MITIGATED NEGATIVE DECLARATION

EASTSIDE ROAD AND WESTSIDE ROAD BRIDGES REPLACEMENT PROJECT
(STATE CLEARINGHOUSE NO. 2020049034)

SUBJECT

Eastside Road and Westside Road Bridges Replacement Project

PROJECT DESCRIPTION

The City of Redding proposes to replace the Eastside Road Bridge (Bridge No. 06C0085) and the Westside Road Bridge (Bridge No. 06C0071) over Canyon Hollow Creek in the City of Redding, Shasta County, California. The project will replace the existing Eastside Road Bridge with a new two-lane, two-span cast-in-place reinforced concrete slab bridge. The proposed structure will provide two 12-foot travel lanes, 8-foot shoulders, one 6-foot wide sidewalk, and concrete barriers. Approximately 300-feet of road will be reconstructed at both approaches to conform to the new bridge. The Westside Road Bridge will be replaced with a new two-lane, three-span cast-in-place reinforced concrete slab bridge. The proposed bridge will provide two 12-foot travel lanes, 4-ft shoulders, one 6-foot wide sidewalk, and barriers. The road will be reconstructed approximately 175 to the south and 325 feet to the north to conform to the new bridge. Construction of both bridges will be staged to allow a single lane of alternating traffic, controlled by temporary signals.

The in-channel work area extends approximately 25-feet upstream and downstream of the new bridges to allow access into the channel during construction and underground utility relocations. Additional Project work includes extending the sidewalk along some approaches, storm drain modification, paving, striping, and sign installation. Specifically, PG&E gas lines, City of Redding water lines, and AT&T underground phone and fiber lines would require relocation at the proposed Eastside Road Bridge and Westside Road Bridge. The PG&E gas line relocations and AT&T underground will require trench excavation depths up to approximately 12 feet deep.

Two staging areas are proposed for the Project. The first staging area is within in a disturbed dirt area located at the northeast quadrant of the Eastside Road Bridge. The second staging area is a paved section of abandoned roadway located 130-feet north of the Westside Road Bridge. Roadway and structure improvements fall within City and private right-of-way. It is anticipated the Project will require sliver strips of right-of-way to be acquired for the proposed bridge replacements, and an encroachment permit will be obtained from Caltrans for construction access.

ENVIRONMENTAL SETTING

The Eastside and Westside Road Bridges are located on the east side and west side of State Route 273, respectively, approximately 650 feet south of the intersection of State Route 273 and Buenaventura Boulevard. The bridges are located on major urban collectors that serve various commercial businesses. Eastside Road and Westside Road are located in an urban area, are bordered by commercial and industrial
businesses, and are separated by the Union Pacific Railroad and State Route 273. Canyon Hollow Creek runs beneath the two bridges, from the west toward the east.

FINDINGS AND DETERMINATION

The City of Redding conducted an Initial Study (attached) that determined that the proposed project could have significant environmental effects on biological resources. Use of specific mitigation measures identified below will avoid or mitigate the potentially significant environmental effects identified, and the preparation of an environmental impact report will not be required. If there are substantial changes that alter the character or impacts of the proposed project, another environmental impact determination will be necessary.

Prior to approval of the project, the lead agency may conclude, at a public hearing, that certain mitigation measures identified in the Mitigated Negative Declaration are infeasible or undesirable. In accordance with CEQA Section 15074.1, the lead agency may delete those mitigation measures and substitute other measures that it determines are equivalent or more effective. The lead agency would adopt written findings that the new measure(s) is equivalent or more effective in mitigating or avoiding potential significant effects and that it would not cause any potentially significant effect on the environment.

1. Based on the whole record (including the Initial Study and any supporting documentation) and the mitigation measures incorporated into the project, the City of Redding has determined that there is no substantial evidence that the project will have a significant effect on the environment.

2. The Mitigated Negative Declaration, with its supporting documentation, reflects the independent judgment and analysis of the lead agency, which is the City of Redding.

DOCUMENTATION

The attached Initial Study documents the reasons to support the above determination.

MITIGATION MEASURES

The following mitigation measures will be incorporated into the project to minimize potential effects on biological resources:

MM-1: Prior to the start of construction, a focused botanical survey will be conducted by a qualified biologist during the blooming period for silky cryptantha within the BSA. If silky cryptantha is not found during the botanical survey no other measures will be required. If silky cryptantha is discovered during the focused botanical surveys, the plants will be marked by a qualified biologist. If the area can be avoided, exclusionary fencing will be placed around the plants and no pedestrian or vehicular entry shall be allowed. If the area cannot be avoided, the City will coordinate with CDFW to avoid, minimize, and mitigate impacts to the species. Potential measures for reducing project impacts on special status plants include limiting ground disturbance until annual special status plants have gone to seed and stockpiling top soil during the initial excavation to be replaced as the top layer during the final site rehabilitation. If listed species are found and cannot be avoided an Incidental Take Permit may be needed.

MM-2: Work within Canyon Hollow Creek shall be restricted to the dry season (June 1 to October 15).
MM-3: Any new gravel material placed in the channel shall meet Caltrans’ cleanness test (California Test No. 227) with a value of 85 or higher.

MM-4: Riparian vegetation disturbed in the temporary use areas on the west side of Westside Road Bridge and on the east side of Eastside Road Bridge shall be restored both by revegetation and by promoting regrowth of plants that were pruned and protected prior to work. Where feasible, revegetated areas shall be planted at a ratio of 3 new plants for every large (>3 inches) woody riparian plant removed (3:1 ratio). In areas of regrowth of large woody riparian vegetation, all regrowth will be monitored and maintained, and counted at a 1:1 ratio. These replanting ratios will help ensure successful establishment of at least one vigorous plant for each plant removed to accommodate the project.

MM-5: To the extent practicable, removal of large trees with cavities shall occur before bat maternity colonies form (i.e., prior to March 1) or after young are volant (i.e., after August 31). If construction (including the removal of large trees) occurs during the bat non-volant season (March 1 through August 31), a qualified professional shall conduct a pre-construction survey of the study area to locate maternity colonies and identify measures to protect colonies from disturbance. The preconstruction survey will be performed no more than 7 days prior to the implementation of construction activities. If a maternity colony is located within or adjacent to the study area, a disturbance free buffer shall be established by a qualified professional, in consultation with CDFW, to ensure the colony is protected from project activities.

MM-6: If vegetation removal or construction activities will occur during the nesting season for migratory birds or raptors (February 1 through August 31), a qualified biologist shall conduct a preconstruction survey no more than 7 days before construction activities begin. If nesting birds or raptors are found, CDFW will be notified and consulted. An appropriate buffer, as determined by CDFW and the qualified biologist, will be placed around the nest until the young have fledged. If construction activities cease for a period greater than 7 days, additional preconstruction surveys will be required.

PUBLIC REVIEW DISTRIBUTION

Draft copies or notice of this Mitigated Negative Declaration were distributed to:
- State Clearinghouse
- Shasta County Clerk
- California Department of Transportation District 2
- California Department of Fish and Wildlife District 1
- Central Valley Regional Water Quality Control Board
- California Native Plant Society
- California Highway Patrol
- Native American Heritage Commission
- State Office of Historic Preservation
- All property owners within 300 feet of the property boundary

PUBLIC REVIEW

(X) Draft document referred for comments 04/15/2020–05/15/2020

( ) No comments were received during the public review period.
Comments were received but did not address the draft Mitigated Negative Declaration findings or the accuracy/completeness of the Initial Study. No response is necessary. The letters are attached.

Comments addressing the findings of the draft Mitigated Negative Declaration and/or accuracy or completeness of the Initial Study were received during the public review period. The letters and responses follow (see Attachment D, Response to Comments).

Copies of the Mitigated Negative Declaration, the Initial Study, documentation materials, and the Mitigation Monitoring Program may be obtained at the Planning Division Public Works Department, City of Redding, 777 Cypress Avenue, Redding, CA 96001. Contact: Amber Kelley, Environmental Compliance Manager, (530) 225-4046 or akelley@cityofredding.org.

Date of Draft Report: April 6, 2020

By: Amber Kelley
Name/ Title: Environmental Compliance Manager

Date of Final Report: May 30, 2020

Attachments:
A. Project Location Map
B. Initial Study
C. Mitigation Monitoring and Environmental Commitment Program
D. Comments and Response to Comments (if any)
ATTACHMENT A

Figure 1 – Project Location Map
EASTSIDE ROAD & WESTSIDE ROAD BRIDGES REPLACEMENT
CALIFORNIA ENVIRONMENTAL QUALITY ACT

INITIAL STUDY

Eastside Road and Westside Road Bridges
Replacement Project

Prepared by:

CITY OF REDDING
Public Works Department
777 Cypress Avenue
Redding, California 96001

May 2020
1. **Project Title:** Eastside Road and Westside Road Bridges Replacement Project

2. **Lead agency name and address:**
   
   CITY OF REDDING  
   Public Works Department  
   777 Cypress Avenue  
   Redding, CA 96001

3. **Contact Person and Phone Number:** Amber Kelley, Environmental Compliance Manager, (530) 225-4046

4. **Project Location:**
   
   The Project is located on the east side and west side of State Route 273, approximately 500 feet south of the intersection of State Route 273 and Buenaventura Boulevard, within the City of Redding, Shasta County, California within the Redding U.S. Geological Survey (USGS) 7 ½ minute quadrangle.

5. **Applicant’s Name and Address:**  
   CITY OF REDDING  
   Public Works Department  
   777 Cypress Avenue  
   Redding, CA 96001

   **Representative’s Name and Address:**  
   Amber Kelley, CITY OF REDDING  
   Public Works Department  
   777 Cypress Avenue  
   Redding, CA 96001

6. **General Plan Designation:**
   
   General Plan land use designations within the Project area consist of Industrial (I), Office (O), and Commercial (C).

7. **Zoning:**
   
   Land use designations within the Project area consist of General Industrial (GI), General Commercial (GC), and Open Space (OS).

8. **Description of Project:**
   
   The City of Redding, in cooperation with the California Department of Transportation (Caltrans), is proposing to replace the Eastside Road Bridge (Bridge No. 06C0085) and Westside Road Bridge (Bridge No. 06C0071) over Canyon Hollow Creek with wider concrete slab bridges in the City of Redding, Shasta County, California. The Eastside and Westside Road Bridges are located on the east side and west side of State Route 273, respectively, approximately 650 feet south of the intersection of State Route 273 and Buenaventura Boulevard. The bridges are located on major urban collectors that serve various commercial businesses as well as residents and visitors to the area (Figure 1. Project Vicinity; Figure 2. Project Location).
The purpose of the project is to provide crossings over Canyon Hollow Creek that can withstand modern traffic loading demands and meet modern safety standards. Constructed in the 1950s, both of the existing Canyon Hollow Creek bridges have deficient structure widths that match neither the roadway shoulder or sidewalk widths on the approach roadways. As a result, they have both been listed as functionally obsolete. The proposed Project will replace the existing bridges with structures that meet current state and federal bridge standards.

The Project will replace the existing Eastside Road Bridge with a new two-lane two-span bridge. The proposed bridge will be a cast-in-place, reinforced concrete slab bridge. The proposed structure will provide two 12-foot travel lanes, 8-foot shoulders, and concrete barriers. A 6-foot wide sidewalk will be constructed on the east side of the bridge to accommodate pedestrian traffic, and the new bridge will have a width of 48’-11” between edges of deck. The overall superstructure depth is 1’-5”, with a total length of 63 feet. The longer replacement bridge will decrease the restriction in the channel at the bridge and will provide a smoother transition between the wide upstream channel and the narrow channel downstream. The soffit elevation of the proposed bridge will be raised approximately two feet to pass the 100-year flood event with no freeboard. Approximately 300 feet of road will be reconstructed at both approaches to raise the road to the higher bridge elevation and conform to the new bridge width. Construction will be staged over two construction seasons to allow a single lane of alternating traffic controlled by temporary signals.

In addition to the replacement of the Eastside Road Bridge, the Project will replace the existing Westside Road Bridge with a new two-lane, three-span cast-in-place reinforced concrete slab bridge. The new bridge will be supported on concrete piles and columns at the piers and reinforced concrete diaphragm type abutments supported on concrete spread footings. The proposed bridge will provide two 12-foot travel lanes, 4-ft shoulders, and barriers. A 6-foot wide sidewalk will be constructed on the west side of the bridge to accommodate pedestrian traffic. The bridge will have a width of 40’-11” between edges of deck. The overall superstructure depth is 1’-3.5”, with a total length of 84 feet, which matches the existing bridge length. The soffit elevation of the proposed bridge will approximately match the existing bridge and will be set to pass the 100-year flood event with no freeboard. The road will be reconstructed approximately 175 to the south and 325 feet to the north to accommodate the bridge width. Construction will be staged to allow a single lane of alternating traffic, controlled by temporary signals.

Existing utilities in conflict with the proposed Project will be relocated. Specifically, PG&E gas lines, City of Redding water lines, and AT&T underground phone and fiber lines would require relocation at the proposed Eastside Road Bridge and Westside Road Bridge. The PG&E gas line relocations and AT&T underground will require trench excavation depths up to approximately 12 feet deep, and approximately 20 to 25 feet downstream or upstream of the proposed bridge. The proposed method of relocation would be open trenching with excavators or other similar excavation equipment.

The in-channel work area extends approximately 25-feet upstream and downstream of the new bridges to allow access into the channel during construction and underground utility relocations.
Additional Project work includes extending the sidewalk along some approaches, storm drain modification, paving, striping, and sign installation.

Two staging areas are proposed for the Project. The first staging area is within a disturbed dirt area located at the northeast quadrant of the Eastside Road Bridge. The second staging area is a paved section of abandoned roadway located 130-feet north of the Westside Road Bridge. Roadway and structure improvements fall within City and private right-of-way. It is anticipated the Project will require sliver strips of right-of-way to be acquired for the proposed bridge replacements, and an encroachment permit will be obtained from Caltrans for construction access (Figure 3. Project Features).
FIGURE 1
Project Vicinity

BRLS-5068(035) and BRLS-5068(038)
Eastside and Westside Road Bridge Replacement Projects
City of Redding, Shasta County, California
FIGURE 3
Project Features

BRLS-5068(035) and BRLS-5068(038)
Eastside and Westside Road Bridge Replacement Projects
City of Redding, Shasta County, California
9. Surrounding Land Uses and Setting:

The majority of the Project area is comprised of highly urbanized, industrial land uses including Pacific Supply building materials storage yard, Redding Lumber Transport storage yard, and Fife Metal Fabricating storage yard. Adjacent land uses include commercial uses including Redding Veterinary Clinic, River City Auto, and American Appliance. Canyon Hollow Creek flows through the Project area in a west to east orientation and confluences with the Sacramento River approximately 0.56-mile east of the Project area. The Union Pacific Railroad (UPRR) train tracks also run through the Project area in a north/south orientation. This area of Canyon Hollow Creek corridor to the east of Eastside Road is zoned as Open Space. The elevation within the Project area is approximately 495 feet above mean sea level. The City of Redding has annual temperatures ranging from a high of 75 degrees Fahrenheit to a low of 49 degrees Fahrenheit. The average annual rainfall is 34.61 inches, and topography within the Project area is flat.

10. Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement):

- U.S. Army Corps of Engineers (USACE)
- California Department of Fish and Wildlife (CDFW)
- Central Valley Regional Water Quality Control Board (RWQCB)
- National Marine Fisheries Service (NMFS)
- Union Pacific Railroad (UPRR)
- Caltrans

11. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?

Consultation letters were sent to the Redding Rancheria, the Wintu Tribe of Northern California, and the Winnemem Wintu Tribe on December 18, 2017 to invite their participation in the Project development process and to request their assistance in the identification of sites of religious and cultural significance or the identification of historic properties that may be affected by the proposed Project.
ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a “Potentially Significant Impact” or “Less Than Significant With Mitigation Incorporated” as indicated by the checklist on the following pages.

<table>
<thead>
<tr>
<th>Aesthetics</th>
<th>Agricultural and Forestry Resources</th>
<th>Air Quality</th>
</tr>
</thead>
<tbody>
<tr>
<td>X Biological Resources</td>
<td>Cultural Resources</td>
<td>Energy</td>
</tr>
<tr>
<td>Geology/Soils</td>
<td>Greenhouse Gas Emissions</td>
<td>Hazards &amp; Hazardous Materials</td>
</tr>
<tr>
<td>Hydrology/Water Quality</td>
<td>Land Use/Planning</td>
<td>Mineral Resources</td>
</tr>
<tr>
<td>Noise</td>
<td>Population/Housing</td>
<td>Public Services</td>
</tr>
<tr>
<td>Recreation</td>
<td>Transportation</td>
<td>Tribal Cultural Resources</td>
</tr>
<tr>
<td>Utilities/Service Systems</td>
<td>Wildfire</td>
<td>X Mandatory Findings of Significance</td>
</tr>
</tbody>
</table>

DETERMINATION (TO BE COMPLETED BY THE LEAD AGENCY)

Based on the initial evaluation:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a “potentially significant impact” or “potentially significant unless mitigated” impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
I find that although the proposed project could have a significant effect on the environment because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR of NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Copies of the Initial Study and related materials and documentation may be obtained at the Engineering Division of the Public Works Department, 777 Cypress Avenue, Redding, CA 96001. Contact Amber Kelley at (530) 225-4046 or akelley@cityofredding.org.

Amber Kelley
Environmental Compliance Manager
Public Works – Engineering

May 30, 2020
Date
EVALUATION OF ENVIRONMENTAL IMPACTS

This section analyzes the potential environmental impacts associated with the proposed project. The issue areas evaluated in this Initial Study include:

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

The environmental analysis in this section is patterned after the Initial Study Checklist recommended by the State CEQA Guidelines and used by the City of Redding in its environmental review process. For the preliminary environmental assessment undertaken as part of this Initial Study's preparation, a determination that there is a potential for significant effects indicates the need to more fully analyze the development’s impacts and to identify mitigation.

For the evaluation of potential impacts, the questions in the Initial Study Checklist are stated and an answer is provided according to the analysis undertaken as part of the Initial Study. The analysis considers the long-term, direct, indirect, and cumulative impacts of the development. To each question, there are four possible responses:

- No Impact. The development will not have any measurable environmental impact on the environment.
- Less Than Significant Impact. The development will have the potential for impacting the environment, although this impact will be below established thresholds that are significant.
- Potentially Significant Impact Unless Mitigation Incorporated. The development will have the potential to generate impacts which may be considered as a significant effect on the environment, although mitigation measures or changes to the development’s physical or operational characteristics can reduce these impacts to levels that are less than significant.
- Potentially Significant Impact. The development will have impacts which are considered significant, and additional analysis is required to identify mitigation measures that could reduce these impacts to less than significant levels.

Where potential impacts are anticipated to be significant, mitigation measures will be required, so that impacts may be avoided or reduced to insignificant levels.
Prior environmental evaluations applicable to all or part of the project site:

- City of Redding General Plan, 2000
- City of Redding General Plan Final Environmental Impact Report, 2000, SCH #1998072103

LIST OF ATTACHMENTS/REFERENCES

Appendix A. Natural Environment Study - Minimal Impacts, Dokken Engineering, January 2020 (on file in the Public Works, Engineering Division)
Appendix B. Biological Assessment, Dokken Engineering, October 2019 (on file in the Public Works, Engineering Division)
Appendix C. Aquatic Resource Delineation Report Dokken Engineering, July 2019 (on file in the Public Works, Engineering Division)
I. AESTHETICS:

<table>
<thead>
<tr>
<th>Except as provided in Public Resources Code Section 21099, would the project:</th>
<th>Potentially Significant Impact</th>
<th>Less-Than-Significant Impact with Mitigation Incorporated</th>
<th>Less-Than-Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Have a substantial adverse effect on a scenic vista?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
</tr>
<tr>
<td>b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
</tr>
<tr>
<td>c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views the site and its surroundings (public views are those that are experience 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?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
</tr>
<tr>
<td>d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
</tr>
</tbody>
</table>

Discussion

a) **No Impact.** No designated state scenic vistas or highways are within or near the Project area (Caltrans 2019); therefore, there would be no impact.

b) **No Impact.** No designated state scenic vistas or highways are within or near the Project area (Caltrans 2019); therefore, no scenic resources within a state scenic highway would be damaged, and there would be no impact.

c) **No Impact.** The Project is within a heavily urbanized area consisting of industrial and commercial uses. The Project would be consistent with applicable zoning and other regulations governing scenic quality and no scenic resources would be impacted by the Project; therefore, there would be no impact.

d) **No Impact.** The Project is within a heavily urbanized area consisting of industrial and commercial uses with many substantial sources of light throughout the Project area. The Project would not create a new substantial source of light or glare which would affect day or nighttime views in the area; therefore, there would be no impact.
Documentation

- The California Department of Transportation “State Scenic Highways Program” webpage was visited on December 19, 2019. The website can be visited here: https://dot.ca.gov/programs/design/land-landscape-architecture-and-community-livability/liv-land-landscape-architecture-and-community-livability/liv-i-scenic-highways.
- City of Redding General Plan, Natural Resources Element, 2000

Mitigation

None necessary.

II. AGRICULTURE AND FORESTRY RESOURCES:

<table>
<thead>
<tr>
<th>Question</th>
<th>Potentially Significant Impact</th>
<th>Less-Than-Significant with Mitigation Incorporated</th>
<th>Less-Than-Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Convert Prime Farmland, Unique Farmland, or Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
</tr>
<tr>
<td>b) Conflict with existing zoning for agricultural use, or a Williamson Act Contract?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
</tr>
<tr>
<td>c) Conflict with existing zoning, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
</tr>
<tr>
<td>d) Result in the loss of forest land or conversion of forest land to non-forest use?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
</tr>
</tbody>
</table>
In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural, Land Evaluation and Site Assessment Mode (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state’s inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:

<table>
<thead>
<tr>
<th>Potential Impact</th>
<th>Less-Than-Significant with Mitigation Incorporated</th>
<th>Less-Than-Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
</tr>
</tbody>
</table>

**Discussion**

a) **No Impact.** The Project area is within a highly urbanized area and the Farmland Mapping and Monitoring Program (FMMP 2016) designates the entire Project area as “Urban and Built-Up Land”. No designated Prime, Unique, or Statewide Importance farmlands are within the Project area; therefore, the Project would not convert farmlands to non-agricultural use, and there would be no impact.

b) **No Impact.** The Project is within a heavily urbanized area consisting of industrial and commercial uses. Land use designations within the Project area consist of General Industrial (GI), General Commercial (GC), and Open Space (OS). The Project area does not have any zoning for agricultural use, or Williamson Act Contract. Therefore, the Project would not conflict with zoning for agricultural use and there would be no impact.

c) **No Impact.** The Project is within a heavily urbanized area consisting of industrial and commercial uses. Land use designations within the Project area consist of General Industrial (GI), General Commercial (GC), and Open Space (OS). The Project area does not have any zoning for forest land, timberland, or timberland zoned for Timberland Production. Therefore, the Project would not conflict with zoning for forest lands or timberlands and there would be no impact.

d) **No Impact.** The Project is within a heavily urbanized area consisting of industrial and commercial uses. Land use designations within the Project area consist of General Industrial (GI), General Commercial (GC), and Open Space (OS). Therefore, the Project would not result in the loss of forest land, or conversion of forest land to non-forest use and there would be no impact.

e) **No Impact.** The Project area is within a highly urbanized area and the Farmland Mapping and Monitoring Program (FMMP 2016) designates the entire Project area as “Urban and Built-Up Land”.

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Page 14  Eastside Road and Westside Road Bridges Replacement Project  May 2020
Land”. No designated Prime, Unique, or Statewide Importance farmlands are within the Project area; therefore, the Project would not convert farmlands to non-agricultural use, and there would be no impact.

**Documentation**


**Mitigation**

None necessary.
III. AIR QUALITY:

<table>
<thead>
<tr>
<th>Would the project:</th>
<th>Potentially Significant Impact</th>
<th>Less-Than-Significant with Mitigation Incorporated</th>
<th>Less-Than-Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Conflict with or obstruct implementation of the applicable air quality plan?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
</tr>
<tr>
<td>b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td>c) Expose sensitive receptors to substantial pollutant concentrations?</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td>d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
</tr>
</tbody>
</table>

Discussion

a) No Impact. A project is considered to conflict with or obstruct implementation of regional air quality plans if it would be inconsistent with the emissions inventories contained in the regional air quality plans. Emission inventories are developed based on projected increases in population growth and vehicle miles traveled (VMT) within the region. The Project would not result in an increase in population or VMT. Therefore, no impact would occur.

b) Less Than Significant Impact. The proposed Project is within the City of Redding, Shasta County, which is at the northern end of the Northern Sacramento Valley Air Basin (NSVAB). The NSVAB is bounded on the north and west by the Coastal Mountain Range and on the east by the southern portion of the Cascade Mountain Range and the northern portion of the Sierra Nevada range. These mountain ranges form a substantial physical barrier to locally created pollution as well as that transported northward on prevailing winds from the Sacramento metropolitan area.

In 1994, the air districts in the Northern Sacramento Valley Planning Area (NSVPA), which includes the SCAQMD jurisdiction, prepared an Air Quality Attainment Plan for ozone. This plan was updated in 1997, 2000, 2003, 2006, 2009, 2012, and again in 2015. Like the preceding plans, the 2015 plan focuses on the adoption and implementation of control measures for stationary sources, area-wide sources, indirect sources, and public information and education programs. The 2015 plan also addresses the effect that pollutant transport has on the NSVPA’s ability to meet and attain the state standards. The Air Quality Attainment Plan provides local guidance for air basins to achieve attainment of ambient air quality standards. Areas that meet ambient air quality standards are classified as attainment areas, while areas that do not meet these
standards are classified as nonattainment areas. Areas for which there is insufficient data available are designated unclassified. The attainment status for the Shasta County portion of the NSVAB is included in the table below. The region is nonattainment for state ozone and PM10 standards.

### NAAQS and CAAQS Attainment Status for Shasta County

<table>
<thead>
<tr>
<th>Criteria Pollutants</th>
<th>State Designation</th>
<th>Federal Designation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ozone</td>
<td>Nonattainment</td>
<td>Unclassified/Attainment</td>
</tr>
<tr>
<td>PM10</td>
<td>Nonattainment</td>
<td>Unclassified</td>
</tr>
<tr>
<td>PM2.5</td>
<td>Attainment</td>
<td>Unclassified/Attainment</td>
</tr>
<tr>
<td>Carbon Monoxide</td>
<td>Unclassified</td>
<td>Unclassified/Attainment</td>
</tr>
<tr>
<td>Nitrogen Dioxide</td>
<td>Attainment</td>
<td>Unclassified/Attainment</td>
</tr>
<tr>
<td>Sulfur Dioxide</td>
<td>Attainment</td>
<td>Unclassified</td>
</tr>
</tbody>
</table>

Source: California Air Resources Board, 2018
https://www.arb.ca.gov/desig/adm/adm.htm

The proposed Project has the ability to release gaseous emissions of criteria pollutants and dust into the ambient air; therefore, construction activities under the proposed Project fall under the ambient air quality standards promulgated at the local, state, and federal levels. The federal Clean Air Act of 1971 and the Clean Air Act Amendments (1977) established the national ambient air quality standards (NAAQS), which are promulgated by the U.S. Environmental Protection Agency (EPA). The State of California has also adopted its own California ambient air quality standards (CAAQS), which are promulgated by the California Air Resource Board (CARB). Implementation of the Project would occur in the Shasta County portion of the NSVAB, which is under the air quality regulatory jurisdiction of the Shasta County Air Quality Management District (SCAQMD) and is subject to the rules and regulations adopted by the air district to achieve the NAAQS and CAAQS. As shown in the table below, these pollutants include O3, CO, NO2, SO2, PM10, PM2.5, and lead. In addition, the State has set standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles. These standards are designed to protect the health and welfare of the populace with a reasonable margin of safety.
## Ambient Air Quality Standards

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Averaging Time</th>
<th>California Standards</th>
<th>National Standards</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Concentration</td>
<td>Primary</td>
<td>Secondary</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Method</td>
<td>3,6</td>
<td>3,6</td>
</tr>
<tr>
<td>Ozone ($O_3$)</td>
<td>1 Hour</td>
<td>0.09 ppm (180 µg/m³)</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>8 Hour</td>
<td>0.070 ppm (137 µg/m³)</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Respirable Particulate Matter (PM10)</td>
<td>24 Hour</td>
<td>50 µg/m³</td>
<td>—</td>
<td>150 µg/m³</td>
</tr>
<tr>
<td></td>
<td>Annual Arithmetic Mean</td>
<td>20 µg/m³</td>
<td>Gravimetric or Beta Attenuation</td>
<td>—</td>
</tr>
<tr>
<td>Fine Particulate Matter (PM2.5)</td>
<td>24 Hour</td>
<td>—</td>
<td>—</td>
<td>35 µg/m³</td>
</tr>
<tr>
<td></td>
<td>Annual Arithmetic Mean</td>
<td>12 µg/m³</td>
<td>Gravimetric or Beta Attenuation</td>
<td>12.0 µg/m³</td>
</tr>
<tr>
<td>Carbon Monoxide (CO)</td>
<td>1 Hour</td>
<td>20 ppm (23 mg/m³)</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>8 Hour</td>
<td>9.0 ppm (10 mg/m³)</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>8 Hour (Lake Tahoe)</td>
<td>6 ppm (7 mg/m³)</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Nitrogen Dioxide (NO₂)</td>
<td>1 Hour</td>
<td>0.18 ppm (330 µg/m³)</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>Annual Arithmetic Mean</td>
<td>0.030 ppm (57 µg/m³)</td>
<td>Gas Phase Chemiluminescence</td>
<td>100 ppb (186 µg/m³)</td>
</tr>
<tr>
<td></td>
<td>—</td>
<td>—</td>
<td>0.053 ppm (100 µg/m³)</td>
<td>Same as Primary Standard</td>
</tr>
<tr>
<td>Sulfur Dioxide (SO₂)</td>
<td>1 Hour</td>
<td>0.25 ppm (655 µg/m³)</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>3 Hour</td>
<td>—</td>
<td>—</td>
<td>0.14 ppm (1300 µg/m³)</td>
</tr>
<tr>
<td></td>
<td>24 Hour</td>
<td>0.04 ppm (105 µg/m³)</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>Annual Arithmetic Mean</td>
<td>—</td>
<td>Ultraviolet Fluorescence</td>
<td>0.030 ppm (for certain areas)¹¹</td>
</tr>
<tr>
<td>Lead¹²,¹³</td>
<td>30 Day Average</td>
<td>1.5 µg/m³</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>Calendar Quarter</td>
<td>—</td>
<td>Atomic Absorption</td>
<td>1.5 µg/m³ (for certain areas)¹²</td>
</tr>
<tr>
<td></td>
<td>Rolling 3-Month Average</td>
<td>—</td>
<td>—</td>
<td>0.15 µg/m³</td>
</tr>
<tr>
<td>Visibility Reducing Particles¹⁴</td>
<td>6 Hour</td>
<td>See footnote 14</td>
<td>Beta Attenuation and Transmittance through Filter Tape</td>
<td>—</td>
</tr>
<tr>
<td>Sulfates</td>
<td>24 Hour</td>
<td>25 µg/m³</td>
<td>Ion Chromatography</td>
<td>—</td>
</tr>
<tr>
<td>Hydrogen Sulfide</td>
<td>1 Hour</td>
<td>0.03 ppm (42 µg/m³)</td>
<td>Ultraviolet Fluorescence</td>
<td>—</td>
</tr>
<tr>
<td>Vinyl Chloride¹²</td>
<td>24 Hour</td>
<td>0.01 ppm (26 µg/m³)</td>
<td>Gas Chromatography</td>
<td>—</td>
</tr>
</tbody>
</table>

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For more information please call ARB-PIO at (916) 322-2990

California Air Resources Board (5/4/16)
1. California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, and particulate matter (PM10, PM2.5, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equalled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

2. National standards (other than ozone, particulate matter, and those based on an annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the highest ozone concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM10, the 24 hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 μg/m3 is equal to or less than one. For PM2.5, the 24 hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact the U.S. EPA for further clarification and current national policies.

3. Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.

4. Any equivalent measurement method which can be shown to the satisfaction of the ARB to give equivalent results at or near the level of the air quality standard may be used.

5. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.

6. National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

7. Reference method as described by the U.S. EPA. An “equivalent method” of measurement may be used but must have a “consistent relationship to the reference method” and must be approved by the U.S. EPA.

8. On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.

9. On December 14, 2012, the national annual PM2.5 primary standard was lowered from 15 μg/m3 to 12.0 μg/m3. The existing national 24-hour PM2.5 standards (primary and secondary) were retained at 35 μg/m3, as was the annual secondary standard of 15 μg/m3. The existing 24-hour PM10 standards (primary and secondary) of 150 μg/m3 also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.

10. To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. Note that the national 1-hour standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the national 1-hour standard to the California standards the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.

11. On June 2, 2010, a new 1-hour SO2 standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO2 national standards (24-hour and annual) remain in effect until one year after an area is designated for the 1970 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 1970 standards are approved. Note that the 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.

12. The ARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.

13. The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. The 1978 lead standard (1.5 μg/m3 as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.

14. In 1989, the ARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.25 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

For more information please call ARB-PIO at (916) 322-2590

California Air Resources Board (5/4/16)

Source: CARB 2019
The proposed Project will replace the Eastside Road Bridge and Westside Road Bridge over Canyon Hollow Creek with wider concrete slab bridges to enhance safety and efficiency for motorized vehicles and improve non-motorized transportation. Though he proposed Project operation would not result in the increased population, VMT or capacity, the operation of Project construction would result in temporary construction emissions of Reactive Organic Gases (ROG) and oxides of nitrogen (NOx).

Emission thresholds within the City’s General Plan Air Quality Element are based on the SCAQMD thresholds as listed in the table below.

<table>
<thead>
<tr>
<th>City of Redding and SCAQMD Thresholds of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Threshold</strong></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Level A Thresholds</td>
</tr>
<tr>
<td>Level B Thresholds</td>
</tr>
<tr>
<td><strong>Source:</strong> City of Redding General Plan, SCAQMD</td>
</tr>
</tbody>
</table>

To determine if thresholds of significance would be exceeded, a Road Construction Emission Model (Version 9.0.0) was prepared. The model found that construction emissions from the proposed Project are under the City of Redding / SCAQMD Level “A” thresholds of significance for NOx, ROG, and PM$_{10}$. Therefore, the project would have a less than significant impact. The project will incorporate the following standard conservation measures and best management practices during construction to limit dust and PM$_{10}$ during construction:

**AQ-1.** Nontoxic soil stabilizers shall be applied according to manufacturer’s specification to all inactive construction areas.

**AQ-2.** All grading operations shall be suspended when winds (as instantaneous gusts) exceed 20 miles per hour.

**AQ-3.** Water all stockpiles, access roads, and disturbed or exposed areas, as necessary, to prevent airborne dust.

**AQ-4.** Pursuant to the California Vehicle Code (Section 23114(e)(4)) (California Legislative Information 2016), all trucks hauling soil and other loose material to and from the construction site shall be covered or shall maintain at least 6 inches of freeboard (i.e., minimum vertical distance between top of load and the trailer).

**AQ-5.** All public roadways used by the project contractor shall be maintained free from dust, dirt, and debris caused by construction activities. Streets shall be swept at the end of the day if visible soil materials are carried onto adjacent public paved roads.

c) **Less Than Significant Impact.** The nearest sensitive receptors in the vicinity of the Project site is the Reddingwood Mobile Home and RV Park, approximately 550 feet from the
Westside Road Bridge. Construction activities are anticipated to involve the operation of diesel-powered equipment. In 1998, the CARB identified diesel exhaust as a Toxic Air Contaminant (TAC). Cancer health risks associated with exposures to diesel exhaust typically are associated with chronic exposure, in which a 70-year exposure period often is assumed. Although elevated cancer rates can result from exposure periods of less than 70 years, acute exposure (i.e., exposure periods of 2 to 3 years) to diesel exhaust typically are not anticipated to result in an increased health risk because acute exposure typically does not result in exposure concentrations that would represent a health risk. Health impacts associated with exposure to diesel exhaust from Project construction are anticipated to be less than significant because construction activities are expected to occur well below the 70-year exposure period used in health risk assessments. Additionally, emissions would be short-term and intermittent in nature, and therefore would not generate TAC emissions at high enough exposure concentrations to represent a health hazard. Therefore, overall exposure of sensitive receptors to substantial pollutant concentrations from the proposed Project would be less than significant and no mitigation is required.

**d) Less Than Significant Impact.** While offensive odors rarely cause physical harm, they can be unpleasant, leading to considerable annoyance and distress among the public and can generate citizen complaints to local governments and air districts. Project-related odor emissions would be limited to times when equipment would be utilized for construction and emission from equipment may be evident in the immediate surrounding area. Construction activities would be short-term and would not result in the creation of long-term objectionable odor because they would be quickly dispersed after equipment utilization. Therefore, due to the short-term nature of the construction activities, combined with limited exposure to sensitive receptors, impacts associated with development of the Project are considered less than significant and no mitigation is required.

**Documentation**


**Mitigation**

None necessary.
IV. BIOLOGICAL RESOURCES:

<table>
<thead>
<tr>
<th>Would the project:</th>
<th>Potentially Significant Impact</th>
<th>Less-Than-Significant with Mitigation Incorporated</th>
<th>Less-Than-Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local of regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td>c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
</tr>
<tr>
<td>d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td>e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
</tr>
<tr>
<td>f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community, Conservation Plan, or other approved local, regional, or State habitat conservation plan?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
</tr>
</tbody>
</table>

Discussion

The analysis of biological resources presented in this section is based on the Natural Environment Study, Biological Assessment, and Aquatic Resources Delineation prepared for the Project (Dokken Engineering).

a) **Less Than Significant with Mitigation Incorporated.**

   **Special Status Plant Species**

   Prior to field surveys, a list of regional special status plant species with potential to occur within the Project vicinity was compiled from database searches. After a comparison of habitat
requirements and available habitat in the biological study area (BSA), one special status plant was determined to have a low to moderate potential to occur: silky cryptantha (*Cryptantha crinita*). Silky cryptantha is not listed as a federal or state protected species, but is listed in the CNPS Inventory of Rare and Endangered Plants on list 1B.2. Silky cryptantha is an annual herb inhabiting gravelly streambeds, within cismontane woodland, lower montane coniferous forest, riparian forest, riparian woodland, and valley/foothill grassland. The blooming period for the species is April – May and is typically found at an elevation range of 200 – 3,986 feet.

Based on the presence of potentially suitable habitat, the species is considered to have a low to moderate potential to occur within the BSA. Field surveys conducted on November 30, 2017 included a habitat assessment, and focused surveys for special-status plant species. During the survey no silky cryptantha was observed; however, the survey was not conducted during the species blooming period.

Construction activities (e.g., grading cut and fill) could affect local populations or individuals if they are present. Potential direct effects include injury, mortality, and permanent loss of habitat resulting from Project construction. Indirect effects could occur if construction activities result in degradation of habitat or water quality due to erosion and sedimentation, accidental fuel leaks, and spills. Standard conservation measures and BMPs HAZ-1 through HAZ-5 (included in Section IX, Hazards and Hazardous Materials) and BIO-1 through BIO-3 are included for all projects requiring earthwork, equipment use, and work near stream channels. These BMPs limit the potential for erosion, sediment transport, and spills, as well as prevent work from occurring in undesignated areas.

**BIO-1.** As required by the City of Redding Stormwater Quality Management and Discharge Control Ordinance, a Stormwater Pollution Prevention Plan (SWPPP) will be prepared to address BMPs that will be used to prevent erosion and sediment loss within the Project site. BMPs such as silt fence, mulching and seeding, and straw wattles will be placed where needed to prevent sediment from leaving the site during and after construction.

**BIO-2.** Appropriate sediment control measures (e.g., silt fences, straw wattles) shall be in place prior to the onset of construction activities near jurisdictional waters and in Project areas where there is a potential for surface runoff to drain into jurisdictional waters. Sediment control measures shall be monitored and maintained until construction activities have ceased.

**BIO-3.** High visibility fencing, flagging, or markers will be installed along the edges of the work zone near avoided waters and avoided riparian areas.

The Project has been designed to minimize removal of native vegetation and protect water quality to the greatest extent practicable; however, protocol level surveys and avoidance measures are needed. With incorporation of mitigation measure MM-1, the Project’s impact on silky cryptantha would be less than significant.

**Special Status Wildlife Species**

Four special status wildlife species have a low to moderate potential to occur within the BSA:

- Central Valley spring-run Chinook salmon (*Oncorhynchus tshawystscha pop. 6*)
- Sacramento River winter-run Chinook salmon (*Oncorhynchus tshawystscha pop. 7*)
- Central Valley steelhead (*Oncorhynchus mykiss irideus*)
- Western red bat (*Lasiurus blossevilli*)
The proposed Project has the potential to cause take of special-status anadromous salmonids if it results in any one of the following: direct mortality; temporary impacts on habitats such that special-status species suffer from injury, lowered reproductive success, increased stress, lessened fitness, or mortality; permanent loss of habitat critical to a special-status fish species; or a substantial reduction in the quantity or value of fish habitat in which a special-status population occurs. However, NMFS recently issued a letter (WCRO-2019-03759) in response to Caltrans’ request to initiate informal consultation. The letter states that NMFS’ determined that with the use of BMPs and avoidance/mitigation measures the Project would not be likely to adversely affect Central Valley spring-run ESU Chinook salmon, Sacramento River winter-run Chinook salmon, and Central Valley steelhead. No designated critical habitat is present within the action area. While the Project would not be likely to adversely affect the species, NMFS determined that the Project would adversely affect essential fish habitat (EFH) for Pacific salmonids and that conservation measures should be used to reduce impacts.

Canyon Hollow Creek does exhibit potentially suitable rocky and gravelly stream bottom used by the species. Canyon Hollow Creek is approximately 0.5 miles from the Sacramento River, and during fall and winter flows, Canyon Hollow Creek could provide potentially suitable spawning and fry rearing habitat. However, the Project’s in-channel construction activities will be restricted to the dry season (June 1 to October 15) of Canyon Hollow Creek, when Canyon Hollow Creek is dry, and these species would be absent. Canyon Hollow Creek dries up as early as April, and is entirely dry throughout the summer months, thereby removing connectivity with the Sacramento River and preventing fish from occurring within the Project area. The Project is not anticipated to directly impact anadromous fish species individuals.

Temporary construction impacts in Canyon Hollow Creek would be limited to temporary ground disturbance associated with construction activities. Permanent impacts would be limited to rock slope protection and cut and fill slopes. The Project will have approximately 0.158 acres of temporary impacts and approximately 0.021 acres of permanent impacts to Canyon Hollow Creek and approximately 0.143 acres of temporary impacts and approximately 0.028 acres of permanent impacts to riparian habitat.

With implementation of mitigation measures MM-2, MM-3, and MM-4, Project-related impacts to anadromous fish and EFH would be less-than significant. In addition to the mitigation measures, standard conservation measures and BMPs HAZ-1 through HAZ-5 and BIO 1 through BIO-5 have been incorporated into the Project.

**BIO-4.** Riparian vegetation within temporary construction zones shall be cleanly cut to ground level and then covered with a layer of clean gravel or topsoil as necessary to protect plant viability and prevent damage to remaining root structures during construction.

**BIO-5.** All riparian areas and streambanks temporarily disturbed during Project construction will be re-contoured to pre-construction conditions and seeded with a native seed mix.
Western Red Bat
The nearest recent occurrence of the species is approximately 7.5 miles from the BSA, within the Whiskeytown National Recreation Area. The species is considered to have a low to moderate potential to occur within the BSA.

Western red bats may roost individually or in small groups in the riparian trees. If a tree is removed that contains a western red bat nursery colony, the removal could result in mortality or injury of individuals. Indirect impacts may occur from construction disturbance if a bat with pups is present in or adjacent to the study area. Significant noise disturbance could result in mothers temporarily or permanently leaving their pups. The BSA does contain potentially suitable open foraging habitat within the Canyon Hollow Creek corridor east of Eastside Road. The BSA also contains potential day roosting tree habitat with the Canyon Hollow Creek riparian corridor east of Eastside Road.

Due to the ability of individual bats to move away from disturbance, direct impacts on bats are not expected; however, the Project will require the removal of two large trees; one cottonwood and one willow. With incorporation of MM-5 (pre-construction surveys), potentially significant impacts to Western red bat would be less than significant.

Migratory Birds and Raptors
Construction activities would occur during the avian breeding season (generally February through August, depending on the species) and could disturb nesting birds in or adjacent to the project area. Construction-related disturbance could result in the incidental loss of fertile eggs or nestlings, or nest abandonment. Impacts could also result from tree removal or noise from construction activities.

