: Tim Bell Bridge Comments

Hello,

General Comment: I live just north of the bridge on Timbell and had an elevated view of the roadway. People traveling north commonly use the incline past the Perryman's house as a launchway and are already traveling at least 45 when they crest the incline and level out. I can hear their engines and exhaust wail all day/night. Moral of the story... there has to be some kind of physical speed reduction devices... or the removal of the s-curves will only serve to worsen the launchpad problem.

Regarding bridge design, build the cheaper one.

Name: Jacob DeBoer
Address: 4606 Timbell Rd, Waterford
Ph: 805-704-5304
email: jdeboer89@gmail.com

Thanks.

--
Jacob DeBoer | p: 805.704.5304 | e: jdeboer89@gmail.com

Denis Bazyuk

From: lucas hayes <lucashayes38@gmail.com>
Sent: Monday, November 26, 2018 7:23 PM
To: Denis Bazyuk
Subject: Tim Bell Road Bridge Replacement

Denis,

Us here at Hayes Ranch are 100% against a temporary road and bridge going through our orchard. Please use the other side of Tim Bell road for access or just go around. Ellenwood road would add very little time to commutes. We have a lot of hard work, money, and time into growing these trees that you think you can just rip out and us simply replant. Walnut trees are not simply replanted and irrigation among many others things become hard to maintain when dealing with a mature orchard and very young trees within the same irrigation block, which would be the case here. Save money by not having to compensate us for destroying our orchard. Save money by not building a temporary bridge. Save money by not building a temporary road. Please take into deep consideration.

Thank you,
Lucas Hayes
--
Sent from Gmail Mobile

To Whom It May Concern:

My husband and I have lived at 4331 Tim Bell Road for two and a half years with our two young boys. Upon moving into this residence, we understood that the current bridge was to be replaced, but had no idea to what extent. Recently, we have been informed that the bride will cause a significant change to our current view and surroundings. While we understand the need for the new bridge, it is with great sadness that we have come to realize that the current view of a small, historic bridge and beautiful walnut trees, will no longer be our surroundings.

We hope that the following will be taken into consideration when planning for the bridge replacement:

1) **Safety**: The double S curve and existing condition of the bridge help to slow down traffic on Tim Bell Road. With much of the traffic being young kids looking for a place to "go mudding" and harvest workers and trucks looking to get to and from their destinations quickly, we are very concerned about speeding on Tim Bell. Our young sons play baseball and football in the grass area that we have worked hard to develop.
2) **Flooding**: We understand the need for the elevation change of the current bridge and road but want to ensure that this DOES NOT increase the potential of flooding to our property. We do have plans for future agricultural use of our land and do not want this project to interfere with these plans. We also, do not want to increase the chances that our home, well or septic system be compromised with heavy flooding, as they are not currently. Should the new bridge and roadway increase the flooding potential to our property, we expect that some type of diversion channel would be installed to help decrease flooding potential on our land.
3) **Aesthetics**: Currently the view in front of our home is very rural and quiet. We are very concerned that the pleasant scenery will be replaced by an unsightly, elevated roadway which will not only destroy the current view but also change the very character of the property itself. This new bridge with its traffic traveling at increased speeds will invariably increase traffic noise levels. While we understand the rationale for an elevated roadway due to flooding concerns, we are very concerned about the increased traffic noise as well of the view. We are not interested in looking at concrete pilings from our lawn area or kitchen window. We are also concerned that the traffic will have a perfect view of the lawn behind our home. This is currently a private area for our family to enjoy, but with the elevation, may be within view of the elevated traffic. We need the privacy for our family as well as for the safety of our children.
4) **Taking of Property**: We understand that the reconfiguration of the new bridge will require the loss of a portion of our property at the SE corner. We expect that compensation would be provided.
5) **Property Access**: We understand that safe access will be provided to our home from the new roadway at its NE corner via the existing roadway. These details will still need to be worked out including mail box and garbage pickup locations.
6) **Historic Bridge**: The current bridge is deemed to be a historic structure. Two bridge configurations were presented: Alternative A with an arch and Altermatove B without an arch. Alternative A is more visually appealing and is a much more equivalent replacement of the current historic bridge.

Submitted by:

Zachary and Julia Perryman

4331 Tim Bell Road
Waterford, CA 95386
(209)4885-4254
Jewelsee81@yahoo.com

DEPARTMENT OF ENVIRONMENTAL RESOURCES

3800 Cornucopia Way, Suite C, Modesto, CA 95358-9492
Phone: (209) 525-6700 Fax: (209) 525-6774

November 15, 2018

TO: DENIS BAZYUK, STANISLAUS COUNTY DEPARTMENT OF PUBLIC WORKS

FROM: EMILY GRIMES, DEPARTMENT OF ENVIRONMENTAL RESOURCES

SUBJECT: **ENVIRONMENTAL REFERRAL – STANISLAUS COUNTY DEPARTMENT OF PUBLIC WORKS – NOTICE OF PREPARATION OF AN ENVIRONMENTAL IMPACT REPORT FOR TIM BELL ROAD BRIDGE REPLACEMENT**

The Department has reviewed the information available on the subject project and it is our position that the project **will not have a significant effect on the environment**. Listed below are the specific impacts which support our determination and the mitigation or condition that needs to be implemented:

BUSINESSES W/ HAZMAT
The applicant should contact the Department of Environmental Resources (DER) regarding appropriate permitting requirements for hazardous materials and/or wastes. Applicant and/or occupants handling hazardous materials or generating hazardous wastes must notify the Department of Environmental Resources relative to the following: (Calif. H&S, Division 20)

A. Permits for the underground storage of hazardous substances at new or the modification of an existing tank facilities.
B. Requirements for registering as a handler of hazardous materials in the County.
C. Submittal of hazardous materials Business information into the California Electronic Reporting System (CERS) by handlers of materials in excess of 55 gallons, 500 pounds of a hazardous material, or of 200 cubic feet of compressed gas.
D. The handling of acutely hazardous materials may require the preparation of a Risk Management Prevention Program which must be implemented prior to operation of the facility. The list of acutely hazardous materials can be found in SARA, Title III, Section §302.
E. Generators of hazardous waste must notify the Department relative to the: (1) quantities of waste generated; (2) plans for reducing wastes generated; and (3) proposed waste disposal practices. Generators of hazardous waste must also use the CERS data base to submit chemical and facility information to the DER.
F. Permits for the treatment of hazardous waste on-site will be required from the hazardous materials division.
G. Medical waste generators must complete and submit a questionnaire to the department for determination if they are regulated under the Medical Waste Management Act.

