DRAFT

INITIAL STUDY/
MITIGATED NEGATIVE DECLARATION

SPORTS PARK DRIVE PEDESTRIAN
OVERCROSSING PROJECT
WOODLAND, CALIFORNIA

EA: 03-1J690
EFIS: 0321000047

November 2020
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MITIGATED NEGATIVE DECLARATION

SPORTS PARK DRIVE PEDESTRIAN OVERCROSSING
WOODLAND, CALIFORNIA

EA: 03-1J690
EFIS: 0321000047

Submitted to:
City of Woodland
Community Development Department
300 First Street
Woodland, California 95695

Prepared by:
LSA
201 Creekside Ridge Court, Suite 250
Roseville, California 95678
(916) 772-7450

Project No. MKT1708

November 2020
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<thead>
<tr>
<th>Abbreviation</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>AB</td>
<td>Assembly Bill</td>
</tr>
<tr>
<td>ADL</td>
<td>Aerially Deposited Lead</td>
</tr>
<tr>
<td>APE</td>
<td>Area of Potential Effects</td>
</tr>
<tr>
<td>AQAP</td>
<td>Air Quality Attainment Plans</td>
</tr>
<tr>
<td>ARB</td>
<td>Air Resources Board</td>
</tr>
<tr>
<td>ASR</td>
<td>Aquifer Storage and Recovery</td>
</tr>
<tr>
<td>B.P.</td>
<td>Before Present</td>
</tr>
<tr>
<td>BMP</td>
<td>best management practices</td>
</tr>
<tr>
<td>BSA</td>
<td>Biological Study Area</td>
</tr>
<tr>
<td>CAP</td>
<td>Climate Action Plan</td>
</tr>
<tr>
<td>CDFW</td>
<td>California Department of Fish and Wildlife</td>
</tr>
<tr>
<td>CEQA</td>
<td>California Environmental Quality Act</td>
</tr>
<tr>
<td>CH₄</td>
<td>Methane</td>
</tr>
<tr>
<td>CNDDDB</td>
<td>California Natural Diversity Database</td>
</tr>
<tr>
<td>CNPS</td>
<td>California Native Plant Society</td>
</tr>
<tr>
<td>CO</td>
<td>carbon monoxide</td>
</tr>
<tr>
<td>CO₂</td>
<td>carbon dioxide</td>
</tr>
<tr>
<td>CO₂e</td>
<td>equivalent carbon dioxide</td>
</tr>
<tr>
<td>CVRWQCB</td>
<td>Central Valley Regional Water Quality Control Board</td>
</tr>
<tr>
<td>dB</td>
<td>decibels</td>
</tr>
<tr>
<td>dBA</td>
<td>A-weighted decibels</td>
</tr>
<tr>
<td>EIR</td>
<td>Environmental Impact Report</td>
</tr>
<tr>
<td>EPA</td>
<td>Environmental Protection Agency</td>
</tr>
<tr>
<td>FEMA</td>
<td>Federal Emergency Management Agency</td>
</tr>
<tr>
<td>FHWA</td>
<td>Federal Highway Administration</td>
</tr>
<tr>
<td>FIRM</td>
<td>Flood Insurance Rate Maps</td>
</tr>
<tr>
<td>FMMP</td>
<td>Farmland Mapping and Monitoring Program</td>
</tr>
<tr>
<td>FTA</td>
<td>Federal Transit Administration</td>
</tr>
<tr>
<td>GHG</td>
<td>greenhouse gases</td>
</tr>
<tr>
<td>GWP</td>
<td>Global Warming Potential</td>
</tr>
<tr>
<td>HCP/NCCP</td>
<td>Habitat Conservation Plan/Natural Communities Conservation Plan</td>
</tr>
<tr>
<td>HFC</td>
<td>Hydrofluorocarbons</td>
</tr>
<tr>
<td>Lₘₐₓ</td>
<td>maximum instantaneous noise level</td>
</tr>
<tr>
<td>LOS</td>
<td>level of service</td>
</tr>
<tr>
<td>mgd</td>
<td>million gallons per day</td>
</tr>
<tr>
<td>MMT</td>
<td>million metric tons</td>
</tr>
<tr>
<td>N₂O</td>
<td>Nitrous Oxide</td>
</tr>
</tbody>
</table>
NAAQS  national ambient air quality standards
NAHC  Native American Heritage Commission
NOA  Naturally Occurring Asbestos
NOx  nitrous oxides
NPDES  National Pollution Discharge Elimination System
NRCS  Natural Resources Conservation Service
NWIC  Northwest Information Center
PM10  particulate matter less than 10 microns in diameter (but larger than 2.5 microns)
PM2.5  particulate matter less than 2.5 microns in diameter
PPV  peak particle velocity
RMS  root-mean-square
Roadmod  Road Construction Emissions Model
ROG  reactive organic gases
SF6  Sulfur Hexafluoride
SIP  State Implementation Plan
SMAQMD  Sacramento Metropolitan Air Quality Management District
SPCP  Spill Prevention and Countermeasure Plan
SR  State Route
SSSMP  Sanitary Sewer System Management Plan
SWPPP  Stormwater Pollution Prevention Plan
TAC  toxic air contaminants
U.S.  United States
USFWS  United States Fish and Wildlife Service
USGS  United States Geological Survey
VdB  vibration velocity decibels
YSAQMD  Yolo-Solano Air Quality Management District
1.0 PROJECT INFORMATION

1. **Project Title:** Sports Park Drive Pedestrian Overcrossing

2. **Lead Agency Name and Address:**
   City of Woodland
   Community Development Department
   300 First Street
   Woodland, California 95695

3. **Contact Person and Phone Number:**
   Sara Andreotti
   Engineering Tech II
   City of Woodland Community Development
   (530) 661-5951

4. **Project Location:** The project site is located on the southern edge of the City of Woodland in Yolo County, California, approximately 0.5 miles south of the Gibson Road/State Route (SR) 113 interchange. The project is located along the city limits, and straddles the city and county. The Project boundary, which includes temporary and permanent impact areas (the Project footprint) is approximately 19.14 acres in size. **Figure 1: Regional Location** and **Figure 2: Project Location** shows the location of the project site on a regional and local scale, respectively, while **Figure 3: Project Site** shows details of the project site.