Construction of the new bridges would result in a permanent loss of approximately 0.028 acre of riparian habitat and two large trees would be removed. All other trees greater than 6-inches diameter at breast height (DBH) will be retained within the Project area. Abundant avian nesting and foraging habitat would be retained within the Project area, and similarly suitable habitat occurs in the Project vicinity. Foraging birds and birds present in, or adjacent to the Project area would not be adversely impacted by construction activities due to their high mobility and available habitat outside of the Project area. However, due to the proximity of potential nesting habitat, MM-6 will be used to ensure impacts on migratory bird species and raptors are minimized by requiring pre-construction surveys and use of protection measures for any potential nests found within the Project area. With incorporation of MM-6 the Project impact on migratory birds and raptors would be less than significant.

b) Less Than Significant Impact. The natural communities of special concern within the BSA are Riverine (Canyon Hollow Creek) and Valley Foothill Riparian (the associated riparian habitat of Canyon Hollow Creek).

Riparian
The BSA contains 0.49 acre of riparian habitat (valley foothill riparian). In addition to providing habitat for many wildlife species, riparian areas may provide shade, nutrient or chemical
regulation, stream bank stability, and input for large woody debris or organic matter to the channel, which are necessary habitat elements for fish and other aquatic species.

**Eastside Road Bridge:** The valley foothill riparian community is not well developed on the upstream (west) side of the bridge as the Union Pacific Railroad (UPRR) tracks run parallel to the bridge and UPRR removes all vegetation within their right of way for safety purposes. This riparian area is composed of herbaceous plants and sapling tree species. The valley foothill riparian community is more developed on the downstream (east) side of the bridge and occurs as a dense narrow strip on each side of Canyon Hollow Creek.

**Westside Road Bridge:** The valley foothill riparian community is not well developed on the upstream (west) side of the bridge as this area is bordered by an industrial area and Westside Road. The riparian vegetation on the north and south banks is composed of herbaceous plants and sapling trees. The valley foothill riparian community is also not well developed on the downstream (east) side of the bridge. This area is bordered by concrete fill on the north side (where no riparian habitat exists) and State Route (SR) 273 to the east. A small strip of sparse riparian vegetation between SR 273 and Westside Road exists on the south bank of Canyon Hollow Creek. This area is highly disturbed from transient activity and may be a factor for the disturbed nature of the riparian area.

Construction of the new bridges would result in permanent and temporary impacts on riparian vegetation. The proposed Project would temporarily impact 0.143 acre and permanently impact 0.028 acre of valley foothill riparian. Permanent impacts would be the result of new abutments and placement of Rock Slope Protection (RSP) approximately 6 feet from the new abutments. Temporary impacts would occur during ground disturbance, excavation for construction of the new bridge abutments, and channel access. Two large trees (Fremont cottonwood and Goodding’s black willow) within the valley foothill riparian east of the Eastside Road Bridge would require removal for construction access. No other trees over 6-inch DBH are anticipated to be removed.

### Anticipated Tree Removal

<table>
<thead>
<tr>
<th>Species</th>
<th># of Stems</th>
<th>Stem 1 DBH</th>
<th>Stem 2 DBH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fremont Cottonwood (<em>Populus fremontii</em>)</td>
<td>2</td>
<td>21</td>
<td>14</td>
</tr>
<tr>
<td>Goodding’s black willow (<em>Salix gooddingii</em>)</td>
<td>2</td>
<td>12</td>
<td>12</td>
</tr>
</tbody>
</table>

### Riparian Impacts

<table>
<thead>
<tr>
<th>Riparian Within Project Area (acre)</th>
<th>Proposed Permanent Impact To Riparian (acre)</th>
<th>Percent of Riparian Permanently Impacted Within The Project Area (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.49 acre</td>
<td>0.028 acre</td>
<td>5.71%</td>
</tr>
</tbody>
</table>

The Project was designed, and will be constructed, to avoid and minimize removal of riparian vegetation to the maximum extent practicable. Permanent impacts to riparian vegetation equate to a very small percentage of the habitat within the BSA, and temporary impact areas are
anticipated to revegetate naturally; therefore, the Project impact on riparian vegetation would be less than significant. Standard conservation measures and BMPs HAZ-1 through HAZ-5 and BIO-1 through BIO-5 will be used during construction.

**Riverine**

A jurisdictional delineation was conducted on November 30th, 2017 to identify jurisdictional waters of the U.S. and State within the BSA. The results of this delineation were used to determine potential temporary and permanent impacts to identified water features. Canyon Hollow Creek is the only hydrological feature within the BSA. The creek is an intermittent tributary water of the Sacramento River, flowing west to east through the BSA. Delineation results found that approximately 0.61 acres of Canyon Hollow Creek are within the BSA.

Temporary fill associated with construction on the new bridge structures would be limited to gravel for the access ramps and a temporary gravel work pad within the channel. In addition, minimal permanent fills would occur for installation of permanent rock slope protection and cut and fill slopes. The Project will have approximately 0.158 acres of temporary impacts and approximately 0.021 acres of permanent impacts to Canyon Hollow Creek, which is very small percentage of waters within the Project area. The Project would have no substantial adverse effect to riparian habitat or sensitive natural communities and impacts would be less than significant.

Prior to construction, regulatory permits will be obtained from USACE, CDFW, and RWQCB. In addition to standard conservation measures and BMPs HAZ-1 through HAZ-5, BIO-1 through BIO-5 have been incorporated into the Project.

**Project Impacts to Jurisdictional Waters**

<table>
<thead>
<tr>
<th>Intermittent Stream Within Project Area (acre)</th>
<th>Proposed Permanent Impact To Intermittent Stream (acre)</th>
<th>Percent of Intermittent Stream Permanently Impacted Within The Project Area (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.61 acre</td>
<td>0.021 acre</td>
<td>3.4%</td>
</tr>
</tbody>
</table>

c) **No Impact.** A PJD was conducted on November 30th, 2017 to identify jurisdictional waters of the U.S. and State within the BSA. Canyon Hollow Creek is the only hydrological feature within the BSA. No federally or state protected wetlands exist within or adjacent to the BSA; therefore, no adverse effect(s) to federally protected wetlands as defined by Section 404 of the Clean Water Act (CWA) would occur, and the Project would have no impact.

d) **Less Than Significant Impact.** The Canyon Hollow Creek corridor may serve as an east-west movement corridor for aquatic and terrestrial wildlife through a heavily developed portion of the City. Although wildlife may avoid the active construction area, the Project would not permanently interfere with the movement of native wildlife. Construction will be short in duration and would occur when fish have no potential to be present. The Project is not anticipated to have any lasting effects to the habitat connectivity for birds, fish, or wildlife.
e) **No Impact.** There is no Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan covering the proposed Project area. The City has adopted a Tree Management Ordinance (Chapter 18.45 of the RMC) that promotes the conservation of mature, healthy trees in the design of new development. The ordinance also recognizes that the preservation of trees sometimes conflicts with necessary land-development requirements. There are no conflicts associated with the Project that would prevent implementation of the Tree Preservation Ordinance or other resource protection ordinances. The Project would have no impact on any habitat conservation plans.

f) **No Impact.** There are no Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan covering the proposed Project area. The City has adopted a Tree Management Ordinance (Chapter 18.45 of the RMC) that promotes the conservation of mature, healthy trees in the design of new development. The ordinance also recognizes that the preservation of trees sometimes conflicts with necessary land-development requirements. There are no conflicts associated with the Project that would prevent implementation of the Tree Preservation Ordinance or other resource protection ordinances. The Project would have no impact on any habitat conservation plans.

**Documentation**

- Dokken Engineering, Natural Environment Study - Minimal Impacts, 2019
- Dokken Engineering, Biological Assessment, 2019
- Dokken Engineering, Aquatic Resource Delineation Report, 2019
- California Department of Fish and Wildlife: California Natural Diversity Database, 2019
- City of Redding General Plan, Natural Resources Element, 2000
- City of Redding Municipal Code, Chapter 18.45, Tree Management Ordinance

**Mitigation**

**MM-1:** Prior to the start of construction, a focused botanical survey will be conducted by a qualified biologist during the blooming period for silky cryptantha within the BSA. If silky cryptantha is not found during the botanical survey no other measures will be required. If silky cryptantha is discovered during the focused botanical surveys, the plants will be marked by a qualified biologist. If the area can be avoided, exclusionary fencing will be placed around the plants and no pedestrian or vehicular entry shall be allowed. If the area cannot be avoided, the City will coordinate with CDFW to avoid, minimize, and mitigate impacts to the species. Potential measures for reducing project impacts on special status plants include limiting ground disturbance until annual special status plants have gone to seed and stockpiling top soil during the initial excavation to be replaced as the top layer during the final site rehabilitation. If listed species are found and cannot be avoided an Incidental Take Permit may be needed.

**MM-2:** Work within Canyon Hollow Creek shall be restricted to the dry season (June 1 to October 15).

**MM-3:** Any new gravel material placed in the channel shall meet Caltrans’ cleanness test (California Test No. 227) with a value of 85 or higher.
**MM-4.** Riparian vegetation disturbed in the temporary use areas on the west side of Westside Road Bridge and on the east side of Eastside Road Bridge shall be restored both by revegetation and by promoting regrowth of plants that were pruned and protected prior to work. Where feasible, revegetated areas shall be planted at a ratio of 3 new plants for every large (>3 inches) woody riparian plant removed (3:1 ratio). In areas of regrowth of large woody riparian vegetation, all regrowth will be monitored and maintained, and counted at a 1:1 ratio. These replanting ratios will help ensure successful establishment of at least one vigorous plant for each plant removed to accommodate the project.

**MM-5:** To the extent practicable, removal of large trees with cavities shall occur before bat maternity colonies form (i.e., prior to March 1) or after young are volant (i.e., after August 31). If construction (including the removal of large trees) occurs during the bat non-volant season (March 1 through August 31), a qualified professional shall conduct a pre-construction survey of the study area to locate maternity colonies and identify measures to protect colonies from disturbance. The preconstruction survey will be performed no more than 7 days prior to the implementation of construction activities. If a maternity colony is located within or adjacent to the study area, a disturbance free buffer shall be established by a qualified professional, in consultation with CDFW, to ensure the colony is protected from project activities.

**MM-6:** If vegetation removal or construction activities will occur during the nesting season for migratory birds or raptors (February 1 through August 31), a qualified biologist shall conduct a preconstruction survey no more than 7 days before construction activities begin. If nesting birds or raptors are found, CDFW will be notified and consulted. An appropriate buffer, as determined by CDFW and the qualified biologist, will be placed around the nest until the young have fledged. If construction activities cease for a period greater than 7 days, additional preconstruction surveys will be required.
V. CULTURAL RESOURCES:

<table>
<thead>
<tr>
<th>Would the project:</th>
<th>Potentially Significant Impact</th>
<th>Less-Than-Significant with Mitigation Incorporated</th>
<th>Less-Than-Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Cause a substantial adverse change in the</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td>significance of a historical resource pursuant to</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Section 15064.5?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b) Cause a substantial adverse change in the</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td>significance of an archaeological resource pursuant</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>to Section 15064.5?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d) Disturb any human remains, including those</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td>interred outside of formal cemeteries?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Discussion

a) **Less Than Significant Impact.** The records search, consultation with Native American organizations and governments, and the field survey did not identify any historical resources, as defined in §15064.5. With any Project, there is always the possibility that unknown cultural resources may be encountered during construction; therefore, standard conservation measures CR-1 and CR-2 have been incorporated into the Project.

b,c) **Less Than Significant Impact.** The records search, consultation with Native American organizations and governments, and the field survey did not identify any cultural resources within or immediately adjacent the Project area. The buried cultural resource analysis concluded that given the extensive ground disturbances which have occurred throughout the study area, the potential for the area to have buried cultural resources is considered low. With any Project, there is always the possibility that unknown cultural resources may be encountered during construction; therefore, standard conservation measures CR-1 and CR-2 have been incorporated into the Project.

CR-1. If previously unidentified cultural materials are unearthed during construction, it is the City’s policy that work be halted in that area until a qualified archaeologist can assess the significance of the find.

CR-2. If human remains are discovered during project activities, all activities in the vicinity of the find will be stopped and the Shasta County Sheriff-Coroner’s Office shall be notified. If the coroner determines that the remains may be those of a Native American, the coroner will contact the Native American Heritage Commission (NAHC). Treatment of the remains shall be conducted in accordance with further direction of the County Coroner or the NAHC, as appropriate.
Documentation


Mitigation

None necessary.
VI. ENERGY:

<table>
<thead>
<tr>
<th>Would the project:</th>
<th>Potentially Significant Impact</th>
<th>Less-Than-Significant with Mitigation Incorporated</th>
<th>Less-Than-Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td>b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
</tr>
</tbody>
</table>

Discussion

a) **Less Than Significant Impact.** The Project would replace the existing bridges with newer and more reliable facilities for local area access. The Project would not permanently alter energy use, as it would not increase the number of vehicle travel lanes or increase carbon emissions; therefore, direct energy use would involve the short-term use of energy for construction activities. Project construction would primarily consume diesel and gasoline through operation of construction equipment, material deliveries, and debris hauling. Construction is estimated to result in a short-term consumption of energy, representing a small demand on local and regional fuel supplies that would be easily accommodated and would be temporary.

Indirect energy use includes the long-term activities required to maintain the completed Project. The roadway and crossing are City owned and currently require staff to travel to the site for maintenance and monitoring. Construction of the new facility would not increase the number of maintenance and monitoring visits, and may decrease the number of visits as the aging structures would be replaced with a new and more reliable crossings. The Project would not result in an inefficient, wasteful, and unnecessary consumption of energy, and the Project’s impact on energy would be less than significant.

b) **No Impact.** The Project would not conflict with or obstruct a State or local plan for renewable energy, and no impact would occur.

Documentation


Mitigation

None necessary.
VII. GEOLOGY AND SOILS:

<table>
<thead>
<tr>
<th>Would the project:</th>
<th>Potentially Significant Impact</th>
<th>Less-Than-Significant Impact with Mitigation Incorporated</th>
<th>Less-Than-Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
</table>
| a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:  
  i) Rupture of a known earthquake, fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publications 42.  
  ii) Strong seismic ground shaking?  
  iii) Seismic-related ground failure, including liquefaction?  
  iv) Landslides? | ✓ | ✓ | ✓ | ✓ |
| b) Result in substantial soil erosion or the loss of topsoil? | ✓ | ✓ | ✓ | ✓ |
| c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse? | ✓ | ✓ | ✓ | ✓ |
| d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property? | ✓ | ✓ | ✓ | ✓ |
| e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of waste water? | ✓ | ✓ | ✓ | ✓ |
| f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? | ✓ | ✓ | ✓ | ✓ |

Discussion

a,c,d) No Impact. The Project would not expose people or structures to potential substantial adverse effects, including risk of loss, injury, or death involving rupture of a known fault, strong seismic ground shaking, seismic-related ground failure, or landslides. The Project is not located within an Alquist Priolo Earthquake Fault Zone. The nearest seismic sources are the Hoadley Fault,
pre-quaternary fault (older than 1.6 million years) approximately 4.5 miles west of the Project site, Bear Creek Fault, also a pre-quaternary fault approximately 11 miles southeast of the Project site, and Battle Creek Fault, a quaternary fault (age undifferentiated), approximately 14 miles south of the Project site.