MONITORING WELLS AND EXPLORATORY BORINGS

If the project involves the installation of monitoring wells and/or borings, the applicant must submit a current permit application for groundwater monitoring wells and exploratory borings to the DERs Hazardous Materials Division. Please contact the DER to obtain guidance on this process.

NOTICE OF PREPARATION OF AN ENVIRONMENTAL IMPACT REPORT
FOR THE
TIM BELL ROAD OVER DRY CREEK - BRIDGE (38C-0073)
REPLACEMENT PROJECT

DATE: **1 February 2021**

TO: **Interested Agencies and Individuals**

FROM: **Stanislaus County Public Works Department**

The Stanislaus County Public Works Department (Public Works) is preparing an Environmental Impact Report (EIR) for the Tim Bell Road over Dry Creek Bridge Replacement Project. Public Works is soliciting the view of interested persons and agencies on the scope and content of the information to be included in the EIR. Agencies should comment with regard to information relevant to the agencies' statutory responsibilities, as required by Section 15082 of the California Environmental Quality Act (CEQA) Guidelines. Public Works will also accept written comments regarding the scope and content from interested persons and organizations concerned with the Project, in accordance with the CEQA Guidelines Section 15083.

The scoping comment period begins 1 February 2021 and ends 3 March 2021. Please direct all written comments to: Stanislaus County Department Public Works, Attention: Mr. Denis Bazyuk, 1716 Morgan Street, Modesto, CA 95358.

PROJECT LOCATION: The Tim Bell Road over Dry Creek Bridge Replacement Project is located along Tim Bell Road approximately 0.8 mile south of the intersection with Claribel Road, and approximately five miles northeast of the community of Waterford in eastern Stanislaus County (Figures 1 and 2). Tim Bell Road heads north and east from Waterford. The Stanislaus County General Plan lists Tim Bell Road as a Minor Collector with two lanes of traffic and 80 feet of right-of-way.

BACKGROUND: The existing 131-foot-long, 20-foot wide bridge was constructed in 1925. The bridge structure is a 90-foot reinforced concrete arch with open spandrel wood members and two 20-foot approach spans. The bridge is eligible for listing on the National Register of Historic Properties as an unusual example of a hybrid timber-concrete bridge. While the original timbers and deck have been replaced, the arch rings are intact and the bridge retains a fair degree of integrity of design, materials, workmanship, feeling, and association.

The bridge has a sufficiency rating of 53.3, and is currently classified as Functionally Obsolete due to several deficiencies. The bridge deck geometry and approach roadway alignment do not meet American Association of State Highway and Transportation Officials (AASHTO) standards. The bridge deck width is 20 ft, which does not meet the minimum AASHTO width of 24 foot (travel way plus 2 feet each side) for average daily traffic (ADT) below 400 vehicles. All wood spandrel caps, columns, bracing and sill plates are inadequate to support AASHTO standard truck loading. The concrete arch size is inadequate to support standard truck loading. The bridge wood barrier does not meet current AASHTO crash tested barrier capacity requirements. The bridge is overtopped during a 100-year storm. Wood spandrel bents are not adequate to resist seismic loading. The County evaluated the deficiencies and determined that bridge replacement was appropriate.