5. **Project Sponsor’s Name and Address:**
   City of Woodland
   Community Development Department
   300 First Street
   Woodland, California 95695

6. **General Plan Designation:** The project site is located along the southern City of Woodland boundary, within the City’s Sphere of Influence and is included within the General Plan 2035 Land Use Map. The City of Woodland 2035 General Plan Land Use Map identifies the project site with Specific Plan and Low Density Residential designations. Land to the north of the project site, to the west of SR-113 is designated as Public/Quasi Public. Yolo County designates the project site as Agriculture in the Yolo County 2030 General Plan.

7. **Zoning:** The project site is designated by Yolo County as Agricultural Intensive. Land to the north of the project site within the City of Woodland is designated as Spring Lake Specific Plan (SLSP).

8. **Description of Project:** The City proposes to develop a pedestrian path from the intersection of Matmor Road and Sports Park Drive, cross over SR-113, and connect to a planned 8-acre park and Harry Lorenzo Avenue east of the project site. The pedestrian path will connect new and planned development on the east side of SR-113 with a school, a sports park and existing residential facilities on the west side of SR-113.
9. **Other Public Agencies Whose Approval is Required (i.e., permits, financial approval, or participation agreements):** Central Valley Regional Water Quality Control Board, Yolo Solano Air Quality Management District, Caltrans District 3, Yolo Habitat Conservancy.

10. **Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resource 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 with tribal representatives has been conducted. Of the five Native American Tribe representatives contacted, all but one responded. These representatives stated that their tribes had no comments regarding the project and no further consultation was requested.
FIGURE 1

Sports Park Drive Pedestrian Overcrossing in Woodland, Yolo County, California
LSA Project No. MKT1708
Regional Location

SOURCE: ESRI Imagery (4/2008)
I:\MKT1708\GIS\Reports\ISMND\ISMND_Fig1_Regional_loc.mxd (1/18/2018)
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FIGURE 2

Sports Park Drive Pedestrian Overcrossing
in Woodland, Yolo County, California
LSA Project No. MKT1708

Project Location

Legend
- Project Area - (19.14 ac)
- USGS 7.5' Quad Boundaries

SOURCE: NAIP Aerial Imagery (7/2016)
\roc12\images\MKT1708\GIS\Reports\ISMND\ISMND_Fig2_Pnj_loc_aerial.mxd (6/22/2018)
Sports Park Drive Pedestrian Overcrossing Project
in Woodland, Yolo County, California
LSA Project No. MKT1708

LEGEND
- Biological Study Area - (19.14 ac)
- Parcel
- Proposed Right of Way
- Temporary Construction Easement
- Future work
- Fill

FIGURE 3

SOURCE: City of Woodland Aerial Imagery (4/2018); Design - Mark Thomas (05/2018); *County of Yolo 2020 parcels modified based on data provided by Mark Thomas.

\( \text{Project Site} \)
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2.0 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” as indicated by the checklist in Chapter 3.0.

☐ Aesthetics  ☑ Biological Resources  ☑ Cultural Resources  ☑ Air Quality
☐ Agriculture and Forestry Resources  ☑ Geology/Soils  ☑ Greenhouse Gas Emissions  ☑ Energy
☐ Air Quality  ☑ Agriculture and Forestry Resources  ☑ Cultural Resources  ☑ Air Quality
☐ Agriculture and Forestry Resources  ☑ Geology/Soils  ☑ Greenhouse Gas Emissions  ☑ Energy

2.1 DETERMINATION

On the basis of this initial evaluation:

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

☑ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because 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 ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature
Sara Andreotti, Engineering Assistant

11/19/2020
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### 3.1 AESTHETICS

<table>
<thead>
<tr>
<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>
</table>

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

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

#### 3.1.1 Environmental Setting

The project area consists of undeveloped land, agricultural land, and SR-113. Surrounding land uses on the west side of SR-113 include Woodland Christian High School to the north, single family detached residential units to the northwest, agricultural land immediately west, and Woodland Sports Park further west. Surrounding land uses on the east side of SR-113 include the Calwest III and IV developments, part of the Spring Lake Specific Plan. These developments are entitled and development of residential units, located directly northeast of the project boundary, commenced in early summer 2019, prior to development of the proposed Project. Agricultural lands are located southeast of the project site.

The visual character of the project area is dominated by SR-113, nearby urban development, and agricultural uses. The project area is approximately 0.5 miles south of the Gibson Road/SR-113 interchange and is located at the southern edge of urban development within the City of Woodland to the north. The topography of the area is flat on the western side of SR-113, and flat with agricultural fields on the eastern side of SR-113. Trees are sparsely located along both sides of SR-113. Limited views of the Northern Coast Range can be seen in the distance to the west.

The City of Woodland General Plan Environmental Impact Report (EIR) identifies scenic resources within the Downtown Woodland Historic District, including many structures that are listed or eligible for listing on the National Register of Historic Places. However, the Downtown District is not located in the immediate project vicinity and cannot be viewed from the project site.
No designated state scenic highways or locally designated scenic roadways are within or adjacent to the project site (City of Woodland 2017a).

3.1.2 Impact Analysis

a. Would the project have a substantial effect on a scenic vista?

NO IMPACT. The project site is located in an area where rural landscapes abut urban development. Agricultural lands are visible from the project site, but urban development is also located immediately adjacent to the project site. While limited views of the North Coast Range can be seen from the project site, the proposed project includes the development of a pedestrian overcrossing that would not substantially block views of the mountains from outside the project site. From the height of the proposed project, in fact, pedestrians may be afforded new, improved views to the mountains and the surrounding landscape, introducing a scenic vista for users. No existing scenic vistas are within the proposed project area. Therefore, the proposed project would have no impacts on scenic vistas.

b. Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

NO IMPACT. The project site is located on the southern boundary of the City of Woodland within Yolo County. No designated state scenic highways or locally designated scenic roadways are within or adjacent to the project site. Therefore, the proposed project would have no impacts on scenic resources within a state scenic highway.