Landslides usually occur in locations with steep slopes and unstable soils. According to the California Department of Conservation (CDC) California Geological Survey Seismic Hazards Zonation Program (CDC 2020) the Project area is not within a known area of landslide concern. The majority of the Project area is situated on flat or very gently sloping topography where the potential for slope failure is low. The Project would also have no impact related to seismic-related failure, including liquefaction, because the potential is believed to be slight at this predominantly flat, low-seismicity site. Design and construction in accordance with Caltrans’ seismic design criteria will ensure that substantial impacts due to seismic forces and displacements are avoided or minimized to the extent feasible. The Project is not on a geologic unit or soil that is unstable or that would become unstable as a result of the Project. On- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse is not anticipated. The Project would result in no impact.

b) **Less Than Significant Impact.** The NRCS Web Soil Survey was used to identify soils within the BSA (NRCS 2017). Specific soil units within the BSA include: Anderson gravelly sandy loam (72.2% of the BSA) and Churn gravelly loam, 0 to 3 percent slopes (27.8% of the BSA). Construction of the bridges and ground disturbance for construction access could result in a small amount of soil erosion or loss of topsoil; however, it would not result in substantial erosion or soil loss and the impact would be less than significant. The Project is also subject to certain erosion-control requirements and BMPs, mandated by existing City regulations which include:

*City of Redding Grading Ordinance.* This ordinance requires preparation of an erosion and sediment control plan for projects affecting more than one acre. The erosion and sediment control plan requires preparation and description of any BMPs that will be used during construction and post-construction, if needed.

*City of Redding Stormwater Quality Management and Discharge Control Ordinance.* This ordinance requires preparation of a Stormwater Pollution Prevention Plan (SWPPP) for projects affecting greater than 1 acre. The objectives of the SWPPP are to identify the sources of sediment and other pollutants that may affect water quality associated with stormwater discharges and to describe and ensure the implementation of BMPs to reduce those sources of sediment and other pollutants in stormwater discharges.

e) **No Impact.** The Project will not utilize septic tanks or an alternative waste water disposal system on the site. Therefore, the Project would have no impact due to soils incapable of adequately supporting septic systems.

f) **No Impact.** A literature review was performed to determine whether paleontological resources have been previously identified in the Project area and to identify the overall paleontological
sensitivity of the Project area. No unique geologic features, fossil-bearing strata, or paleontological sites are known to exist on the Project site.

Documentation


Mitigation

None necessary.
VIII.  GREENHOUSE GAS EMISSIONS:

<table>
<thead>
<tr>
<th>Would the project:</th>
<th>Potentially Significant Impact</th>
<th>Less-Than-Significant with Mitigation Incorporated</th>
<th>Less-Than-Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td>b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
</tr>
</tbody>
</table>

Discussion

While climate change has been a concern since at least 1988, as evidenced by the establishment of the United Nations and World Meteorological Organization’s Intergovernmental Panel on Climate Change (IPCC), the efforts devoted to greenhouse gas (GHG) emissions reduction and climate change research and policy have increased dramatically in recent years. These efforts are primarily concerned with the emissions of GHG related to human activity that include CO2, CH4, NOX, nitrous oxide, tetrafluoromethane, hexafluoroethane, sulfur hexafluoride, HFC-23 (fluoroform), HFC-134a (s, s, s, 2 –tetrafluoroethane), and HFC-152a (difluoroethane).

In 2002, with the passage of Assembly Bill 1493 (AB 1493), California launched an innovative and pro-active approach to dealing with GHG emissions and climate change at the state level. AB 1493 requires the CARB to develop and implement regulations to reduce automobile and light truck GHG emissions. These stricter emissions standards were designed to apply to automobiles and light trucks beginning with the 2009-model year; however, in order to enact the standards California needed a waiver from the EPA. The waiver was denied by the EPA in December 2007 and efforts to overturn the decision had been unsuccessful. See California v. Environmental Protection Agency, 9th Cir. Jul. 25, 2008, No. 08-70011. On January 26, 2009, it was announced that the EPA would reconsider their decision regarding the denial of California’s waiver. On May 18, 2009, President Obama announced the enactment of a 35.5 mpg fuel economy standard for automobiles and light duty trucks. On June 30, 2009 EPA granted California the waiver. The granting of the waiver has allowed California to implement even stronger standards. In 2013 CARB adopted new Phase I regulation for GHG emissions, establishing GHG emission limits on truck and engine manufacturers that harmonizes with the EPA rule. In 2016, the EPA and the National Highway Traffic Safety Administration (NHTSA), adopted federal Phase 2 standards that built on the Phase I standards to achieve additional GHG reductions. California aligned with these federal Phase 2 standards in 2018.

On June 1, 2005, Governor Arnold Schwarzenegger signed Executive Order S-3-05. The goal of this Executive Order is to reduce California’s GHG emissions to: 1) 2000 levels by 2010, 2) 1990 levels by the 2020 and 3) 80 percent below the 1990 levels by the year 2050. In 2006, this goal was further reinforced with the passage of Assembly Bill 32 (AB 32), the Global Warming Solutions Act of 2006.
AB 32 sets the same overall GHG emissions reduction goals while further mandating that CARB create a plan, which includes market mechanisms, and implement rules to achieve “real, quantifiable, cost-effective reductions of greenhouse gases.” Executive Order S-20-06 further directs state agencies to begin implementing AB 32, including the recommendations made by the state’s Climate Action Team. With Executive Order S-01-07, Governor Schwarzenegger set forth the low carbon fuel standard for California. Under this executive order, the carbon intensity of California’s transportation fuels is to be reduced by at least 10 percent by 2020.

Climate change and GHG reduction is also a concern at the federal level; however, at this time, no legislation or regulations have been enacted specifically addressing GHG emissions reductions and climate change. California, in conjunction with several environmental organizations and several other states, sued to force the EPA to regulate GHG as a pollutant under the Clean Air Act (Massachusetts vs. [EPA] et al., 549 U.S. 497 (2007). The court ruled that GHG does fit within the Clean Air Act’s definition of a pollutant, and that the EPA does have the authority to regulate GHG. Despite the Supreme Court ruling, there are no promulgated federal regulations to date limiting GHG emissions.

[1] On December 7, 2009, the EPA Administrator signed two distinct findings regarding greenhouse gases under section 202(a) of the Clean Air Act:

**Endangerment Finding:** The Administrator found that the current and projected concentrations of the six key well-mixed greenhouse gases—carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF6) in the atmosphere threaten the public health and welfare of current and future generations.

**Cause or Contribute Finding:** The Administrator found that the combined emissions of these well-mixed greenhouse gases from new motor vehicles and new motor vehicle engines contribute to the greenhouse gas pollution which threatens public health and welfare.

These findings do not themselves impose any requirements on industry or other entities. However, this action is a prerequisite to finalizing the EPA’s greenhouse gas emission standards for light-duty vehicles, which were jointly by EPA and the Department of Transportation’s National Highway Safety Administration on September 15, 2009.

According to Recommendations by the Association of Environmental Professionals on How to Analyze GHG Emissions and Global Climate Change in CEQA Documents (March 5, 2007), an individual project does not generate enough GHG emissions to significantly influence global climate change. Rather, global climate change is a cumulative impact. This means that a project may participate in a potential impact through its incremental contribution combined with the contributions of all other sources of GHG. In assessing cumulative impacts, it must be determined if a project’s incremental effect is “cumulatively considerable.” See CEQA Guidelines sections 15064(i)(1) and 15130. To gather sufficient information on a global scale of all past, current, and future projects in order to make this determination is a difficult if not impossible task. As part of its supporting documentation for the Draft Climate Change Scoping Plan, CARB recently released an updated version of the GHG inventory for California (June 26, 2008).
a) **Less Than Significant Impact.** GHG emissions for transportation projects can be divided into those produced during construction and those produced during operations. For the Project, construction GHG emissions would include emissions produced by onsite construction equipment. As discussed in Section 3, “Air Quality”, construction emission would be below threshold’s established by CARB, as well as the City’s air quality threshold, and would be further reduced through implementation of BMPs AQ-1.

GHG emissions produced during operations are those that result from potentially increased traffic volumes or changes in automobile speeds. The proposed Project will replace the existing Eastside Road and Westside Road bridges with structures that meet current state and federal bridge standards. The Project would not be capacity increasing and the Project would not increase the number of automobiles in the traffic system; therefore, no impact to greenhouse gas emissions or climate change would result from operations. The proposed Project contribution to global climate change through GHG emissions are considered less than significant.

b) **No Impact.** Implementation of the proposed Project would not conflict with or obstruct implementation of any applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases. As noted in discussion “a” above, and in Section 3, the Project is in conformance with the City’s air quality policies and thresholds, and consistent with County and state guidelines and regulations. Therefore, the Project would have no impact.

**Documentation**


**Mitigation**

None necessary.
IX. HAZARDS AND HAZARDOUS MATERIALS:

<table>
<thead>
<tr>
<th>Would the project:</th>
<th>Potentially Significant Impact</th>
<th>Less-Than-Significant with Mitigation Incorporated</th>
<th>Less-Than-Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td>b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td>c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
</tr>
<tr>
<td>d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☒</td>
</tr>
<tr>
<td>e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
</tr>
<tr>
<td>f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td>g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
</tr>
</tbody>
</table>

Discussion

a,b,d) **Less Than Significant Impact.** The Project would involve the use of heavy equipment for grading, hauling, and materials handling. Use of this equipment may require the use of fuels and other common materials that have hazardous properties (e.g., fuels are flammable). As a part of the Clean Water Act Section 402, National Pollutant Discharge Elimination System, and conservation measure BIO-1 (described in Section IV, Biological Resources), a SWPPP is required when obtaining a general construction permit. Compliance under water quality
regulations and the SWPPP would require use of the following standard conservation measures and BMPs to avoid or minimize the potential for accidental release of hazardous materials from spills or fuel leaks during Project construction:

HAZ-1. Hazardous materials, including fuels, oils, cement, and solvents will be stored and contained in an area protected from direct runoff and away from areas where they could enter waters of the United States.

HAZ-2. Construction equipment will be inspected daily for leaks. Leaking fluids will be contained upon detection and equipment repairs will be made as soon as practicable or the leaking equipment will be moved off site.

HAZ-3. Secondary containment such as drip pans or absorbent materials shall be used to catch spills or leaks when removing or changing fluids. Secondary containment will be used for storage of all hazardous materials.

HAZ-4. Spill containment and clean-up materials shall be kept on site at all times for use in the event of an accidental spills.

HAZ-5. Absorbent materials shall be used on small spills rather than hosing down or burying the spill. The absorbent material shall be promptly removed and properly disposed.

The potential for Project construction and operation to create a hazard to the public or the environment through the accidental spill or pollutants would be less than significant.

A search for hazardous wastes within 1 mile of the Project area was conducted using the California State Water Resource Control Board (SWRCB) GeoTracker website and California Department of Toxic Substances Control (DTSC) EnviroStor website. The table below provides a list of known hazardous waste sites within 1-mile of the Project. Twenty-six known sites were identified by the GeoTracker database within 1-mile of the Project area. One site is located within the defined Project area: Fisher J W Logging Co. The site is a LUST Cleanup Site and the cleanup status is listed as “Completed – Case Closed”. Therefore, no impacts are anticipated due to the proximity of the LUST Cleanup Site.

**GeoTracker and EnviroStor Search Results**

<table>
<thead>
<tr>
<th>SITE NAME</th>
<th>GLOBAL ID</th>
<th>SITE_TYPE</th>
<th>STATUS</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMERICAN STEEL</td>
<td>T0608900143</td>
<td>LUST CLEANUP SITE</td>
<td>COMPLETED – CASE CLOSED</td>
</tr>
<tr>
<td>ANDERSON PETROLEUM</td>
<td>T0608900128</td>
<td>LUST CLEANUP SITE</td>
<td>COMPLETED – CASE CLOSED</td>
</tr>
<tr>
<td>ANDERSON PETROLEUM</td>
<td>SL375332882</td>
<td>CLEANUP PROGRAM SITE</td>
<td>COMPLETED – CASE CLOSED</td>
</tr>
<tr>
<td>BEACON #549 (FORMER)</td>
<td>T0608900087</td>
<td>LUST CLEANUP SITE</td>
<td>COMPLETED – CASE CLOSED</td>
</tr>
<tr>
<td>BROWN PLUMBING/REDING</td>
<td>T0608900293</td>
<td>LUST CLEANUP SITE</td>
<td>COMPLETED – CASE CLOSED</td>
</tr>
<tr>
<td>INDUSTRIAL ELECTR</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
c) **No Impact.** There are no existing or currently proposed schools within 0.25-mile of the Project area. Therefore, no hazardous waste emissions or handling of hazardous materials would occur within 0.25-mile of an existing or currently proposed school, and no impact would occur.

e) **No Impact.** The Project area is within approximately 1.75 miles of the Benton Airpark. However, the Project would not result in a safety hazard for people residing or working in the Project area as the Project is not within the direct vicinity or flight path of the Benton Airpark. Therefore, there would be no impact related to safety of the public in the Project area.

f) **Less Than Significant Impact.** Although temporary, short duration disruptions to normal traffic operations would occur during construction. Temporary traffic control and lane reduction may
be used during construction. Temporary signage would be used to alert motorists and non-motorized travelers to any Project detour, decreased speeds, uneven pavement, etc. throughout the Project alignment and controlled through-traffic would be allowed to pass during construction. Emergency response vehicles would be given priority access through the Project site. Operation of the completed Project would have no impact on traffic operations. The Project would have a less-than-significant impact on emergency response and evacuation plans during construction.

g) **Less Than Significant Impact.** The use of construction equipment in and around vegetated areas increases the potential for wildfire ignition. Operation of the Project would not increase the existing wildfire potential; however, the standard specifications require internal combustion engines to be equipped with an operational spark arrester, or the engine must be equipped for the prevention of fire. The potential for wildfire ignition would be less than significant.