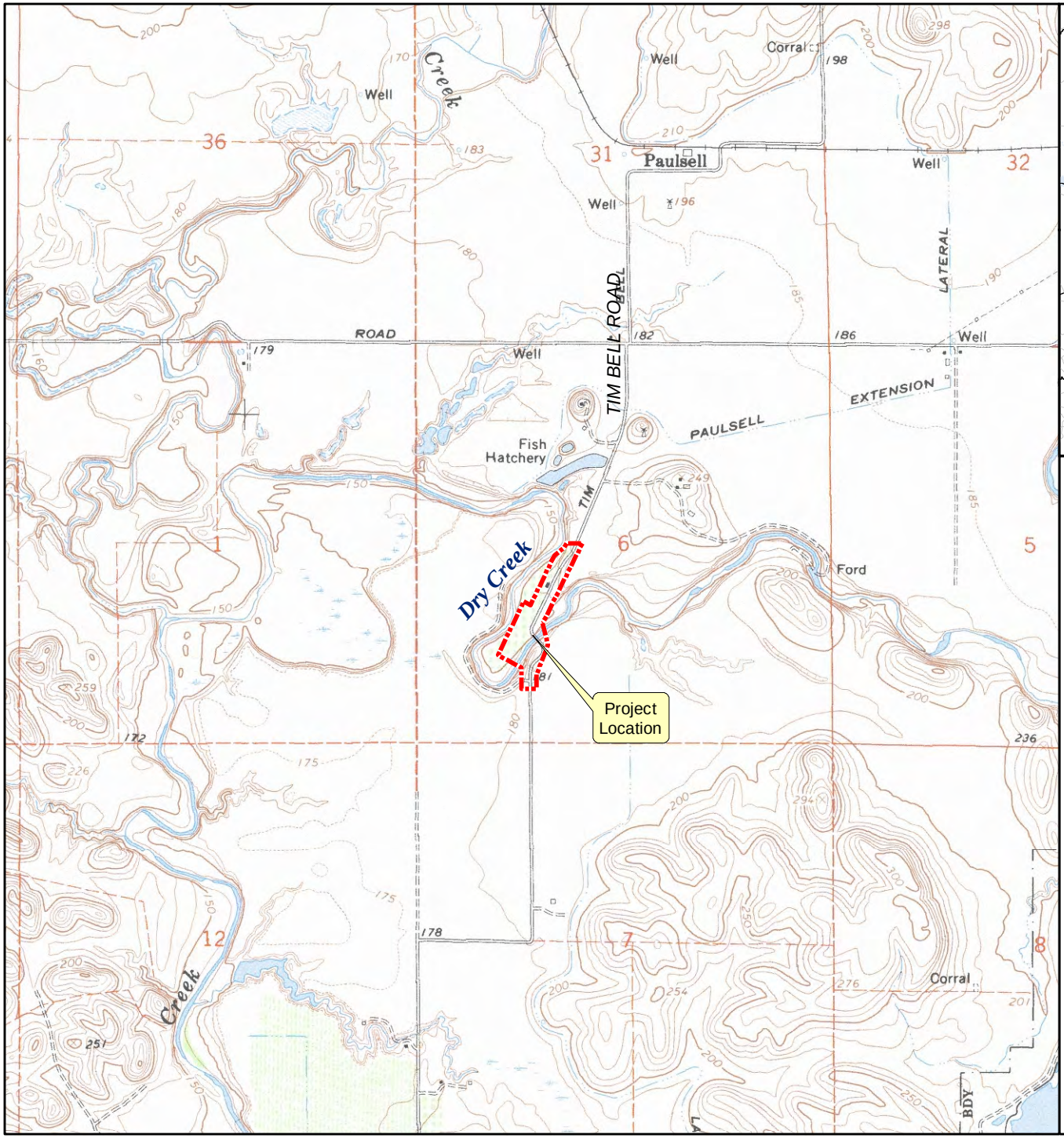
The primary objective of the project is to provide long-term safe vehicular and farm equipment across Dry Creek. The project will result in the removal of the existing, historic bridge. The demolition of a historic structure cannot be mitigated to less than significant under CEQA; therefore, the County will prepare a CEQA EIR.

PROJECT DESCRIPTION: Stanislaus County proposes to replaces the existing Tim Bell Road Bridge with a new, approximately 960-ft bridge that spans over the 100-year floodplain. The new, two-lane bridge will have a Caltrans approved 26-foot clear deck width. The deck width accommodates two 11-foot travel lanes and two 2-foot shoulders. The new bridge will be shifted downstream of the existing bridge. The new alignment improves sight distance, removes the existing S-curve, and provides for a 45 miles per hour design speed. The proposed Project

includes approximately 1,900-feet of road and bridge improvements. Road improvements south of the bridge will be approximately 220 feet long to safely conform into the existing alignment. At the north end of the Project, approximately 700 feet of road improvements avoids creating an S-curve. The bridge structure type will be a cast-in-place or precast concrete slab to minimize the elevation difference between the existing road profile and new profile in front of the private residence. At Dry Creek, the bridge span will be approximately 140 to 160 feet long to clear span the ordinary high water mark elevation.

Public Works will use Highway Bridge Program (HBP) funds to replace the existing structure to improve roadway safety and comply with the American Association of State Highway and Transportation Officials (AASHTO) design guidelines and County standards.

ENVIRONMENTAL PROCESS AND PUBLIC INPUT: Following receipt of input during the comment period, the County will prepare a Draft EIR that will describe the Project and alternatives (including a no project alternative as required by CEQA) and will identify the potential environmental effects and mitigation measures that may be necessary to minimize or avoid such effects. The Draft EIR will be made available for public review and input for a 45-day review period. The County will consider all comments received and will prepare a Final EIR which identifies any necessary changes to the Draft and provides responses to all comments on the Draft. The County Board of Supervisors will consider certification of the Final EIR prior to approval of actions required for undertaking the Project.



Tim Bell Road Over
Dry Creek Bridge (38C-0073)
Replacement
Stanislaus County, CA
26 September 2017

Figure 1. Location Map

Project Location

2,000 1,000 0 2,000 Feet

N

Scale: 1 inch = 2,000 feet

USGS Quadrangle: Paulsell, CA (Photoinspected 1976)
o_sw0101.sid
7.5 Minute (C) Series, Albers Nad83 Mosaics (MrSID),
CASIL California USGS Digital Raster Graphics (DRG)

11094TimBellRdDryCkBridge_Fig1LocationMap.mxd

Tim Bell Road over
Dry Creek Bridge (38C-0073)
Replacement
Stanislaus County, CA
26 September 2017

Project Study Area

Aerial Photograph: 20 June 2016
NAIP2016 USDA FSA Imagery
ESRI Imagery Basemap layer

Figure 2. Aerial Photograph

11094TimBellRdDryCkBridge_Fig2AerialPhoto.mxd

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February 1, 2021

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

Re: 2021020008, Tim Bell Road over Dry Creek Bridge (38C-0073) Replacement Project, Stanislaus County

Dear Mr. Bazyuk:

The Native American Heritage Commission (NAHC) has received the Notice of Preparation (NOP), Draft Environmental Impact Report (DEIR) or Early Consultation for the project referenced above. The California Environmental Quality Act (CEQA) (Pub. Resources Code §21000 et seq.), specifically Public Resources Code §21084.1, states that a project that may cause a substantial adverse change in the significance of a historical resource, is a project that may have a significant effect on the environment. (Pub. Resources Code § 21084.1; Cal. Code Regs., tit.14, §15064.5 (b) (CEQA Guidelines §15064.5 (b)). If there is substantial evidence, in light of the whole record before a lead agency, that a project may have a significant effect on the environment, an Environmental Impact Report (EIR) shall be prepared. (Pub. Resources Code §21080 (d); Cal. Code Regs., tit. 14, § 5064 subd.(a)(1) (CEQA Guidelines §15064 (a)(1)). In order to determine whether a project will cause a substantial adverse change in the significance of a historical resource, a lead agency will need to determine whether there are historical resources within the area of potential effect (APE).