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

LESS THAN SIGNIFICANT IMPACT. The project would involve development of a new pedestrian overcrossing over SR-113. The project would result in vegetation removal and could result in minimal tree removal within the project area, as well as the temporary presence of construction equipment, worker vehicles, fencing, and stockpiled materials. The proposed pedestrian overcrossing would be a minor visual element in comparison to the Gibson Road/SR-113 interchange located approximately 0.5 miles to the north. Despite some temporary changes in visual character due to construction and the addition of a new structure over SR-113, once completed, the project would result in a minimal change in visual character since urban development already exists just outside the project site. The pedestrian overcrossing would be designed and constructed consistent with the City’s design standards, would complement other structures north of the project area, and would not conflict with any zoning or other regulations governing scenic quality. Therefore, the project will not substantially degrade existing visual character or quality of the site and its surroundings, and impacts would be less than significant.
d. **Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?**

**LESS THAN SIGNIFICANT IMPACT.** The proposed project is located in an area where rural landscapes meet urban development. Street lamps are located sporadically along SR-113 in the project vicinity, and are located along Sports Park Drive to the northwest of the project site. The Woodland Sports Park to the west of the site also includes stadium lighting at the multi-use athletic fields, which provide a substantial lighting source in the project vicinity. Additionally, the Woodland Christian School contributes to the lighting sources in the project vicinity. The proposed project would introduce new sources of light along the overcrossing pathway. However, lighting included along the pathway would be downward-cast to avoid spillover, consistent with the City’s General Plan. Additionally, materials utilized on the bridge structure would not produce glare. Therefore, the project would not create new sources of substantial light or glare, which would adversely affect day or nighttime views in the area and impacts would be less than significant.
3.2 AGRICULTURE AND FORESTRY RESOURCES

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

<table>
<thead>
<tr>
<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>Would the project:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?</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>
</tr>
<tr>
<td>c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?</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>
</tr>
<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>

3.2.1 Environmental Setting

The California Department of Conservation Farmland Mapping and Monitoring Program (FMMP) produces maps and statistical data used for analyzing impacts on California’s agricultural resources based on soil information documented by the United States (U.S.) Department of Agriculture Natural Resources Conservation Service (NRCS). Agricultural land is rated by the NRCS according to soil quality and irrigation status. Lands with soils best suited for agricultural production are designated as Prime Farmland, Unique Farmland, and Farmland of Statewide Importance and are collectively known as Important Farmland. The FMMP maps are updated every two years with the use of a computer mapping system, aerial imagery, public review, and field reconnaissance. FMMP’s statistical and mapping information synchronizes with modern soil surveys developed by the U.S. Department of Agriculture. The FMMP designates land into the following categories within Yolo
County: Prime Farmland; Farmland of Statewide Importance; Unique Farmland; Farmland of Local Importance; Farmland of Local Potential; Grazing Land; Urban and Built-Up Land; Other Land; and, Water. The following provides definitions of each of these designations:

- **Prime Farmland** – Farmland with the best combination of physical and chemical features able to sustain long-term agricultural production. Prime Farmland has the soil quality, growing season, and moisture supply needed to produce sustained high yields. Lands designated as Prime Farmland must have been used for irrigated agricultural production at some time during the four years prior to the mapping date.

- **Farmland of Statewide Importance** – Farmland similar to Prime Farmland but with minor shortcomings, such as greater slopes or less ability to store soil moisture. Lands with a “Farmland of Statewide Importance” designation must have been used for irrigated agricultural production at some time during the four years prior to the mapping date.

- **Unique Farmland** – Farmland of lesser quality soils used for the production of the State’s leading agricultural crops. This land is usually irrigated, but may include non-irrigated orchards or vineyards as found in some climatic zones in California. Land must have been cropped at some time during the four years prior to the mapping date.

- **Farmland of Local Importance** – Land of importance to the local agricultural economy as determined by each county’s board of supervisors and a local advisory committee. In Yolo County, this land includes cultivated farmland having soils that meet the criteria for Prime or Statewide Importance, except that the land is not presently irrigated, which prevents its designation as Prime Farmland or Farmland of Statewide Importance, and other non-irrigated farmland.

- **Farmland of Local Potential** – Prime or Statewide soils which are presently not irrigated or cultivated.

- **Grazing Land** – Land on which the existing vegetation is suited to the grazing of livestock. This category was developed in cooperation with the California Cattleman’s Association, University of California Cooperative Extension, and other groups interested in the extent of grazing activities.

- **Urban and Built-Up Land** – Land occupied by structures with a building density of at least 1 unit to 1.5 acres, or approximately 6 structures to a 10-acre parcel. This land is used for residential, industrial, commercial, construction, institutional, public administration, railroad and other transportation yards, cemeteries, airports, golf courses, sanitary landfills, sewage treatment, water control structures, and other developed purposes.

- **Other Land** – Land not included in any other mapping category. Common examples include low density rural developments; brush, timber, wetland, and riparian areas not suitable for livestock grazing; confined livestock, poultry or aquaculture facilities; strip mines, borrow pits; and water
bodies smaller than forty acres. Vacant and nonagricultural land surrounded on all sides by urban development and greater than 40 acres is mapped under this designation.

- **Water** – Perennial water bodies with an extent of at least 40 acres.

The most recent (2016) FMMP Yolo County Important Farmland Map designates the project site and surrounding area as Prime Farmland, Farmland of Local Potential, and Urban and Built-Up Land (Department of Conservation 2017). According to the Department of Conservation’s most recent Yolo County Williamson Act Map (2010/2011), no Williamson Act parcels are located in the vicinity of the project site (Department of Conservation 2012). Land uses within the project site are designated as Agriculture within Yolo County and designated as Low Density Residential and Specific Plan within the City of Woodland (City of Woodland 2018; Yolo County 2009). The only land within the project site that is currently cultivated, at the time of preparation of this document, is located on the eastern side of SR-113; this land is owned by a developer and is zoned Single Family Residential. Although not constructed at the time of preparation of this document, the Calwest III and IV developments, part of the Spring Lake Specific Plan, are northeast of the Project site. These developments are entitled and construction of residential units commenced in early summer 2019, prior to development of the proposed Project. No forest or timberland is located within or adjacent to the proposed project site.

### 3.2.2 Impact Analysis.

a. **Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?**

**LESS THAN SIGNIFICANT IMPACT.** The proposed project site would have permanent impacts to 0.88 acre of Prime Farmland and 0.50 acre of Farmland of Local Importance (a total of 1.38 acres of Important Farmland), per the 2016 FMMP mapping. These conversions to urban use would not change the zoning of the parcels, nor would the uses of the remainder of the parcels change as a result of the proposed project. According to the 2015 California Farmland Conversion Report, Yolo County had 250,695 acres of Prime Farmland and 58,134 acres of Farmland of Local Importance.