**Documentation**


**Mitigation**

None necessary.
**X. HYDROLOGY AND WATER QUALITY:**

<table>
<thead>
<tr>
<th>Would the project:</th>
<th>Potentially Significant Impact</th>
<th>Less-Than-Significant with Mitigation Incorporated</th>
<th>Less-Than-Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td>b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td>c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td>i) result in substantial erosion or siltation on- or off-site;</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td>ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td>iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td>iv) impede or redirect flood flows?</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td>d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td>e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
</tr>
</tbody>
</table>

**Discussion**

a) **Less Than Significant Impact.** The Project will disturb greater than one acre, therefore a Construction Storm Water General Permit (CGP) is required to address storm water runoff. The permit will address clearing, grading, grubbing, and disturbances to the ground, such as stockpiling, or excavation. The permit also requires the City and the Contractor to prepare and
implement a SWPPP with the intent of keeping all products of erosion from moving off site into receiving waters. The SWPPP includes BMPs to prevent construction pollutants from entering storm water runoff. The Project would not involve any discharges of waste material into ground or surface waters and would be subject to the terms and conditions included in permit authorizations anticipated to be required from the Central Valley RWQCB, CDFW, and the Corps. In addition to the CGP, SWPPP, and City Construction Standards, these permits will condition the Project to implement measures that will prevent degradation of water quality. In addition, construction and operation of the Project would not violate any water quality standards or waste discharge requirements established by the Central Valley RWQCB in its Basin Plan for the Sacramento River and San Joaquin River Basins.

b) Less Than Significant Impact. The Project would not directly or indirectly result in the construction of uses that would utilize groundwater supplies. The Project design will include a minor increase in impervious surface for the replacement of the Eastside Road and Westside Road Bridges; however, this is not anticipated to alter the drainage patterns in such a way that would interfere with groundwater recharge. Additionally, the proposed Project would not be constructed immediately above a preexisting well, nor would areas known to contain wells be disturbed by construction of the proposed Project. Therefore, impacts to groundwater supplies would be less than significant.

c) Less Than Significant Impact. The proposed Project consists of the replacement of the Eastside Road and Westside Road Bridges. Minor loss of vegetation and general disturbance to the soil for construction of the proposed Project would occur within the Project footprint. Removal of vegetation and soil can accelerate erosion processes and increase the potential for sediment to enter into Canyon Hollow Creek. The Project design will include a minor increase in impervious surface for the replacement of the Eastside Road and Westside Road Bridges, however, the increase is minor and surface water would flow into the vegetated area. A portion of the Project area is located within a Zone AE of the Federal Emergency Management Agency (FEMA) Special Flood Hazard Area; however, replacement of the Eastside Road Bridge would remove an existing pier within Canyon Hollow Creek, increasing flood capacity of the creek. Additionally, the soffit elevation of both of the proposed bridges will approximately match the existing bridge and will be set to pass the 100-year flood event.

Although construction activities are expected to alter the existing drainage pattern of the site, these activities are not anticipated to alter the drainage pattern in a way that would result in substantial erosion, surface runoff, flooding on or off site, or otherwise substantially degrade water quality. Minor increases in impervious surfaces resulting from the slightly wider new bridges would not create run-off that would exceed the capacity of existing or planned stormwater drainage systems. To support adherence with federal, state, and local regulations/ policies conservation measures BIO-1 through BIO-5 and HAZ-1 through HAZ-5 have been incorporated into the Project.

d) Less Than Significant Impact. A portion of the Project area is located within a Zone AE of the FEMA Special Flood Hazard Area; however, replacement of the Eastside Road Bridge would remove an existing pier within Canyon Hollow Creek, increasing flood capacity. The new bridges
would be constructed to adequately pass flows associated with a 100-year storm event, and would not increase risk in release of pollutants due to Project inundation. The threat of a tsunami wave is not applicable to inland communities such as Redding. Seiches could potentially be generated in either Shasta or Whiskeytown Lakes during an earthquake; however, as identified in the Health and Safety Element of the General Plan, if a seiche over 65 feet in height were to overtop Shasta Dam, or in the event of dam failure, the proposed Project area would be outside of the inundation zone.

e) **No Impact.** Construction and operation of the Project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

**Documentation**

- Dokken Engineering. 2019. Eastside Road and Westside Road Bridges Replacement Project. Natural Environment Study (Minimal Impacts).

**Mitigation**

None necessary.
XI. LAND USE AND PLANNING:

<table>
<thead>
<tr>
<th>Would the project:</th>
<th>Potentially Significant Impact</th>
<th>Less-Than-Significant with Mitigation Incorporated</th>
<th>Less-Than-Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Physically divide an established community?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
</tr>
<tr>
<td>b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
</tr>
</tbody>
</table>

**Discussion**

a) **No Impact.** The Project would have no potential to divide an established community.

b) **No Impact.** The Project is consistent with the City’s General Plan. The Project would not cause a significant environmental impact due to conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environment effect.

**Documentation**

- City of Redding General Plan, Community Development Element, 2000
- City of Redding General Plan, Natural Resources Element, 2000

**Mitigation**

None necessary.
### XII. MINERAL RESOURCES:

<table>
<thead>
<tr>
<th>Would the project:</th>
<th>Potentially Significant Impact</th>
<th>Less-Than-Significant with Mitigation Incorporated</th>
<th>Less-Than-Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
</tr>
<tr>
<td>b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
</tr>
</tbody>
</table>

**Discussion**

a) **No Impact.** The proposed Project would not result in the use or extraction of any mineral or energy resources and would not restrict access to known mineral resource areas. Furthermore, the proposed Project would not result in the loss of availability of a known mineral resource.

b) **No Impact.** The proposed Project would have no impact on mineral resources.

**Documentation**


**Mitigation**

None necessary.
XIII. NOISE:

<table>
<thead>
<tr>
<th>Would the project:</th>
<th>Potentially Significant Impact</th>
<th>Less-Than-Significant with Mitigation Incorporated</th>
<th>Less-Than-Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td>b) Generation of excessive groundborne vibration or groundborne noise levels?</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td>c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
</tr>
</tbody>
</table>

Discussion

a) **Less Than Significant Impact.** The Project area is most similar to that of “noisy urban residential.” Noisy urban residential areas have a typical noise level of 60-65 dBA. The Project would take place within and adjacent to areas primarily zoned as General Commercial (GC), General Industrial (GI), Open Space (OS), and Public Facility (PF) (City of Redding General Plan). Commercial and industrial businesses operate within the Project area.

Typical noise-sensitive land uses include receptors such as residences, parks, schools, and/or hospitals and there is one mobile home park located approximately 550 feet from the Westside Road Bridge. Residents within the Reddingwood Mobile Home & RV Park currently experience outside noise levels from local traffic, including State Route 273, located approximately 300 feet east of the community, and the railroad, located approximately 430 feet east of the community. Freight trains, on average, generate approximately 88 dBA at a distance of 50 feet while passing by, which decreases to approximately 70 dBA at the closest residence. The typical sound level due to passing vehicles is estimated to be approximately 60 dBA in 2020, per Table 5-2 of the Noise Element within the City of Redding’s General Plan.

Generally, noise levels at construction sites can vary from 55 dBA to a maximum of nearly 96 dBA when heavy equipment is used. Construction noise during this Project would be intermittent, and noise levels would vary depending on the type of construction activity. The lowest construction equipment-related noise levels would be 55 dBA at a distance of 50 feet for sound from a pick-up truck. The highest noise levels for this Project are anticipated to be up to 101 dBA at a distance of 50 feet for an impact pile driver. Noise volumes at the closest residence approximately 550 feet from the impact pile driver are anticipated to temporarily experience...
noise volumes at approximately 80 dBA, which is lower than the existing ambient 88 dBA freight train noise.

While the impact pile driver will be the dominant noise source during construction, it will be intermittent and temporary, and received at a volume lower than other existing intermittent ambient noise. The Project will have a less than significant impact; however, BMP NOI-1 has been incorporated into the Project.

NOI-1. The Contractor shall follow Caltrans Section 14-8.02 of the Standard Specifications. Construction noise shall not exceed 86 dBA Lmax at 50 feet from the job site from 9:00 p.m. to 6:00 a.m.

b) **Less Than Significant Impact.** Some groundborne vibration and noise would be generated during construction of the Project. Pile driving or other activities commonly associated with vibration are anticipated to occur; however, the vibration would be minor, intermittent, and temporary in nature. Operation of the Project would not generate groundborne vibration or noise. Project impacts would be less than significant.

c) **No Impact.** The Project area is within approximately 1.75 miles of the Benton Airpark. However, the Project would not expose people residing or working in the Project area to excessive noise levels as the Project is not within the direct vicinity or flight path of the Benton Airpark.

**Documentation**


**Mitigation**

None necessary.
XIV. POPULATION AND HOUSING:

Would the project:  

<table>
<thead>
<tr>
<th>Potential Impact</th>
<th>Less-Than-Significant with Mitigation Incorporated</th>
<th>Less-Than-Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
</tr>
<tr>
<td>b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
</tr>
</tbody>
</table>

Discussion

a) **No Impact.** The proposed Project does not include the construction of new homes or businesses, nor does it include extension or construction of new roadways which could potentially induce growth. Therefore, the Project would have no potential to induce substantial population growth in the area, either directly or indirectly. No impact would occur.

b) **No Impact.** The Project will not displace any number of existing housing or necessitate the construction of replacement housing. No impact would occur.

Documentation


Mitigation

None necessary.
XV. PUBLIC SERVICES:

<table>
<thead>
<tr>
<th>a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:</th>
<th>Potentially Significant Impact</th>
<th>Less-Than-Significant with Mitigation Incorporated</th>
<th>Less-Than-Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fire Protection?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
</tr>
<tr>
<td>Police Protection?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
</tr>
<tr>
<td>Schools?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
</tr>
<tr>
<td>Parks?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
</tr>
<tr>
<td>Other public facilities?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
</tr>
</tbody>
</table>

Discussion

a) **No Impact.** The proposed Project does not include new development for habitation, nor does it include development of new businesses. Therefore, the proposed Project would not induce population growth and furthermore, does not include any components that would result in an increased demand for fire protection, police protection, schools, parks, or other public services. Establishment of additional facilities to maintain acceptable service ratios for the public would not be necessary. Therefore, no impact would occur.

Documentation


Mitigation

None necessary.
XVI. RECREATION:

<table>
<thead>
<tr>
<th>Would the project:</th>
<th>Potentially Significant Impact</th>
<th>Less-Than-Significant with Mitigation Incorporated</th>
<th>Less-Than-Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
</tr>
<tr>
<td>b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
</tr>
</tbody>
</table>

Discussion

a) **No Impact.** The proposed Project does not include new development for habitation, nor does it include development of new businesses. Therefore, the proposed Project would not increase the use of existing neighborhood and regional parks or other recreational facilities such that physical deterioration of the facility would occur or be accelerated. Therefore, no impact would occur.

b) **No Impact.** The Project area does not include nor does the Project include any recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment. Therefore, no impact would occur.

Documentation


Mitigation

None necessary.
XVII. TRANSPORTATION:

<table>
<thead>
<tr>
<th>Would the project:</th>
<th>Potentially Significant Impact</th>
<th>Less-Than-Significant with Mitigation Incorporated</th>
<th>Less-Than-Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
</tr>
<tr>
<td>b) Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
</tr>
<tr>
<td>c) Substantially increase hazards to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
</tr>
<tr>
<td>d) Result in inadequate emergency access?</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
<td>☐</td>
</tr>
</tbody>
</table>

Discussion

a) **No Impact.** The Project would not conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system. The proposed Project involves replacement of the Eastside Road and Westside Road Bridges and roadway approaches. No new public roadways or significant physical alteration of an existing roadway would occur. Therefore, no impact would occur.

b) **No Impact.** The proposed Project does not involve construction of a new public roadway or significant physical alteration of an existing roadway and would have no impact on an established vehicle miles traveled threshold. Therefore, the Project would not conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b), and no impact would occur.

c) **No Impact.** The proposed Project would be designed in accordance with the City and Caltrans design standards and guidelines. The proposed Project involves replacement of the Eastside Road and Westside Road Bridges and roadway approaches. The Project would not substantially increase hazards to geometric design features or include incompatible uses. Therefore, no impact would occur.

d) **Less Than Significant Impact.** The proposed Project would include construction activities at the Eastside Road and Westside Road Bridges requiring single lane closures at each bridge location. Construction will be staged over two construction seasons to allow a single lane of alternating traffic controlled by temporary signals. During construction, emergency vehicles would have a limited access route through single lane traffic conditions; however, single lane traffic controls would be temporary and intermittent. Upon completion of construction,
emergency vehicles would regain full access abilities through the Project area. Therefore, the proposed Project would have a less than significant impact.

Documentation


Mitigation

None necessary.
XVIII. TRIBAL CULTURAL RESOURCES:

Would the project: cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

<table>
<thead>
<tr>
<th></th>
<th>Potentially Significant Impact</th>
<th>Less-Than-Significant with Mitigation Incorporated</th>
<th>Less-Than-Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Discussion

a,b) **Less Than Significant Impact.** No Tribal Cultural Resources were identified during the cultural studies and consultation efforts conducted for the Project. No impacts are anticipated for the Project related to TCRs; however, with any project there is always the possibility that unknown resources may be encountered during construction; therefore, standard conservation measures CR-1 and CR-2 have been incorporated into the Project (Refer to Section V “Cultural Resources”).

Documentation


Mitigation

None necessary.
XIX. UTILITIES AND SERVICE SYSTEMS:

<table>
<thead>
<tr>
<th>Would the project:</th>
<th>Potentially Significant Impact</th>
<th>Less-Than-Significant with Mitigation Incorporated</th>
<th>Less-Than-Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td>b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☒</td>
</tr>
<tr>
<td>c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project’s projected demand in addition to the provider’s existing commitments?</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☒</td>
</tr>
<tr>
<td>d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?</td>
<td>☐</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
</tr>
<tr>
<td>e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☒</td>
</tr>
</tbody>
</table>

Discussion

a) **Less Than Significant Impact.** The proposed Project consists of the replacement of the Eastside Road and Westside Road Bridges. The Project would require relocation of existing utilities, but would not increase population in the Project vicinity and there would be no new or expanded utility facilities. Relocation of the existing utilities would not cause a significant environmental effect and the Project impact would be less than significant.

b) **No Impact.** The Project would not result in the need for new or expanded water supplies. There may be a temporary need for water during construction to control dust; however, it is not anticipated to result in the need for water supply beyond what is currently available, and no increase in demand for long-term water supply would be generated by the Project. No impact would occur.
c) **No Impact.** The Project would not include the construction of any wastewater-generating uses. No impact would occur.

d) **Less Than Significant Impact.** The Project would not generate solid waste during operation. Solid waste would be generated during construction; however, the amount will not exceed landfill capacities. Solid waste generated by the proposed Project would be transported to West Central Landfill or an appropriate solid waste facility. Therefore, impacts would be considered less than significant.

e) **No Impact.** The Project would comply with all applicable federal, state, and local statutes and regulations related to solid waste including the California Integrated Waste Management Act of 1989 (AB 939) and the California Solid Waste Re-Use and Recycling Access Act of 1991 (§42900-42911 of the Public Resources Code). No impact would occur.

**Documentation**


**Mitigation**

None necessary.
XX. WILDFIRE:

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:

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

Discussion

a) **No Impact.** The Project area is not located within a very high severity fire zone and would not impair or alter any existing emergency response plan or emergency evacuation plan; therefore, no impact would occur.

b) **No Impact.** The Project is located in a topographically flat, urban area of the City, adjacent to industrial and commercial land uses. Emergency access would be maintained throughout construction and, in the event of a fire, the Redding Fire Department provides emergency fire services to the Project Area. The Redding Fire Hall #3 is adjacent to the Project area. No impact would occur.

c) **No impact.** The proposed Project consists of the replacement of the Eastside Road and Westside Road Bridges. However, construction and replacement activities would not exacerbate fire risk and, according to the Department of Forestry and Fire Protection (2020) the proposed Project corridor is located in an area of Non-Very High Fire Hazard Severity Zone; therefore, no impact would occur.

d) **No impact.** The Project is located in a topographically flat, urban area of the City, adjacent to industrial and commercial land uses. The proposed Project corridor is not designated as a wildland and vegetation removal would be minimal and temporary. The Project would not expose
people or structures to significant risks, including flooding or landslides, as a result of runoff, post fire slope instability or drainage changes; therefore, no impacts would occur.