CEQA was amended significantly in 2014. Assembly Bill 52 (Gatto, Chapter 532, Statutes of 2014) (AB 52) amended CEQA to create a separate category of cultural resources, "tribal cultural resources" (Pub. Resources Code §21074) and provides that a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment. (Pub. Resources Code §21084.2). Public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource. (Pub. Resources Code §21084.3 (a)). **AB 52 applies to any project for which a notice of preparation, a notice of negative declaration, or a mitigated negative declaration is filed on or after July 1, 2015.** If your project involves the adoption of or amendment to a general plan or a specific plan, or the designation or proposed designation of open space, on or after March 1, 2005, it may also be subject to Senate Bill 18 (Burton, Chapter 905, Statutes of 2004) (SB 18). **Both SB 18 and AB 52 have tribal consultation requirements.** If your project is also subject to the federal National Environmental Policy Act (42 U.S.C. § 4321 et seq.) (NEPA), the tribal consultation requirements of Section 106 of the National Historic Preservation Act of 1966 (154 U.S.C. 300101, 36 C.F.R. §800 et seq.) may also apply.

The NAHC recommends consultation with California Native American tribes that are traditionally and culturally affiliated with the geographic area of your proposed project as early as possible in order to avoid inadvertent discoveries of Native American human remains and best protect tribal cultural resources. Below is a brief summary of portions of AB 52 and SB 18 as well as the NAHC's recommendations for conducting cultural resources assessments.

Consult your legal counsel about compliance with AB 52 and SB 18 as well as compliance with any other applicable laws.

AB 52

AB 52 has added to CEQA the additional requirements listed below, along with many other requirements:

1. Fourteen Day Period to Provide Notice of Completion of an Application/Decision to Undertake a Project: Within fourteen (14) days of determining that an application for a project is complete or of a decision by a public agency to undertake a project, a lead agency shall provide formal notification to a designated contact of, or tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, to be accomplished by at least one written notice that includes:

- **a.** A brief description of the project.
- **b.** The lead agency contact information.
- **c.** Notification that the California Native American tribe has 30 days to request consultation. (Pub. Resources Code §21080.3.1 (d)).
- **d.** A "California Native American tribe" is defined as a Native American tribe located in California that is on the contact list maintained by the NAHC for the purposes of Chapter 905 of Statutes of 2004 (SB 18). (Pub. Resources Code §21073).

2. Begin Consultation Within 30 Days of Receiving a Tribe's Request for Consultation and Before Releasing a Negative Declaration, Mitigated Negative Declaration, or Environmental Impact Report: A lead agency shall begin the consultation process within 30 days of receiving a request for consultation from a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project. (Pub. Resources Code §21080.3.1, subds. (d) and (e)) and prior to the release of a negative declaration, mitigated negative declaration or Environmental Impact Report. (Pub. Resources Code §21080.3.1(b)).

- **a.** For purposes of AB 52, "consultation shall have the same meaning as provided in Gov. Code §65352.4 (SB 18). (Pub. Resources Code §21080.3.1 (b)).

3. Mandatory Topics of Consultation If Requested by a Tribe: The following topics of consultation, if a tribe requests to discuss them, are mandatory topics of consultation:

- **a.** Alternatives to the project.
- **b.** Recommended mitigation measures.
- **c.** Significant effects. (Pub. Resources Code §21080.3.2 (a)).

4. Discretionary Topics of Consultation: The following topics are discretionary topics of consultation:

- **a.** Type of environmental review necessary.
- **b.** Significance of the tribal cultural resources.
- **c.** Significance of the project's impacts on tribal cultural resources.
- **d.** If necessary, project alternatives or appropriate measures for preservation or mitigation that the tribe may recommend to the lead agency. (Pub. Resources Code §21080.3.2 (a)).

5. Confidentiality of Information Submitted by a Tribe During the Environmental Review Process: With some exceptions, any information, including but not limited to, the location, description, and use of tribal cultural resources submitted by a California Native American tribe during the environmental review process shall not be included in the environmental document or otherwise disclosed by the lead agency or any other public agency to the public, consistent with Government Code §6254 (r) and §6254.10. Any information submitted by a California Native American tribe during the consultation or environmental review process shall be published in a confidential appendix to the environmental document unless the tribe that provided the information consents, in writing, to the disclosure of some or all of the information to the public. (Pub. Resources Code §21082.3 (c)(1)).

6. Discussion of Impacts to Tribal Cultural Resources in the Environmental Document: If a project may have a significant impact on a tribal cultural resource, the lead agency's environmental document shall discuss both of the following:

- **a.** Whether the proposed project has a significant impact on an identified tribal cultural resource.
- **b.** Whether feasible alternatives or mitigation measures, including those measures that may be agreed to pursuant to Public Resources Code §21082.3, subdivision (a), avoid or substantially lessen the impact on the identified tribal cultural resource. (Pub. Resources Code §21082.3 (b)).

7. Conclusion of Consultation: Consultation with a tribe shall be considered concluded when either of the following occurs:

a. The parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource; or

b. A party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached. (Pub. Resources Code §21080.3.2 (b)).