Per the City of Woodland 2035 General Plan and 2035 General Plan EIR, the proposed Project is located in Specific Plan 1B (SP-1B), and is within the 10-year Sphere of Influence and Urban Limit Line of the City. The City has established a policy (Policy 2.A.3) to mitigate for the loss of Important Farmland. Policy 2.A.3 Agricultural Mitigation states:

“For impacts to agriculture within the Urban Limit Line, require one acre to be permanently conserved for every acre converted to urban development (1:1 ratio). The farmland being conserved must be of the same Farmland Mapping and Monitoring Program type (Prime Farmland, Farmland of Statewide Importance, Unique Farmland, Farmland of Local Importance) as the farmland that is being converted, or of a type of higher quality, and the conserved farmland should be located outside of, but as close to the Woodland Urban Limit Line as possible.”
However, City projects are exempt from this policy and impacts represent less than .001% of existing Yolo County Farmland. Therefore, impacts are less than significant.

b. Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?

**NO IMPACT.** The part of the proposed project site in the City of Woodland is located in an area that is fully developed and is zoned as part of the Spring Lake Specific Plan. Within the Spring Lake Specific Plan, the surrounding parcels are zoned Schools, Fire, Yolo County, and Single Family Residential. The parcels to the southwest and southeast of the proposed project site, which are located in unincorporated Yolo County, are zoned Agricultural Intensive. The project would require partial acquisition of these agriculturally-zoned parcels for project implementation. However, acquisitions would not change the zoning or jurisdiction of the unincorporated Yolo County parcels, resulting in no conflicts with existing zoning for agricultural use. Additionally, no Williamson Act parcels are located in the project vicinity. Therefore, the project would not conflict with a Williamson Act contract. No impacts would occur.

c. Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))? 

**NO IMPACT.** No forest land or timberland is located within or adjacent to the project site. Therefore, the project would not conflict with existing zoning for, or cause rezoning of, forest land or timberland. No impacts would occur.

d. Would the project result in the loss of forest land or conversion of forestland to non-forest use?

**NO IMPACT.** The proposed project site does not contain forest land. Therefore, no impacts to forest land would occur.

e. Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

**NO IMPACT.** The proposed project would provide a pedestrian bridge over SR-113. No other development is associated with the proposed project, nor would the proposed project make any other changes in the existing environment. The proposed project would not convert existing farmland to other uses. Therefore, no impacts would occur.
### 3.3 AIR QUALITY

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

<table>
<thead>
<tr>
<th>Would the project:</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant with Mitigation</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>

#### 3.3.1 Environmental Setting

The proposed Project is within the jurisdiction of the Yolo-Solano Air Quality Management District (YSAQMD) and is part of the Sacramento Valley Air Basin, which is located between two mountain ranges to the east and the west and bordered to the north by mountains. Conducive to trapping air pollutants, the basin receives prevailing winds from the San Francisco Bay area to the southwest. Ambient air quality standards have been set in place to protect against adverse health impacts caused by air pollution. 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. Proposed projects within the YSAQMD must be consistent with all applicable air quality plans intended to bring the basin into attainment for all criteria pollutants, and below the YSAQMD significance thresholds of ozone precursor pollutants (i.e., reactive organic gases [ROG] and nitrous oxides [NOx]) and particulate matter less than 2.5 microns in diameter (PM$_{2.5}$), to have less than significant cumulative impacts. The six criteria pollutants are:

- Ozone
- Carbon monoxide (CO)
- Particulate matter (PM$_{10}$ and PM$_{2.5}$)
- Nitrous oxides
- Sulfur dioxide
- Lead

The Yolo County portion of the Sacramento Valley is under federal nonattainment status for ozone and fine particulate matter (PM$_{2.5}$), as well as State nonattainment status for ozone and coarse particulate matter less than 10 microns in diameter (but larger than 2.5 microns) (PM$_{10}$). Yolo
County is designated an attainment or unclassified area for all other State ambient air quality standards.

3.3.2 Impact Analysis

a. Would the project conflict with or obstruct implementation of the applicable air quality plan?

LESS THAN SIGNIFICANT IMPACT WITH MITIGATION INCORPORATED. The Project is located within the jurisdiction of the YSAQMD, which is part of the Sacramento Federal Non-Attainment Area as designated by the U.S. Environmental Protection Agency (EPA). Accordingly, the City of Woodland is included in the Sacramento Regional State Implementation Plan (SIP), prepared by the Sacramento Metropolitan Air Quality Management District (SMAQMD) in conjunction with the YSAQMD. The Air Quality Attainment Plans applicable to the Project site are the SMAQMD’s 8-hour Ozone Plan (SMAQMD 2013a) and PM$_{2.5}$ Implementation/Maintenance Plan (SMAQMD 2013b).

The 8-Hour Ozone Plan demonstrates how existing and new control strategies will provide the necessary future emission reductions to meet the federal Clean Air Act requirements for reasonable further progress and attainment of the 1997-1998 ozone national ambient air quality standards (NAAQS) for the Sacramento region. The PM$_{2.5}$ Plan shows that the region has met the redesignation requirements and requests that EPA redesignate the area to attainment. The plan also analyzes measures that were implemented to achieve attainment and that will provide for maintenance of the PM$_{2.5}$ NAAQS.

The following provides a discussion on potential construction and operational impacts to air quality due to implementation of the proposed Project.

Construction Impacts. During construction, short-term degradation of air quality may occur due to the release of particulate matter emissions (i.e., fugitive dust) generated by grading, hauling, and other activities. Emissions from construction equipment are also anticipated and would include CO, NO$_x$, ROG, directly emitted particulate matter (PM$_{2.5}$ and PM$_{10}$), and toxic air contaminants (TAC), such as diesel exhaust particulate matter.

Given the nature of the proposed Project and anticipated activities, daily emissions from construction equipment operation, vehicles transporting equipment and workers, and hauling materials would be minimal. These emissions would be temporary and limited to the immediate area around the Project site, and would not be anticipated to result in an exceedance of construction level thresholds established by the YSAQMD. Off-road equipment used at the Project site would be required to adhere to the statewide In-Use Off-Road Diesel-Fueled Fleets Regulation, including limits on idling of all construction equipment to five (5) minutes or less. Additionally, all portable equipment with internal combustion engines over 50 horsepower would obtain a District Permit to Operate or a valid statewide Portable Equipment Registration Program issued by the Air Resources Board.