Documentation


Mitigation

None necessary.

XXI. MANDATORY FINDINGS OF SIGNIFICANCE:

| Would the project: |
|-------------------|------------------|--------------------------|-------------------|
|                    | Potentially Significant Impact | Less-Than-Significant Impact with Mitigation Incorporated | Less-Than-Significant Impact |
| a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below the self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory? |
|                   | ✗ | ☑ | ✗ | ✗ |
| b) Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)? |
|                   | ☐ | ☐ | ☑ | ☐ |
| c) Does the project have potential environmental effects which may cause substantial adverse effects on human beings, either directly or indirectly? |
|                   | ☐ | ☐ | ☐ | ☑ |

Discussion

a) Less Than Significant with Mitigation Incorporated. The proposed Project would have minimal potential to degrade the quality of the environment, affect wildlife populations or their habitats, or reduce the number or restrict the range of rare or endangered plant and animal species.
Although special-status species may be impacted by implementation of the proposed Project, standard conservation measures and BMPs, as well as mitigation measures, will be used to avoid adverse impacts on these species. Implementation of the proposed Project would not eliminate examples of history or prehistory.

b) **Less Than Significant Impact.** As described in Section III, the proposed Project could temporarily contribute to region-wide cumulative air quality impacts. However, these impacts would be considered less than significant and under policy of the City’s General Plan, application of standard BMPs would eliminate the potential for air quality impacts during Project implementation. Upon project completion the Project has the potential to reduce air quality impacts by providing safe and efficient routes for transportation. The Project’s potential cumulative traffic impacts would be less than significant.

c) **No Impact.** The proposed Project does not include any activities that could cause substantial adverse impacts on human beings, either directly or indirectly.

**Documentation**

Determinations for Section XXI have been made based on all documentation as part of this Initial Study Environmental Checklist sections listed above.

**Mitigation**

**MM-1:** Prior to the start of construction, a focused botanical survey will be conducted by a qualified biologist during the blooming period for silky cryptantha within the BSA. If silky cryptantha is not found during the botanical survey no other measures will be required. If silky cryptantha is discovered during the focused botanical surveys, the plants will be marked by a qualified biologist. If the area can be avoided, exclusionary fencing will be placed around the plants and no pedestrian or vehicular entry shall be allowed. If the area cannot be avoided, the City will coordinate with CDFW to avoid, minimize, and mitigate impacts to the species. Potential measures for reducing project impacts on special status plants include limiting ground disturbance until annual special status plants have gone to seed and stockpiling top soil during the initial excavation to be replaced as the top layer during the final site rehabilitation. If listed species are found and cannot be avoided an Incidental Take Permit may be needed.

**MM-2:** Work within Canyon Hollow Creek shall be restricted to the dry season (June 1 to October 15).

**MM-3:** Any new gravel material placed in the channel shall meet Caltrans’ cleanness test (California Test No. 227) with a value of 85 or higher.

**MM-4:** Riparian vegetation disturbed in the temporary use areas on the west side of Westside Road Bridge and on the east side of Eastside Road Bridge shall be restored both by revegetation and by promoting regrowth of plants that were pruned and protected prior to work. Where feasible, revegetated areas shall be planted at a ratio of 3 new plants for every large (>3 inches) woody riparian plant removed (3:1 ratio). In areas of regrowth of large woody riparian vegetation, all regrowth will be monitored and maintained, and counted at a 1:1 ratio. These replanting ratios will help ensure successful establishment of at least one vigorous plant for each plant removed to accommodate the project.
**MM-5:** To the extent practicable, removal of large trees with cavities shall occur before bat maternity colonies form (i.e., prior to March 1) or after young are volant (i.e., after August 31). If construction (including the removal of large trees) occurs during the bat non-volant season (March 1 through August 31), a qualified professional shall conduct a pre-construction survey of the study area to locate maternity colonies and identify measures to protect colonies from disturbance. The pre-construction survey will be performed no more than 7 days prior to the implementation of construction activities. If a maternity colony is located within or adjacent to the study area, a disturbance free buffer shall be established by a qualified professional, in consultation with CDFW, to ensure the colony is protected from project activities.

**MM-6:** If vegetation removal or construction activities will occur during the nesting season for migratory birds or raptors (February 1 through August 31), a qualified biologist shall conduct a preconstruction survey no more than 7 days before construction activities begin. If nesting birds or raptors are found, CDFW will be notified and consulted. An appropriate buffer, as determined by CDFW and the qualified biologist, will be placed around the nest until the young have fledged. If construction activities cease for a period greater than 7 days, additional preconstruction surveys will be required.
MITIGATION MONITORING AND
ENVIRONMENTAL COMMITMENT PROGRAM

EASTSIDE ROAD AND WESTSIDE ROAD BRIDGES REPLACEMENT
PROJECT
STATE CLEARINGHOUSE NO. 2020049034

MITIGATION MONITORING PROGRAM CONTENTS

This document is the Mitigation Monitoring and Environmental Commitment Program (MMP/ECP) for the Eastside Road and Westside Road Bridges Replacement Project (project). The MMP/ECP includes a brief discussion of the legal basis for, and the purpose of, the program, discussion, and direction regarding complaints about noncompliance, a key to understanding the monitoring matrix, and the monitoring matrix itself.

LEGAL BASIS OF AND PURPOSE FOR THE MITIGATION MONITORING PROGRAM

California Public Resources Code Section 21081.6 requires public agencies to adopt mitigation monitoring or reporting programs whenever certifying an environmental impact report (EIR) or a mitigated negative declaration (MND). This requirement facilitates implementation of all mitigation measures adopted through the California Environmental Quality Act (CEQA) process.

The MMP contained herein is intended to satisfy the requirements of CEQA as they relate to the Initial Study/Mitigated Negative Declaration prepared for the project. It is intended to be used by City of Redding (City) staff, participating agencies, project contractors, and mitigation monitoring personnel during implementation of the project.

- Mitigation is defined by CEQA Guidelines Section 15370 as a measure that does any of the following:
  - Avoids impacts altogether by not taking a certain action or parts of an action.
  - Minimizes impacts by limiting the degree or magnitude of the action and its implementation.
  - Rectifies impacts by repairing, rehabilitating, or restoring the impacted environment.
  - Reduces or eliminates impacts over time by preservation and maintenance operations during the life of the project.
  - Compensates for impacts by replacing or providing substitute resources or environments.

The intent of the MMP is to ensure the effective implementation and enforcement of adopted mitigation measures and permit conditions. The MMP will provide for monitoring of construction activities as necessary, on-site identification and resolution of environmental problems, and proper reporting to City staff.
In addition to meeting the CEQA MMP requirements, this document incorporates environmental commitments, standard practices, conservation measures, and best management practices (BMPs). The environmental commitments may be part of the project design, standard contract specifications, City of Redding requirements, or conservation measures. These commitments are part of the project, but do not constitute mitigation under CEQA as they have not been incorporated to reduce a potentially significant impact.

**MITIGATION MONITORING/ENVIRONMENTAL COMMITMENT TABLE**

The MMP/ECP Table identifies the mitigation measures and commitments proposed for the project. The tables have the following columns:

- **Mitigation Measure:** Lists the mitigation measures identified within the Initial Study for a specific potentially significant impact, along with the number for each measure as enumerated in the Initial Study.

- **Environmental Commitment:** Lists the commitments identified within the project that are not related to a potentially significant CEQA impact, but further ensure environmental resource protection.

- **Timing:** Identifies at what point in time, review process, or phase the mitigation measure will be completed.

- **Agency/Department Consultation:** References the City department or any other public agency with which coordination is required to satisfy the identified mitigation measure.

- **Verification:** Spaces to be initialed and dated by the individual designated to verify adherence to a specific mitigation measures.

**NONCOMPLIANCE COMPLAINTS**

Any person or agency may file a complaint asserting noncompliance with the mitigation measures and commitments associated with the project. The complaint shall be directed to the City in written form, providing specific information on the asserted violation. The City shall investigate and determine the validity of the complaint. If noncompliance with a mitigation measure has occurred, the City shall take appropriate action to remedy any violation. The compliant shall receive written confirmation indicating the results of the investigation or the final action corresponding to the particular noncompliance issue.
MITIGATION MONITORING AND ENVIRONMENTAL COMMITMENT TABLE
FOR THE HOLLOW LANE CULVERT REPLACEMENT PROJECT
MITIGATION MONITORING PROGRAM
(STATE CLEARINGHOUSE NO.)

ENVIRONMENTAL COMMITMENTS
The following environmental commitments will be incorporated into the project to further protect environmental and biological resources:

<table>
<thead>
<tr>
<th>Best Management Practices (BMPs)</th>
<th>Timing/ Implementation</th>
<th>Enforcement/ Monitoring</th>
<th>Verification (Date and Initials)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Air Quality (AQ)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>AQ-1.</strong> Nontoxic soil stabilizers shall be applied according to manufacturer’s specification to all inactive construction areas.</td>
<td>Construction</td>
<td>City/ Construction Management</td>
<td></td>
</tr>
<tr>
<td><strong>AQ-2.</strong> All grading operations shall be suspended when winds (as instantaneous gusts) exceed 20 miles per hour.</td>
<td>Construction</td>
<td>City/ Construction Management</td>
<td></td>
</tr>
<tr>
<td><strong>AQ-3.</strong> Water all stockpiles, access roads, and disturbed or exposed areas, as necessary, to prevent airborne dust.</td>
<td>Construction</td>
<td>City/ Construction Management</td>
<td></td>
</tr>
<tr>
<td><strong>AQ-4.</strong> Pursuant to the California Vehicle Code (Section 23114(e)(4)) (California Legislative Information 2016), all trucks hauling soil and other loose material to and from the construction site shall be covered or shall maintain at least 6 inches of freeboard (i.e., minimum vertical distance between top of load and the trailer).</td>
<td>Construction</td>
<td>City/ Construction Management</td>
<td></td>
</tr>
<tr>
<td><strong>AQ-5.</strong> All public roadways used by the project contractor shall be maintained free from dust, dirt, and debris caused by construction activities. Streets shall be swept at the end of the day if visible soil materials are carried onto adjacent public paved roads.</td>
<td>Construction</td>
<td>City/ Construction Management</td>
<td></td>
</tr>
</tbody>
</table>
### Best Management Practices (BMPs)

<table>
<thead>
<tr>
<th>Biological Resources (BIO)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BIO-1.</strong> As required by the City of Redding Stormwater Quality Management and Discharge Control Ordinance, a Stormwater Pollution Prevention Plan (SWPPP) will be prepared to address BMPs that will be used to prevent erosion and sediment loss within the project site. BMPs such as silt fence, mulching and seeding, and straw wattles will be placed where needed to prevent sediment from leaving the site during and after construction.</td>
</tr>
<tr>
<td><strong>BIO-2.</strong> Appropriate sediment control measures (e.g., silt fences, straw wattles) shall be in place prior to the onset of construction activities near jurisdictional waters and in project areas where there is a potential for surface runoff to drain into jurisdictional waters. Sediment control measures shall be monitored and maintained until construction activities have ceased.</td>
</tr>
<tr>
<td><strong>BIO-3.</strong> High visibility fencing, flagging, or markers will be installed along the edges of the work zone near avoided waters and avoided riparian areas.</td>
</tr>
<tr>
<td><strong>BIO-4.</strong> Riparian vegetation within temporary construction zones shall be cleanly cut to ground level and then covered with a layer of clean gravel or topsoil as necessary to protect plant viability and prevent damage to remaining root structures during construction.</td>
</tr>
<tr>
<td><strong>BIO-5.</strong> All riparian areas and streambanks temporarily disturbed during Project construction will be re-contoured to pre-construction conditions and seeded with a native seed mix.</td>
</tr>
</tbody>
</table>

### Cultural Resources (CR)

| **CR-1.** If previously unidentified cultural materials are unearthed during construction, it is City policy that work be halted in that area until a qualified archaeologist can assess the significance of the find. | Construction | City/ Construction Management |
### Best Management Practices (BMPs)

<table>
<thead>
<tr>
<th>CR-2. If human remains are discovered during project activities, all activities near the find will be stopped and the Shasta County Sheriff-Coroner’s Office shall be notified. If the coroner determines that the remains may be those of a Native American, the coroner will contact the Native American Heritage Commission (NAHC). Treatment of the remains shall be conducted in accordance with further direction of the County Coroner or the NAHC, as appropriate.</th>
<th>Timing/Implementation</th>
<th>Enforcement/Monitoring</th>
<th>Verification (Date and Initials)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction</td>
<td>City/ NAHC/ County Coroner</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### HAZARDS AND HAZARDOUS MATERIALS (HAZ)

<table>
<thead>
<tr>
<th>HAZ-1. Hazardous materials, including fuels, oils, cement, and solvents will be stored and contained in an area protected from direct runoff and away from areas where they could enter waters of the United States.</th>
<th>Timing/Implementation</th>
<th>Enforcement/Monitoring</th>
<th>Verification (Date and Initials)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction</td>
<td>City/ Construction Management</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>HAZ-2. Construction equipment will be inspected daily for leaks. Leaking fluids will be contained upon detection and equipment repairs will be made as soon as practicable or the leaking equipment will be moved off site.</th>
<th>Timing/Implementation</th>
<th>Enforcement/Monitoring</th>
<th>Verification (Date and Initials)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction</td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HAZ-3. Secondary containment such as drip pans or absorbent materials shall be used to catch spills or leaks when removing or changing fluids. Secondary containment will be used for storage of all hazardous materials.</th>
<th>Timing/Implementation</th>
<th>Enforcement/Monitoring</th>
<th>Verification (Date and Initials)</th>
</tr>
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<tbody>
<tr>
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</table>

<table>
<thead>
<tr>
<th>HAZ-4. Spill containment and clean-up materials shall be kept on site at all times for use in the event of an accidental spills.</th>
<th>Timing/Implementation</th>
<th>Enforcement/Monitoring</th>
<th>Verification (Date and Initials)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction</td>
<td>City/ Construction Management</td>
<td></td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>HAZ-5. Absorbent materials shall be used on small spills rather than hosing down or burying the spill. The absorbent material shall be promptly removed and properly disposed.</th>
<th>Timing/Implementation</th>
<th>Enforcement/Monitoring</th>
<th>Verification (Date and Initials)</th>
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<tbody>
<tr>
<td>Construction</td>
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<td></td>
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</tbody>
</table>

### NOISE (NOI)

<table>
<thead>
<tr>
<th>NOI-1. The Contractor shall follow Caltrans Section 14-8.02 of the Standard Specifications. Construction noise shall not exceed 86 dBA Lmax at 50 feet from the job site from 9:00 p.m. to 6:00 a.m.</th>
<th>Timing/Implementation</th>
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</tbody>
</table>
## CEQA MITIGATION MEASURES

Resource-specific mitigation measures to be used during project implementation include:

<table>
<thead>
<tr>
<th>Mitigation Measure (MM)</th>
<th>Timing/Implementation</th>
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<td><strong>MM-1:</strong> Prior to the start of construction, a focused botanical survey will be conducted by a qualified biologist during the blooming period for silky cryptantha within the BSA. If silky cryptantha is not found during the botanical survey no other measures will be required. If silky cryptantha is discovered during the focused botanical surveys, the plants will be marked by a qualified biologist. If the area can be avoided, exclusionary fencing will be placed around the plants and no pedestrian or vehicular entry shall be allowed. If the area cannot be avoided, the City will coordinate with CDFW to avoid, minimize, and mitigate impacts to the species. Potential measures for reducing project impacts on special status plants include limiting ground disturbance until annual special status plants have gone to seed and stockpiling top soil during the initial excavation to be replaced as the top layer during the final site rehabilitation. If listed species are found and cannot be avoided an Incident Take Permit may be needed.</td>
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ATTACHMENT D

Comments and Response to Comments (if any)
Eastside Road and Westside Road Bridges Replacement Project  
Response to Public Comments Received on CEQA Initial Study/Mitigated Negative  
Declaration, State Clearinghouse #2020049034

In accordance with the California Environmental Quality Act (CEQA), an Initial Study/Mitigated  
Negative Declaration (IS/MND) for the Eastside Road and Westside Road Bridges Replacement  
Project was made available to the public and interested agencies for a minimum 30-day review  
period. The agency review period was managed by the State Clearinghouse (SCH) and closed on  
May 14, 2020. The public review period was managed by staff and closed on May 15, 2020. All  
written comments received during the public and agency review period are attached, along with  
written responses to environmental issues raised by commenters on the IS/MND. Comments  
received on the public draft IS/MND do not identify new significant impacts or significant new  
information that would require recirculation of the draft IS/MND pursuant to CEQA Guidelines  
Section 15073.5. This technical memorandum is being used to summarize comments and support  
adoption of the public draft IS/MND.