8. Recommending Mitigation Measures Agreed Upon in Consultation in the Environmental Document: Any mitigation measures agreed upon in the consultation conducted pursuant to Public Resources Code §21080.3.2 shall be recommended for inclusion in the environmental document and in an adopted mitigation monitoring and reporting program, if determined to avoid or lessen the impact pursuant to Public Resources Code §21082.3, subdivision (b), paragraph 2, and shall be fully enforceable. (Pub. Resources Code §21082.3 (a)).

9. Required Consideration of Feasible Mitigation: If mitigation measures recommended by the staff of the lead agency as a result of the consultation process are not included in the environmental document or if there are no agreed upon mitigation measures at the conclusion of consultation, or if consultation does not occur, and if substantial evidence demonstrates that a project will cause a significant effect to a tribal cultural resource, the lead agency shall consider feasible mitigation pursuant to Public Resources Code §21084.3 (b). (Pub. Resources Code §21082.3 (e)).

10. Examples of Mitigation Measures That, If Feasible, May Be Considered to Avoid or Minimize Significant Adverse Impacts to Tribal Cultural Resources:

a. Avoidance and preservation of the resources in place, including, but not limited to:

i. Planning and construction to avoid the resources and protect the cultural and natural context.

ii. Planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.

b. Treating the resource with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following:

i. Protecting the cultural character and integrity of the resource.

ii. Protecting the traditional use of the resource.

iii. Protecting the confidentiality of the resource.

c. Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places.

d. Protecting the resource. (Pub. Resource Code §21084.3 (b)).

e. Please note that a federally recognized California Native American tribe or a non-federally recognized California Native American tribe that is on the contact list maintained by the NAHC to protect a California prehistoric, archaeological, cultural, spiritual, or ceremonial place may acquire and hold conservation easements if the conservation easement is voluntarily conveyed. (Civ. Code §815.3 (c)).

f. Please note that it is the policy of the state that Native American remains and associated grave artifacts shall be repatriated. (Pub. Resources Code §5097.991).

11. Prerequisites for Certifying an Environmental Impact Report or Adopting a Mitigated Negative Declaration or Negative Declaration with a Significant Impact on an Identified Tribal Cultural Resource: An Environmental Impact Report may not be certified, nor may a mitigated negative declaration or a negative declaration be adopted unless one of the following occurs:

a. The consultation process between the tribes and the lead agency has occurred as provided in Public Resources Code §21080.3.1 and §21080.3.2 and concluded pursuant to Public Resources Code §21080.3.2.

b. The tribe that requested consultation failed to provide comments to the lead agency or otherwise failed to engage in the consultation process.

c. The lead agency provided notice of the project to the tribe in compliance with Public Resources Code §21080.3.1 (d) and the tribe failed to request consultation within 30 days. (Pub. Resources Code §21082.3 (d)).

The NAHC's PowerPoint presentation titled, "Tribal Consultation Under AB 52: Requirements and Best Practices" may be found online at: http://nahc.ca.gov/wp-content/uploads/2015/10/AB52TribalConsultation_CalEPAPDF.pdf

SB 18

SB 18 applies to local governments and requires local governments to contact, provide notice to, refer plans to, and consult with tribes prior to the adoption or amendment of a general plan or a specific plan, or the designation of open space. (Gov. Code §65352.3). Local governments should consult the Governor's Office of Planning and Research's "Tribal Consultation Guidelines," which can be found online at: https://www.opr.ca.gov/docs/09_14_05_Updated_Guidelines_922.pdf.

Some of SB 18's provisions include:

1. Tribal Consultation: If a local government considers a proposal to adopt or amend a general plan or a specific plan, or to designate open space it is required to contact the appropriate tribes identified by the NAHC by requesting a "Tribal Consultation List." If a tribe, once contacted, requests consultation the local government must consult with the tribe on the plan proposal. **A tribe has 90 days from the date of receipt of notification to request consultation unless a shorter timeframe has been agreed to by the tribe.** (Gov. Code §65352.3 (a)(2)).
2. No Statutory Time Limit on SB 18 Tribal Consultation. There is no statutory time limit on SB 18 tribal consultation.
3. Confidentiality: Consistent with the guidelines developed and adopted by the Office of Planning and Research pursuant to Gov. Code §65040.2, the city or county shall protect the confidentiality of the information concerning the specific identity, location, character, and use of places, features and objects described in Public Resources Code §5097.9 and §5097.993 that are within the city's or county's jurisdiction. (Gov. Code §65352.3 (b)).
4. Conclusion of SB 18 Tribal Consultation: Consultation should be concluded at the point in which:
    a. The parties to the consultation come to a mutual agreement concerning the appropriate measures for preservation or mitigation; or
    b. Either the local government or the tribe, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached concerning the appropriate measures of preservation or mitigation. (Tribal Consultation Guidelines, Governor's Office of Planning and Research (2005) at p. 18).

Agencies should be aware that neither AB 52 nor SB 18 precludes agencies from initiating tribal consultation with tribes that are traditionally and culturally affiliated with their jurisdictions before the timeframes provided in AB 52 and SB 18. For that reason, we urge you to continue to request Native American Tribal Contact Lists and "Sacred Lands File" searches from the NAHC. The request forms can be found online at: http://nahc.ca.gov/resources/forms/.

NAHC Recommendations for Cultural Resources Assessments

To adequately assess the existence and significance of tribal cultural resources and plan for avoidance, preservation in place, or barring both, mitigation of project-related impacts to tribal cultural resources, the NAHC recommends the following actions:

1. Contact the appropriate regional California Historical Research Information System (CHRIS) Center (http://ohp.parks.ca.gov/?page_id=1068) for an archaeological records search. The records search will determine:
    a. If part or all of the APE has been previously surveyed for cultural resources.
    b. If any known cultural resources have already been recorded on or adjacent to the APE.
    c. If the probability is low, moderate, or high that cultural resources are located in the APE.
    d. If a survey is required to determine whether previously unrecorded cultural resources are present.