Construction emissions were estimated for the Project using the Sacramento Metropolitan Air Quality Management District’s Road Construction Emissions Model, Version 8.1.0 (Roadmod) as recommended by the SMAQMD, and YSAQMD for linear construction projects. The Project would
include the import of approximately 16,000 cubic yards of soil on-haul, which was included in Roadmod. In addition, the construction equipment list provided to LSA was input into Roadmod. The construction schedule for all improvements was assumed to be 9 months, starting in 2021. Construction-related emissions are compared to the YSAQMD’s ROG, NOx, and PM10 thresholds in Table 1. As shown in Table 1, emissions of ROG, NOx, and PM10 would not be exceeded.

### Table 1: Project Construction Emissions

<table>
<thead>
<tr>
<th>Project Construction</th>
<th>ROG</th>
<th>NOx</th>
<th>PM10</th>
<th>PM2.5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grubbing/Land Clearing (pounds/day)</td>
<td>1.3</td>
<td>15.6</td>
<td>3.3</td>
<td>1.1</td>
</tr>
<tr>
<td>Grading/Excavation (pounds/day)</td>
<td>2.3</td>
<td>24.1</td>
<td>4.0</td>
<td>1.7</td>
</tr>
<tr>
<td>Drainage/Utilities/Sub-Grade/Structure (pounds/day)</td>
<td>2.8</td>
<td>27.0</td>
<td>4.2</td>
<td>1.9</td>
</tr>
<tr>
<td>Maximum Construction Emissions (pounds/day)</td>
<td>2.8</td>
<td>27.0</td>
<td>4.2</td>
<td>1.9</td>
</tr>
<tr>
<td>Total Construction Emissions (tons)</td>
<td>0.2</td>
<td>2.5</td>
<td>0.4</td>
<td>0.2</td>
</tr>
<tr>
<td>YSAQMD Thresholds of Significance (tons/year)</td>
<td>10.0</td>
<td>10.0</td>
<td>80.0</td>
<td>NA</td>
</tr>
</tbody>
</table>

| Exceed Threshold? | No | No | No | No |

Source: LSA (June 2018).

In addition to exhaust emissions, the effects of construction activities would include increased dust and locally elevated levels of particulate matter downwind of construction areas. According to the YSAQMD’s CEQA Handbook, even projects not exceeding district thresholds should implement best management practices to reduce fugitive dust emissions and avoid localized health impacts. Common measures include watering, chemical stabilization of soils or stockpiles, and reducing surface wind speeds with windbreaks. Implementation of Mitigation Measure AIR-1, as identified below, would ensure compliance with YSAQMD recommended best management practices for fugitive dust control and would reduce impacts to less than significant.

**Mitigation Measure AIR-1**: The City or construction contractor shall implement the following measures at the Project site:

- Water all active construction sites at least twice daily. Frequency shall be based on the type of operation, soil, and wind exposure.
- Haul trucks shall maintain at least 2 feet of freeboard;
- Cover all trucks hauling dirt, sand, or loose materials;
- Apply non-toxic binders (e.g., latex acrylic copolymer) to exposed areas after cut and fill operations and hydroseed area;
- Apply chemical soil stabilizers on inactive construction areas (disturbed lands within construction projects that are unused for at least four consecutive days);
- Plant vegetative ground cover in disturbed areas as soon as possible;
• Cover inactive storage piles; and
• Sweep streets if visible soil material is carried out from the construction site.

As indicated in Table 1, construction of the proposed Project would not exceed the emissions thresholds. Therefore, air quality impacts associated with construction of the proposed Project would be less than significant with mitigation incorporated.

Operational Impacts. Long-term air emission impacts are associated with stationary sources and mobile sources. Stationary source emissions typically result from the consumption of natural gas and electricity. Mobile source emissions typically result from vehicle trips and result in air pollutant emissions affecting the entire air basin. The proposed Project would construct a pedestrian overcrossing to connect new and planned development on the east side of SR-113 with a school, a sports park, and existing residential facilities on the west side of SR-113. Implementation of the proposed Project would create better access and a more pedestrian-friendly environment. The proposed Project would not result in a significant increase in the generation of vehicle trips that would increase air pollutant emissions. The Project would result in low levels of off-site emissions due to energy generation associated with lighting along the overcrossing. However, these emissions would be minimal and would not exceed the pollutant thresholds established by the YSAQMD. Therefore, the proposed Project would not be a significant source of operational emissions and this impact would be less than significant.

Localized CO Impacts. According to YSAQMD’s CEQA Handbook, a screening level approach, originally developed by the San Joaquin Valley Air Pollution Control District, can be used to estimate whether or not a project’s traffic impact would cause a potential CO hotspot at any given intersection. If either of the following criteria is true of any intersection affected by project traffic, then the project can be said to have the potential to create a violation of the CO standard. The criteria are as follows:

• If a traffic study prepared for a project indicates that the peak-hour level of service (LOS) on one or more streets or at one or more intersections in the vicinity of said project would be reduced to an unacceptable LOS (typically LOS E or F); or,

• A traffic study prepared for a project indicates that the said project would substantially worsen an already existing peak-hour LOS F on one or more streets or at one or more intersections in the project vicinity. “Substantially worsen” includes situations where delay would increase by 10 seconds or more when project-generated traffic is included.

As discussed above, the proposed Project would construct a new pedestrian overcrossing to connect new and planned development on the east side of SR-113 with a school, a sports park, and existing residential facilities on the west side of SR-113. Once operational, the proposed Project would not result in an increase in vehicle trips and, therefore, would not exceed the YSAQMD’s CO hotspot screening criteria.
With implementation of Mitigation Measure AIR-1, the proposed Project would result in less-than-significant construction-period and operational emissions. Therefore, the proposed Project supports the goals of the applicable Air Quality Attainment Plans (AQAP) and SIP and would not conflict with any measures identified in the plans or designed to bring the region into attainment. The proposed Project would not hinder the region from attaining the goals outlined in the AQAPs or SIP. Therefore, the proposed Project would not hinder or disrupt implementation of the applicable AQAPs or SIP.

b. Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

LESS THAN SIGNIFICANT IMPACT. CEQA defines a cumulative impact as two or more individual effects, which when considered together, are considerable or which compound or increase other environmental impacts. According to YSAQMD, project emissions that are not consistent with the AQAPs, SIP, or exceed District thresholds of significance will have a significant cumulative impact unless offset.

As described above in Section 3.3.2.a, construction and operation of the proposed Project would not conflict with applicable AQAPs or SIP, or result in significant levels of criteria pollutants or pollutant precursors. Therefore, the Project would not result in a cumulatively considerable contribution to regional air quality impacts and this impact would be less than significant.

c. Would the project expose sensitive receptors to substantial pollutant concentrations?