Response to Comments
In addition to confirmation from the State Clearinghouse that the 30-day posting requirement was  
met, a total of two comment letters were received regarding the IS/MND. The confirmation notice  
and comment letters are attached to this technical memorandum in the order indicated:

State Clearinghouse Compliance Notification (Letter A)  
California Department of Toxic Substances Control (Letter B)  
California Department of Fish and Wildlife (Letter C)

1. Letter A confirms project compliance with the State Clearinghouse review requirements  
   for draft environmental documents pursuant to CEQA. No response is needed for this letter.

2. Letter B was submitted by the California Department of Toxic Substances Control and  
   includes six comments.

   **Comment B1. Release of Hazardous Waste/Substances**

   *Response:* Hazardous waste is addressed in Section IX. “Hazards and Hazardous Waste”  
   of the Initial Study. The threat to public health and the environment was evaluated and it  
   was determined that the project would have a less than significant impact.

   **Comment B2. Aerially Deposited Lead**

   *Response:* Caltrans contract specifications are being used for the project and soils will be  
   characterized and managed in accordance with the June 2016 Soil Management Agreement  
   for Aerially Deposited Lead-Contaminated Soils (DTSC, 2016) or subsequent updates.
Comment B3. Mining Activities
Response: There have been no known mining activities within the project area or vicinity.

Comment B4. Lead Contamination
Response: Caltrans contract specifications are being used for the project, including Caltrans Standard Special Provision 36-4 (Residue Containing High Lead Concentration Paints).

Comment B5. Imported Soil
Response: In accordance with the contract specifications, the contractor is required to provide clean fill material.

Comment B6. Pesticides
Response: The project area has not been used for agriculture or weed abatement activities.

3. Letter C was submitted by the California Department of Fish and Wildlife (CDFW) and includes three comments.

Comment C1. Bats
Response: Slab bridge structures are not bat friendly as they rarely provide habitat value unless there are deterioration hollows, expansion joints, or other similar features that provide day roost crevices or hollows. The existing bridges are continuous reinforced concrete slab bridges with no joints and they do not provide bat habitat. Numerous engineering and biological bridge inspections have confirmed the lack of habitat and lack of bat presence at the project location.

Comment C2. Permit and Vegetation Replanting Concurrence
Response: Comment noted.

Comment C3. Trenching
Response: The City of Redding construction standards require all trenches be covered securely at the end of each work day to ensure safety, and pipes are inspected prior to modification or movement.
The State Clearinghouse would like to inform you that our office will be transitioning from providing a hard copy of acknowledging the close of review period on your project to electronic mail system.

Please visit: https://ceqanet.opr.ca.gov/2020049034 for full details about your project and if any state agencies submitted comments by close of review period (note: any state agencies in bold, submitted comments and are available).

This email acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act.

Please email the State Clearinghouse at state.clearinghouse@opr.ca.gov for any questions regarding the environmental review process. If you have a question about the above-named project, please refer to the ten-digit State Clearinghouse number when contacting this office.

Justin Le | Student Assistant
Governor’s Office of Planning and Research
State Clearinghouse Unit
1400 10th Street, Room 113
Sacramento, CA 95814
(916) 445-0613
April 22, 2020

Ms. Amber Kelly  
City of Redding  
777 Cypress Avenue  
Redding, California 96001  
akelley@cityofredding.org

MITIGATED NEGATIVE DECLARATION FOR EASTSIDE ROAD AND WESTSIDE ROAD BRIDGES REPLACEMENT PROJECT – DATED APRIL 2020 (STATE CLEARINGHOUSE NUMBER: 2020049034)

Dear Ms. Kelley:

The Department of Toxic Substances Control (DTSC) received a Mitigated Negative Declaration (MND) for Eastside Road and Westside Road Bridges Replacement Project. The proposed Project would replace the existing bridges over Canyon Hollow Creek with two new two-lane cast-in-place concrete slab bridges. The proposed structures will provide two 12-foot travel lanes, 4 to 8-foot shoulders, and a 6-foot wide sidewalk. The approach roadways will be reconstructed to conform to the new bridges. The Project also includes underground utility relocation, sidewalk extension, storm drain modification, paving, striping, and sign installation. Construction of both bridges will be staged to allow a single lane of alternating traffic, controlled by temporary signals. Most work would occur within the City right of way; however, sliver acquisitions and easements may be required.

DTSC recommends that the following issues be evaluated in the MND Hazards and Hazardous Materials section:

1. The MND should acknowledge the potential for historic or future activities on or near the project site to result in the release of hazardous wastes/substances on the project site. In instances in which releases have occurred or may occur, further studies should be carried out to delineate the nature and extent of the contamination, and the potential threat to public health and/or the environment should be evaluated. The MND should also identify the mechanism(s) to initiate any required investigation and/or remediation and the government agency who will be responsible for providing appropriate regulatory oversight.
2. Refiners in the United States started adding lead compounds to gasoline in the 1920s in order to boost octane levels and improve engine performance. This practice did not officially end until 1992 when lead was banned as a fuel additive in California. Tailpipe emissions from automobiles using leaded gasoline contained lead and resulted in aerially deposited lead (ADL) being deposited in and along roadways throughout the state. ADL-contaminated soils still exist along roadways and medians and can also be found underneath some existing road surfaces due to past construction activities. Due to the potential for ADL-contaminated soil DTSC, recommends collecting soil samples for lead analysis prior to performing any intrusive activities for the project described in the MND.

3. If any sites within the project area or sites located within the vicinity of the project have been used or are suspected of having been used for mining activities, proper investigation for mine waste should be discussed in the MND. DTSC recommends that any project sites with current and/or former mining operations onsite or in the project site area should be evaluated for mine waste according to DTSC’s 1998 Abandoned Mine Land Mines Preliminary Assessment Handbook (https://dtsc.ca.gov/wp-content/uploads/sites/31/2018/11/aml_handbook.pdf).

4. If buildings or other structures are to be demolished on any project sites included in the proposed project, surveys should be conducted for the presence of lead-based paints or products, mercury, asbestos containing materials, and polychlorinated biphenyl caulk. Removal, demolition and disposal of any of the above-mentioned chemicals should be conducted in compliance with California environmental regulations and policies. In addition, sampling near current and/or former buildings should be conducted in accordance with DTSC’s 2006 Interim Guidance Evaluation of School Sites with Potential Contamination from Lead Based Paint, Termiticides, and Electrical Transformers (https://dtsc.ca.gov/wpcontent/uploads/sites/31/2018/09/Guidance_Lead_Contamination_050118.pdf).

5. If any projects initiated as part of the proposed project require the importation of soil to backfill any excavated areas, proper sampling should be conducted to ensure that the imported soil is free of contamination. DTSC recommends the imported materials be characterized according to DTSC’s 2001 Information Advisory Clean Imported Fill Material (https://dtsc.ca.gov/wp-content/uploads/sites/31/2018/09/SMP_FS_Cleanfill-Schools.pdf).

6. If any sites included as part of the proposed project have been used for agricultural, weed abatement or related activities, proper investigation for organochlorinated pesticides should be discussed in the MND. DTSC recommends the current and former agricultural lands be evaluated in accordance with DTSC’s 2008 Interim Guidance for Sampling Agricultural Properties (Third Revision) (https://dtsc.ca.gov/wp-content/uploads/sites/31/2018/09/Ag-Guidance-Rev-3-August-7-2008-2.pdf).
DTSC appreciates the opportunity to comment on the MND. Should you need any assistance with an environmental investigation, please submit a request for Lead Agency Oversight Application, which can be found at: https://dtsc.ca.gov/wp-content/uploads/sites/31/2018/09/VCP_App-1460.doc. Additional information regarding voluntary agreements with DTSC can be found at: https://dtsc.ca.gov/brownfields/.

If you have any questions, please contact me at (916) 255-3710 or via email at Gavin.McCreary@dtsc.ca.gov.

Sincerely,

Gavin McCreary
Project Manager
Site Evaluation and Remediation Unit
Site Mitigation and Restoration Program
Department of Toxic Substances Control

cc: (via email)

Governor’s Office of Planning and Research
State Clearinghouse
State.Clearinghouse@opr.ca.gov

Ms. Lora Jameson, Chief
Site Evaluation and Remediation Unit
Department of Toxic Substances Control
Lora.Jameson@dtsc.ca.gov

Mr. Dave Kereazis
Office of Planning & Environmental Analysis
Department of Toxic Substances Control
Dave.Kereazis@dtsc.ca.gov
May 13, 2020

Amber Kelley, Environmental Compliance Manager
City of Redding
Public Works Department
777 Cypress Avenue
Redding, CA 96001

Subject: Review of the Mitigated Negative Declaration for the Eastside Road and Westside Road Bridge Replacement Project, State Clearinghouse Number 2020049034, Anderson, Shasta County

Dear Amber Kelley:

The California Department of Fish and Wildlife (Department) has reviewed the Mitigated Negative Declaration (MND) dated April 2020, for the above-referenced project (Project). As a trustee for the State’s fish and wildlife resources, the Department has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants and their habitat. As a responsible agency, the Department administers the California Endangered Species Act and other provisions of the Fish and Game Code that conserve the State’s fish and wildlife public trust resources. The Department offers the following comments and recommendations on this Project in our role as a trustee and responsible agency pursuant to the California Environmental Quality Act, California Public Resources Code section 21000 et seq.

Project Description

The Project as proposed is to replace the Eastside Road Bridge (Bridge No. 06C0085) and the Westside Road Bridge (Bridge No. 06C0071) over Canyon Hollow Creek. The existing Eastside Road Bridge will be replaced with a new two-lane, two-span cast-in-place reinforced concrete slab bridge. The existing Westside Road Bridge will be replaced with a new two-lane, three-span cast-in-place reinforced concrete slab bridge. In addition to replacing the bridges, work will also include extending the sidewalk along some approaches, storm drain modification, paving, striping, and sign installation. PG&E gas lines, City of Redding water lines, and AT&T underground phone and fiber optic lines will require relocation with trench excavation depths up to 12 feet deep. Two staging areas will be used, the first within a disturbed dirt area located at the northeast quadrant of the Eastside Road Bridge and the second in a paved section of abandoned roadway located 130-feet north of the Westside Road Bridge.
Comments and Recommendations

The Department has the following recommendations and comments as they pertain to biological resources.

**Bats**

The Natural Environment Study dated January 2020 and prepared by Dokken Engineering, states that no western red bats (*Lasiurus blossevillii*) were observed during the site visit on November 30, 2017, and there was no habitat for other special status bat species present onsite. A focused bat survey was not conducted.

Mitigation Measure MM-5 states that bat surveys will be conducted within seven days prior to the start of Project activity if large trees will be removed during the bat maternity season. It goes on to state if the species is discovered during pre-construction surveys, the City will contact the Department to develop avoidance and minimization measures. There is no discussion about surveying the bridge structures.

Bridges are well documented as providing important maternity and hibernacula roost habitat. According to Caltrans’ *Bat and Bridges Technical Bulletin*, 93 percent of California’s rare bat species either use or are likely to use bridges, and 18 of California’s 24 bat species are documented as using bridges\(^1\).

In addition to protecting bats as discussed in MM-5, both the maternity and hibernacula season must be considered. Removal or disturbance of a roost structure during either of these seasons could cause significant impacts to bats as a colony could consist of the entire local population of a species and impacts may lead to high mortality. The availability of suitable roosting habitat is considered a limiting factor for western bat populations. Roost site suitability is often based on a narrow range of suitable temperatures, relative humidity, physical dimensions, etc., and many species exhibit high roost site fidelity.

In order to minimize impacts to roosting bats, the Department recommends the completion of habitat assessments of impacted bridges and large trees to determine if roosting habitat is present well in advance of the start of Project activities. These assessments should be conducted by a biologist with experience surveying for bat roost habitat and knowledge of the ecology of local bat species. Different species may require different mitigation strategies and factors beyond the roost type, such as the rarity of the species and the sensitivity of the species to disturbance, must be considered.

Presence of roosting bats may require additional focused surveys to determine species use, seasonal use patterns, and roost type. Habitat assessments conducted prior to the start of Project activities will allow for time to determine potential impacts to roosting

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bats and develop effective avoidance or mitigation measures and will also reduce the chance for Project delays.

**Comment C2**

*Permitting and Mitigation*

The MND states that the project applicant will obtain a 1602 Lake or Streambed Alteration Agreement along with other necessary permits. The MND also states that riparian vegetation will be replanted at a 3:1 ratio. The Department concurs with this mitigation ratio for impacts to riparian vegetation. A revegetation plan should be developed and include success criteria and a list of native plants proposed to be used. The revegetation plan should be reviewed and approved by the Department.

**Comment C3**

*Trenching*

According to the MND, trenching to a depth of 12 feet will be required to relocate PG&E gas lines, City of Redding water lines, and AT&T underground phone and fiber optic lines. If the trench remains open at the end of the workday, it should be covered securely, or a ramp should be provided in the trench to prevent wildlife entrapment. If pipes are left out onsite, they should be inspected for animals prior to burying, capping, moving or filling. The Department recommends a mitigation measure be developed and included in the final MND.

If you have any questions, please contact Amy Henderson, Senior Environmental Scientist, at (530) 225-2779, or by e-mail at Amy.Henderson@wildlife.ca.gov.

Sincerely,

Curt Babcock
Habitat Conservation Program Manager

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akelley@cityofredding.org

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Amy Henderson
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