2. If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.
    a. The final report containing site forms, site significance, and mitigation measures should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum and not be made available for public disclosure.

b. The final written report should be submitted within 3 months after work has been completed to the appropriate regional CHRIS center.

3. Contact the NAHC for:

a. A Sacred Lands File search. Remember that tribes do not always record their sacred sites in the Sacred Lands File, nor are they required to do so. A Sacred Lands File search is not a substitute for consultation with tribes that are traditionally and culturally affiliated with the geographic area of the project's APE.

b. A Native American Tribal Consultation List of appropriate tribes for consultation concerning the project site and to assist in planning for avoidance, preservation in place, or, failing both, mitigation measures.

4. Remember that the lack of surface evidence of archaeological resources (including tribal cultural resources) does not preclude their subsurface existence.

a. Lead agencies should include in their mitigation and monitoring reporting program plan provisions for the identification and evaluation of inadvertently discovered archaeological resources per Cal. Code Regs., tit. 14, §15064.5(f) (CEQA Guidelines §15064.5(f)). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American with knowledge of cultural resources should monitor all ground-disturbing activities.

b. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the disposition of recovered cultural items that are not burial associated in consultation with culturally affiliated Native Americans.

c. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the treatment and disposition of inadvertently discovered Native American human remains. Health and Safety Code §7050.5, Public Resources Code §5097.98, and Cal. Code Regs., tit. 14, §15064.5, subdivisions (d) and (e) (CEQA Guidelines §15064.5, subds. (d) and (e)) address the processes to be followed in the event of an inadvertent discovery of any Native American human remains and associated grave goods in a location other than a dedicated cemetery.

If you have any questions or need additional information, please contact me at my email address: Nancy.Gonzalez-Lopez@nahc.ca.gov.

Sincerely,

Nancy Gonzalez-Lopez
Cultural Resources Analyst

cc: State Clearinghouse

2 March 2021

Denis Bazyuk
Stanislaus County Department Public Works
1716 Morgan Street
Modesto, CA 95358

COMMENTS TO REQUEST FOR REVIEW FOR THE NOTICE OF PREPARATION FOR THE DRAFT ENVIRONMENTAL IMPACT REPORT, TIM BELL ROAD OVER DRY CREEK BRIDGE (38C-0073) REPLACEMENT PROJECT, SCH#2021020008, STANISLAUS COUNTY

Pursuant to the State Clearinghouse's 1 February 2021 request, the Central Valley Regional Water Quality Control Board (Central Valley Water Board) has reviewed the *Request for Review for the Notice of Preparation for the Draft Environmental Impact Report* for the Tim Bell Road over Dry Creek Bridge (38C-0073) Replacement Project, located in Stanislaus County.

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

I. Regulatory Setting

Basin Plan

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

The Basin Plan is subject to modification as necessary, considering applicable laws, policies, technologies, water quality conditions and priorities. The original Basin Plans were adopted in 1975, and have been updated and revised periodically as required, using Basin Plan amendments. Once the Central Valley Water Board has adopted a Basin Plan amendment in noticed public hearings, it must be approved by the State Water Resources Control Board (State Water Board), Office of Administrative Law (OAL) and in some cases, the United States Environmental

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

Antidegradation Considerations

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

In part it states:

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

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

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

II. Permitting Requirements

Construction Storm Water General Permit

Dischargers whose project disturb one or more acres of soil or where projects disturb less than one acre but are part of a larger common plan of development that in total disturbs one or more acres, are required to obtain coverage under the General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit), Construction General Permit Order No. 2009-0009-DWQ. Construction activity subject to this permit includes clearing, grading, grubbing, disturbances to the ground, such as stockpiling, or excavation, but does not include regular maintenance activities performed to restore the original line, grade, or capacity of the facility. The Construction General Permit requires the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP). For more information on the Construction General Permit, visit the State Water Resources Control Board website at:
http://www.waterboards.ca.gov/water_issues/programs/stormwater/constpermits.shtml

Clean Water Act Section 404 Permit

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

Clean Water Act Section 401 Permit – Water Quality Certification

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

Waste Discharge Requirements – Discharges to Waters of the State

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

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

Dewatering Permit

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

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

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

Limited Threat General NPDES Permit

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

If you have questions regarding these comments, please contact me at (916) 464-4856 or Nicholas.White@waterboards.ca.gov.

Nicholas White
Water Resource Control Engineer

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

Appendix B: Land Conservation Act Contract Copies

APPLICATION NO. 72-1150

RECORDED AT REQUEST OF:
Stanislaus County
Board of Supervisors

WHEN RECORDED RETURN TO:
Stanislaus County
Planning Department

THIS SPACE FOR RECORDER ONLY

This agreement recorded on
Jan 24 1972, in
Vol. 2447 534-544
Instrument No. 2744
Stanislaus County Records.