LESS THAN SIGNIFICANT IMPACT. According to the YSAQMD’s CEQA Handbook (Yolo-Solano AQMD 2007), a sensitive receptor is generically defined as a location where human populations, especially children, seniors, or sick persons are found, and there is a reasonable expectation of continuous human exposure according to the averaging period for the AAQS (e.g., 24-hour, 8-hour, 1-hour). Examples of sensitive receptors include residences, hospitals, and schools.

In 1998, the Air Resources Board (ARB) identified particulate matter from diesel-fueled engines as a TAC. The ARB has completed a risk management process that identifies potential cancer risks for a range of activities using diesel-fueled engines (California Air Resources Board 2000). High volume freeways, stationary diesel engines, and facilities attracting heavy and constant diesel vehicle traffic (e.g. distribution centers and truck stops) were identified as having the highest associated risk.

Health risks from TACs are a function of both concentration and duration of exposure. Exposure of receptors to substantial concentrations of TACs and PM$_{2.5}$ could occur from the following situations:

- Sitting a new TAC and/or PM$_{2.5}$ source (e.g., diesel generator, truck distribution center, freeway) near existing or planned receptors; and,

- Sitting a new receptor near an existing source of TAC and/or PM$_{2.5}$ emissions.
The nearest existing sensitive receptors include the single-family residents along Hoffman Street, located approximately 330 feet west of the overcrossing. In addition, Woodland Christian School is located approximately 475 feet north of the overcrossing, and the new Calwest III and IV developments, part of the Spring Lake Specific Plan, commenced construction in summer 2019 and are located approximately 150 feet north of the overcrossing. As described in Section 3.3.2.b. above, construction of the proposed Project may expose surrounding sensitive receptors to airborne particulates, as well as a small quantity of construction equipment pollutants (i.e., usually diesel-fueled vehicles and equipment). However, given the short duration of construction activities relative to the 70-year health risk exposure analysis period and the minimal nature of construction activities for the proposed Project, these sensitive receptors would not be exposed to substantial pollutant concentrations. In addition, construction contractors would be required to implement best management practices required in Mitigation Measure AIR-1, which would reduce construction emissions. Therefore, health risks associated with construction of the proposed Project would be less than significant.

In addition, once operational, the Project would not increase emissions of TAC or expose new sensitive receptors to TAC or PM$_{2.5}$ emissions. Therefore, health risks associated with operation of the proposed Project would also be less than significant.

d. Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

LESS THAN SIGNIFICANT IMPACT. According to the YSAQMD CEQA Handbook, common types of facilities that are known producers of odors include wastewater treatment facilities, chemical manufacturing, sanitary landfills, fiberglass manufacturing, transfer stations, painting/coating operations (e.g. auto body shops), composting facilities, petroleum refineries, feed lots/dairies, asphalt batch plants, and rendering plants. The proposed Project would not include any of these types of land uses. However, during Project construction, some odors may be present due to diesel exhaust. However, these odors would be temporary and limited to the construction period. The project is not anticipated to result in any other emissions. Therefore, the proposed Project would not result in emissions adversely affecting a substantial number of people, and this impact would be less than significant.
3.4 BIOLOGICAL RESOURCES

<table>
<thead>
<tr>
<th>Would the project:</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant with Mitigation</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 Game 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 or regional plans, policies, regulations or by the California Department of Fish and Game 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>

3.4.1 Environmental Setting

LSA conducted a biological resources study for the proposed project to assess the site for compliance with the CEQA review process. The following summarizes the biological setting in the vicinity of the proposed project.

Methods

For purposes of the biological analysis, a Biological Study Area (BSA) was established. The BSA, totaling 19.14 acres, within the Central Valley is characterized by large flat areas of agricultural farmland and development. The BSA is approximately 0.51 mile in length and extends from County Road 101/Harry Lorenzo Avenue in the east to the corner of Sports Parks Drive and Matmor Road in the west; the BSA is bisected north-south by SR-113. The BSA includes lands beyond the proposed project footprint that could potentially be affected by project construction and/or were determined necessary to inventory in order to perform an adequate analysis of impacts to biological resources.
A list of sensitive wildlife and plant species potentially occurring within the BSA was compiled to evaluate the potential impacts resulting from project construction. Sources used to compile the list include the California Natural Diversity Database (CNDDB), the U.S. Fish and Wildlife Service (USFWS) online special-status species list, and the California Native Plant Society (CNPS) Online Edition. The species lists obtained from the CNDDB, CNPS, and USFWS were reviewed to determine which species could potentially occur in the project area. Individual lists are included in Appendix B.

The BSA falls within the coverage area of the Yolo Habitat Conservation Plan/Natural Communities Conservation Plan (HCP/NCCP), which was implemented in January 2019. The Yolo HCP/NCCP covers activities that would have an adverse impact on any of the twelve covered species and provides incidental take coverage from the USFWS and California Department of Fish and Wildlife (CDFW).

Naturally occurring vegetation in the BSA was classified according to A Manual of California Vegetation, Second Edition (Sawyer, Keeler-Wolf, and Evans 2008), as appropriate. Managed, disturbed, or developed areas were classified according to their dominant plant species. The names of the plant species are consistent with The Jepson Manual: Vascular Plants of California, Second Edition (Baldwin, B. G., et. al., editors 2012).

LSA conducted general field surveys and a jurisdictional delineation within the BSA on December 5, 2017. A follow-up visit to complete the jurisdictional delineation was conducted by LSA on December 13, 2017.

Results

Three habitat types were identified in the BSA: row crops, ruderal/disturbed, and developed. No natural communities occur in the BSA.

Row crops, totaling 7.25 acres, are located in the southern portion of the BSA on both sides of SR-113. Current crops appear to be winter wheat (Triticum aestivum).

Ruderal/disturbed areas, totaling 6.13 acres, include areas adjacent to roadways, ditch channels, and areas associated with the housing development north of Corporate Limit Road, which runs east-west through the BSA east of SR-113. Representative species observed in these areas include yellow star-thistle (Centaurea solstitialis), Italian thistle (Carduus pycnocephalus), milk thistle (Silybum marianum), and annual fireweed (Epilobium brachycarpum).

Developed areas, totaling 5.76 acres, include established roadways (SR-113, County Road 101, and Sports Park Drive), sidewalks, parking areas, and the active construction site associated with the housing development north of Corporate Limit Road. These areas are characterized by little to no vegetation.