CALIFORNIA LAND CONSERVATION CONTRACT NO. 72-1150

THIS CALIFORNIA LAND CONSERVATION CONTRACT is made and entered into this 18 day of JANUARY, 1972, by and between the County of Stanislaus, a political subdivision of the State of California, hereinafter referred to as "County" and the undersigned landowners or the successors thereof, hereinafter referred to as "Owner" as follows:

WHEREAS, Owner is the legal owner of certain real property, herein referred to as the subject property, situate in the County of Stanislaus, State of California; and

WHEREAS, the subject property is presently devoted to agricultural and compatible uses; and

WHEREAS, subject property is located in an agricultural preserve heretofore established by County by Resolution dated October 20, 1970; and

WHEREAS, both Owner and County desire to limit the use of subject property to agricultural and compatible uses in order to discourage premature and unnecessary conversion of such land from agricultural uses, recognizing that such land has definite public value as open space, that the preservation of such land in agricultural production constitutes an important physical, social, esthetic, and economic asset to the County to maintain the agricultural economy of County and the State of California, and that the common interest is served by encouraging and making feasible the orderly expansion of development of the urban and commercial sectors of the County to avoid the disproportionate expense involved in providing municipal services to scattered development; and

WHEREAS, both Owner and County intend that the Contract is and shall continue to be through its initial term and any extension thereof an enforceable restriction within the meaning and for the purposes of Article XXVIII of the California Constitution and thereby qualify as an enforceable restriction as defined in Revenue and Taxation Code Section 422;

NOW, THEREFORE, the parties, in consideration of the mutual covenants and conditions set forth herein and the substantial public benefits to be derived therefrom, do hereby agree as follows:

(1) The Contract is made and entered into pursuant to the California Land Conservation Act of 1965 (Chapter 7 of Part 1 of Division 1 of Title 5 of the California Government Code, commencing with Section 51200), hereinafter referred to as the Act, as such Act has been amended or may hereafter be

(15) Owner and holders of security interests designate the following person as the Agent for Notice to receive any and all notices and communications from County during the life of the Contract. Owner will notify County in writing of any change of designated person or change of address for him:

DESIGNATED AGENT: Velma A. Bates

MAILING ADDRESS: 140 Church St.
Oakdale, California 95361

(16) I desire to place the following parcels of real property under Contract:

ASSESSMENT NO.	CODE AREA	ACREAGE	SITUS ADDRESS
060-109-002	54-08	424.1	Sec. 6 & 7 - T3S - R12E

(List the Assessment Number and Acreage for each parcel of property to be included under the Contract. Also, attach to this application a copy of the Assessor's Map for each parcel.)

IN WITNESS WHEREOF, the parties hereto have executed the within Contract the day and year first above written.

OWNERS:

NAME (print or type)	SIGNATURE (all to be notarized)	DATE	SIGNED AT (city)
Velma A. Bates	Velma A Bates	Dec 30 1971	Oakdale, Calif.
Philip M. Bates	Philip M Bates	Dec 30 1971	Oakdale Calif
Selma to Bond -	Barbara Painter		

SECURITY HOLDERS:

NAME (print or type)	SIGNATURE (all to be notarized)	DATE	SIGNED AT (city)

COUNTY:

Dated JAN 18 1972

JAMES FRANZEN
Chairman, Board of Supervisors

(Staple notary certificates here)

SECTIONS 4-9 T.3S. R.12E. M.D.B.&

BK. 11

1
132 Ac.±

2
212.5 Ac.±

3
300.4 Ac.

11
105.2 Ac.±

10
25 Ac.±

9
124.1 Ac.±

8
279.67 Ac.±

12
68 Ac.±

6
1± Ac.±

7
62.8 Ac.±

13
126.8 Ac.±

14
41.2 Ac.±

16
241.8 Ac.±

15
18.2 Ac.±

M.I.D.

MODESTO (DILLON-WARNER) RESERVOIR

CREEK

DRY

FROM 15-15
ABE-100-395, 157, 163
REC. SURV. VOL. 9 PGS. 16 & 17
3-4-66

03

DATE January 16, 1972

TO: BOARD OF SUPERVISORS

FROM: STANISLAUS COUNTY PLANNING COMMISSION
Martin L. Schueller, Director

SUBJECT: APPLICATION FOR CONTRACT--LAND CONSERVATION ACT

The following application to establish an Open Space Contract, as provided by the Land Conservation Act of 1965, has been received and is found to comply in all respects with the requirements of the Uniform Rules adopted and recorded by your Board:

CONTRACT NO. 72-1150

ASSESSOR PARCEL NO. 84-08 008-0109-002 Secs. 6 & 7,T3S,R12E
E of TimBell, S of Dry Creek

School District _____ Supervisorial District 1

Applicant Velma & Philip Bates or agent _____

Address 140 Church St.
Oakdale 95361

Total Acres applies for 424.1 Zoning A-2

APPLICATION

CALIFORNIA LAND CONSERVATION ACT OF 1965

STANISLAUS COUNTY

The undersigned hereby requests the County of Stanislaus, California, to enter into the California Land Conservation Contract attached hereto.

The persons who have signed the contract are the only persons with legal and security interests in the subject property.

Each person who has signed the contract is an adult who is not incapacitated to contract, or the signature is by an authorized guardian or conservator.

I declare under penalty of perjury that the foregoing is true and correct and this application was executed on 12-31-71, 19 , at Modesto, California.

Velma A. Bates

Signature of Applicant
(Any owner or designated agent.)

(Application must be sworn to
and signed before a notary
if executed outside California.)

APPLICATION NO. 72-510

RECORDED AT REQUEST OF:
Stanislaus County
Board of Supervisors

WHEN RECORDED RETURN TO:
Stanislaus County
Planning Department

THIS SPACE FOR RECORDER ONLY

This agreement recorded on
July 28 19 71, in
Vol. 2408, Page 628-636
Instrument No. 28027
Stanislaus County Records.