Special-status wildlife species that may occur in the BSA include western burrowing owl (Athene cunicularia), a California Species of Special Concern, and Swainson’s hawk (Buteo swainsoni), which is listed as threatened under the California Endangered Species Act. These species are covered by...
the Yolo HCP/NCCP. No special-status plants are expected to occur in the BSA, and the BSA is not suitable habitat for special-status bats or fish.

Aquatic resources in the BSA are limited to a series of ephemeral, culverted drainage ditches, totaling 0.64 acre. All ditches within the BSA are composed entirely of non-wetland waters; no potential wetlands are associated with these features.

3.4.2 Impact Analysis

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

Less Than Significant with Mitigation. As described above, no State or federally listed or proposed plant species occur in the BSA; therefore, no special-status plants would be affected by implementation of the proposed project. However, the proposed project has the potential to affect two special-status animal species that could occur within the BSA. Potential impacts to these special-status species are described below.

**Western Burrowing Owl**

Suitable denning and foraging habitat is present in the ruderal/disturbed areas within the BSA, specifically along the slopes of the drainage ditches. Numerous California ground squirrel (*Otospermophilus beecheyi*) burrow complexes were observed in these areas during the December 5 and 13 site surveys. Burrowing owl sign (pellets and whitewash) were observed in front of a burrow complex east of SR-113.

The proposed project would result in impacts to suitable western burrowing owl habitat as a result of project construction. Permanent impacts, totaling 0.08 acre, and temporary impacts, totaling 0.52 acre, would occur as a result of project construction. Implementation of Mitigation Measure BIO-1 would reduce potential impacts to western burrowing owls.

**Mitigation Measure BIO-1:** The following measures shall be implemented to reduce potential impacts to western burrowing owls. These measures are consistent with AMM18, Minimize Take and Adverse Effects on Western Burrowing Owl in the Yolo HCP/NCCP:

- Preconstruction surveys for western burrowing owls shall be conducted by a qualified biologist in accordance with the CDFW’s 2012 Staff Report on Burrowing Owl Mitigation, and shall occur no more than 3 days prior to the start of ground disturbing activities in areas having suitable burrows. Time lapses between ground disturbing activities will trigger subsequent surveys prior to ground disturbance.
• If burrowing owls are identified during the non-breeding season, passive exclusion shall be implemented during the per CDFW’s 2012 Staff Report on Burrowing Owl Mitigation. This may include the installation of one-way doors in burrow entrances by a qualified biologist.

• If any occupied burrows are identified during the breeding season (February 1 to August 31), the active burrow shall be avoided within a set disturbance buffer consistent with the 2012 Staff Report on Burrowing Owl Mitigation during the remainder of the breeding season or while the nest is occupied. Construction may occur inside of the disturbance buffer if an avoidance and minimization plan is approved by the Yolo Habitat Conservancy and CDFW prior to project construction and contains the following criteria:

  1 – A qualified biologist monitors the owls for a minimum of 3 days prior to construction to determine baseline nesting and foraging behavior.

  2 – The same qualified biologist monitors the owls during construction and finds no change in owl nesting and foraging behavior in response to construction activities.

  3 – If the qualified biologist identifies a change in owl nesting behavior as a result of construction activities, the qualified biologist shall have the authority to stop work within the disturbance buffer. This information shall be reported to the Yolo Habitat Conservancy and CDFW within 24 hours. Construction shall not resume during the remainder of the breeding season or while the nest is occupied.

  4 – If monitoring indicates that the nest has been abandoned prior to the end of besting season, the project proponent may remove the disturbance buffer with the concurrence of CDFW.

**Swainson’s Hawk**

No trees within the BSA would be considered suitable habitat for nesting, however the BSA does provide suitable foraging habitat and multiple suitable nest trees are within 0.25 mile of the BSA.

The proposed project would impact suitable Swainson’s hawk foraging habitat as a result of project construction. Permanent impacts, totaling 1.19 acres, and temporary impacts, totaling 6.60 acres, would occur as a result of project construction. Implementation of Mitigation Measure BIO-2 would reduce potential impacts to Swainson’s hawks.

**Mitigation Measure BIO-2:** The following measures shall be implemented to reduce potential impacts to Swainson’s hawks. These measures are consistent with
AMM16, Minimize Take and Adverse Effects on Swainson’s Hawk and White-Tailed Kite in the Yolo HCP/NCCP:

• In accordance with guidance provided by the Swainson’s Hawk Technical Advisory Committee (2000), if work begins during the nesting season (March 15 to August 30), an early season preconstruction survey for nesting Swainson’s hawks shall be conducted between January and March in the BSA and immediate vicinity (an approximately 1,320-foot [0.25 mile] radius) by a qualified biologist when tree foliage is relatively sparse and nests are easy to identify. A second preconstruction survey for nesting Swainson’s hawks shall be conducted in the BSA and immediate vicinity (an approximately 1,320-foot [0.25 mile] radius) by a qualified biologist no more than 15 days prior to initiation of earthmoving activities.

• If nesting Swainson’s hawks are found within the survey area, a 1,320-foot (0.25 mile) initial temporary nest disturbance buffer shall be established. If project activities within the temporary nest disturbance buffer are determined to be necessary during the nesting season, a qualified biologist shall evaluate the potential for the project to disturb nesting activities. CDFW shall be contacted to review the evaluation and determine if the project can proceed without adversely affecting nesting activities. Work will only be allowed to proceed within the temporary nest disturbance buffer.

• Disturbance of active nests shall be avoided until it is determined by a qualified biologist that nesting is complete and the young have fledged, or that the nest has failed. If work is allowed to proceed within the temporary nest disturbance buffer if Swainson’s hawks are not exhibiting agitated behavior (e.g. defensive flights at intruders, getting up from a brooding position, flying off the nest, etc.). A qualified biologist shall be on-site daily while construction activities are occurring within the temporary nest disturbance buffer to monitor nesting activity. The monitor shall have the authority to stop work if it is determined the project is adversely affecting nesting activities.

• Potential impacts to Swainson’s hawk will be minimized with implementation of avoidance and minimization efforts above; due to the small acreage of potential foraging impacts and because no nesting trees are within the BSA, no compensatory mitigation is proposed.

b. Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

No Impact. No riparian habitat or other sensitive natural communities occur in the BSA. The project site consists of row crops, ruderal/disturbed, and developed areas. However, as mentioned above, ephemeral drainage ditches (potential non-wetland waters) occur within the BSA. The proposed
project design completely avoids these features; therefore, no impacts to potential waters are within the BSA.

c. Would the project 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?