CALIFORNIA LAND CONSERVATION CONTRACT NO. 72-510

THIS CALIFORNIA LAND CONSERVATION CONTRACT is made and entered into this 27 day of JULY, 1971, by and between the County of Stanislaus, a political subdivision of the State of California, hereinafter referred to as "County" and the undersigned landowners or the successors thereof, hereinafter referred to as "Owner" as follows:

WHEREAS, Owner is the legal owner of certain real property, herein referred to as the subject property, situate in the County of Stanislaus, State of California; and

WHEREAS, the subject property is presently devoted to agricultural and compatible uses; and

WHEREAS, subject property is located in an agricultural preserve heretofore established by County by Resolution dated October 20, 1970; and

WHEREAS, both Owner and County desire to limit the use of subject property to agricultural and compatible uses in order to discourage premature and unnecessary conversion of such land from agricultural uses, recognizing that such land has definite public value as open space, that the preservation of such land in agricultural production constitutes an important physical, social, esthetic, and economic asset to the County to maintain the agricultural economy of County and the State of California, and that the common interest is served by encouraging and making feasible the orderly expansion of development of the urban and commercial sectors of the County to avoid the disproportionate expense involved in providing municipal services to scattered development; and

WHEREAS, both Owner and County intend that the Contract is and shall continue to be through its initial term and any extension thereof an enforceable restriction within the meaning and for the purposes of Article XXVIII of the California Constitution and thereby qualify as an enforceable restriction as defined in Revenue and Taxation Code Section 422;

NOW, THEREFORE, the parties, in consideration of the mutual covenants and conditions set forth herein and the substantial public benefits to be derived therefrom, do hereby agree as follows:

(1) The Contract is made and entered into pursuant to the California Land Conservation Act of 1965 (Chapter 7 of Part 1 of Division 1 of Title 5 of the California Government Code, commencing with Section 51200), hereinafter referred to as the Act, as such Act has been amended or may hereafter be

(15) Owner and holders of security interests designate the following person as the Agent for Notice to receive any and all notices and communications from County during the life of the Contract. Owner will notify County in writing of any change of designated person or change of address for him:

DESIGNATED AGENT: A. H. Johnson

MAILING ADDRESS: 4400 Central Avenue, Apt 207
Fremont, Calif 94536

(16) I desire to place the following parcels of real property under Contract:

ASSESSMENT NO.	ACREAGE	ZONING	SITUS ADDRESS
8408 008 - 011 - 002	108.2	A-2-10	W. side of Tim Bell Rd.
8409 008 - 012 - 002	88	"	S. of Ory Creek
10501 008 - 013 - 002	126.8	"	"
10501 008 - 014 - 002	41.2	"	"
8408 015 - 0207 - 002	305	"	"
10501 015 - 0208 - 002	348	"	"

(List the Assessment Number and Acreage for each parcel of property to be included under the Contract. Also, attach to this application a copy of the Assessor's Map for each parcel.)

IN WITNESS WHEREOF, the parties hereto have executed the within Contract the day and year first above written.

OWNERS:

NAME (print or type)	SIGNATURE (all to be notarized)	DATE	SIGNED AT (city)
A. H. Johnson	A. H. Johnson	6/30/71	Modesto

SECURITY HOLDERS:

NAME (print or type)	SIGNATURE (all to be notarized)	DATE	SIGNED AT (city)
Clyde H. Booth	Clyde H Booth	6-30-71	Modesto

COUNTY:

JUL 27 1971
Dated

ROBERT FAHEY
Chairman, Board of Supervisors

(Staple notary certificates here)

105-01 8-01

SECTIONS 4-9 T.3S.R

BK. 11

BK. 15

36. 31. 40' CLARIBEL RD. 31. 32.
1. 6. 2645' 6. 5.

1 — 122.9 Ac.±
2 — 212.5 Ac.±
3 — 300.4 Ac.
11 — 108.2 Ac.±
10 — 25 Ac.±
12 — 88 Ac.±
9 — 424.1 Ac.±
8 — 279.67 Ac.±
13 — 126.8 Ac.±
14 — 41.2 Ac.±
17 — 257 Ac
16 — 241.5 Ac.±
15 — 2 Ac.±

1. 6. 12. 7. TIBBELL RD.
13. 18. 7. 8. 18. 17.

FROM 15-15
AGE-100-135, 137, 143
REC. SURV. VOL. 5 PGS. 14 & 17
3-4-66

03

2 T.3'S.R.11E. M.D.B. & M.

08406
10501
10504

15-02

BK.10

ARIEL ROAD

35 | 36
2 | 1

2640'

2643.44'

16 2.04 Ac ± R/S 1.54

1ST STAN. CO. 70-11118

36 | 31
1 | 6

1171.48'

565.62'

530.64'

533.65'

73.89'

1180.84'

14

15 65.0 Ac ± .06 Ac. RD 45.54 Ac.±

73.72'

45.00 43.21 Ac±

1502.82'

766.92'

CHINNIGN

5 570.6 Ac ±

1320'

CREEK

7 305 Ac. ±

2640'

3650'±

1320' 1320' 1320' 5280' 3960'

2 | 1
11 | 12

1402'

DRY

8 348 Ac.±

12 160 Ac ±

5280'

11 280Ac ±

2600'±

9 65.5Ac ±

10 97 Ac ±

1320' 1320' 2640'

14 | 13

15

BK.8

1" = 1320'

67

15-02

DATE July 27, 1971

BOARD OF SUPERVISORS

STANISLAUS COUNTY PLANNING COMMISSION
Austin L. Schueller, Director

APPLICATION FOR CONTRACT--LAND CONSERVATION ACT

The following application to establish an Open Space Contract, authorized by the Land Conservation Act of 1965, has been received and is found to comply in all respects with the requirements of Rules adopted and recorded by your Board:

Contract No. 72-510

Assessor Parcel No.	84-08 008-0111-002	W. side of Tim Bell Rd
	" 008-0112-002	S. of Dry Creek
	105-01 008-0113-002	"
	105-01 008-0114-002	"
	84-08 015-0207-002	
	105-01 015-0208-002	

School District _____ Supervisorial District 1

Applicant A. H. Johnson or agent _____

Address 4400 Central Avenuem Apt.

Fremont 94536

Total Acres Applied for 1017.2 Zoning A-2-10