No Impact. Aquatic resources within the BSA are limited to non-wetland waters consisting of several culverted ephemeral drainage ditches. No potential wetlands are located within the BSA. The project would not require direct removal, filling, hydrological interruptions, or construction that would affect federally protected wetlands. Therefore, the project would have no impact.

d. Would the project 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?

No Impact. Wildlife movement corridors are linear habitats that function to connect two or more areas of significant wildlife habitat. These corridors may function on a local level as links between small habitat patches (e.g., streams in urban settings) or may provide critical connections between regionally significant habitats (e.g., deer movement corridors). Wildlife corridors typically include vegetation and topography that facilitate the movements of wild animals from one area of suitable habitat to another, in order to fulfill foraging, breeding, and territorial needs. These corridors often provide cover and protection from predators that may be lacking in surrounding habitats. Wildlife corridors generally include riparian zones and similar linear expanses of contiguous habitat.

There is no evidence that the habitats present in the BSA provide a significant migration route. The project area is heavily impacted by human activity (ongoing construction, agriculture, traffic, etc.) and provides little to no connectivity with parks or open space in the vicinity. Therefore, impacts to local wildlife movement would be minor and insignificant, and no mitigation would be required.

e. Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

No Impact. The project would not conflict with any local policies or ordinances protecting biological resources. Although the proposed project falls within the City of Woodland, and is therefore subject to provisions of the City’s Municipal Code (City of Woodland 2017b), the proposed project does not conflict with any of the existing ordinances.

f. Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

Less Than Significant Impact. The Yolo HCP/NCCP was approved by the Yolo County Board of Supervisors and the cities of Davis, West Sacramento, Winters, and Woodland in June 2018 and was formally implemented in January 2019. The Yolo HCP/NCCP covers activities that would have an
adverse impact on any of the twelve covered species and provides incidental take coverage from the USFWS and CDFW. The species covered by the Yolo HCP/NCCP that may potentially occur in the BSA include western burrowing owl and Swainson’s hawk.

The Project will be implemented in accordance with the Yolo Habitat Conservation Plan/Natural Community Conservation Plan (HCP/NCCP) avoidance and minimization measures. Through payment of HCP/NCCP fees or equivalent mitigation, the Project will contribute to the HCP/NCCP’s conservation strategy, thereby benefiting the above-listed covered species. With incorporation of HCP/NCCP fees or equivalent mitigation and adherence to other HCP/NCCP avoidance and minimization measures, this Project’s individual impacts and its contribution to cumulative impacts to covered species are less than significant.
3.5 CULTURAL RESOURCES

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

3.5.1 Environmental Setting

LSA prepared a Cultural Resources Study (2018) for the proposed project (see Appendix C). This study consisted of background research, consultation with potentially interested parties and a field survey. The information for the following section was based on this study.

Cultural Resources. The Area of Potential Effects (APE) for the proposed project includes the maximum extent of all ground disturbing activities including staging areas and access routes in association with the proposed project. The APE is located within both the City of Woodland and Yolo County. Agricultural fields abut the project site to the south, residential development to the north, and a recreational facility to the west. The project APE encompasses 19.14 total acres within which the vertical extent is 7 feet below surface. The APE includes portions of various parcels containing agricultural properties and a church and school. The nearest water source is Willow Slough, 0.82 miles to the southeast. SR-113 passes through the APE.

LSA conducted a records search (IC No. 17-1235) for the APE/Permit Area and a 0.5-mile radius on October 25, 2017, at the Northwest Information Center (NWIC) of the California Historical Resources Information System, located in Rohnert Park, California. The NWIC, an affiliate of the State of California Office of Historic Preservation, is the official state repository of cultural resource records and reports for Yolo County.

A total of ten previously recorded cultural resources that are 45 years and older were identified within or adjacent to the project area. These resources did not appear to possess a prehistoric component, and therefore, were recorded as single-component sites (whereas multicomponent sites possess both historic and prehistoric resources). Details of these ten resources can be found in the attached Cultural Resources Study (Appendix C).

Consultation with the Native American Heritage Commission occurred on November 20, 2017, and the results indicated that a records search of the Sacred Lands File had negative results for Native American cultural resources within the project Area, but noted that “the absence of specific site information in the Sacred Lands File does not indicate the absence of Native American cultural resources in any APE.” Additionally, the Native American Heritage Commission (NAHC) provided three local Native American Tribe representatives who may have information or concerns regarding the project.
LSA assisted the City with Assembly Bill (AB) 52 consultation. On March 2, 2018, LSA sent letters with maps depicting the APE/Permit Area to the following Native American contacts on the AB 52 list provided by the City. Three of the recipients are also on the NAHC list. The letters served to initiate consultation pursuant to AB 52 and to elicit input or concern. No responses were received within two weeks so on March 21, 2018, LSA made follow-up telephone calls to ensure the letters were received. Of the five Native American Tribe representatives contacted, all but one responded. These representatives stated that their tribes had no comments regarding the project.

Archaeological Sensitivity. The archaeological resources study consisted of archival and background research, field survey of the APE on December 13, 2017 by LSA, consultation with potentially interested parties, and an archaeological assessment. LSA assessed the APE’s archaeological sensitivity based on the results of the records search, geological and soils research, field survey, and geotechnical study. The records search found no previously identified archaeological deposits within or adjacent to the APE, and the field survey did not identify any cultural resources in the APE. The land in the APE and surrounding areas is highly disturbed. Therefore, the probability of encountering unidentified subsurface prehistoric archaeological deposits in the APE is very low. Based on the historical context of the area and the cut/fill nature of the APE, the probability of encountering buried historic archaeological deposits in the APE is low to moderate.

3.5.2 Impact Analysis

a. Would the project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED. As described above, research was conducted to determine if sensitive historical or Native American sites were located within the APE or surrounding the project site. Of the ten resources identified in the vicinity of the project, only one, Farmer’s Central Canal, is within the project site. This resource was once a canal but has been since filled in. This resource has not been evaluated for the National Register, California Register, or Local designation.

The possibility exists that previously unknown buried archaeological deposits could be discovered during grading and excavation work associated with construction. Prehistoric materials can include flaked-stone tools (e.g., projectile points, knives, choppers) or obsidian, chert, basalt or quartzite tool making debris; bone tools; culturally darkened soil (e.g., midden soil often containing heat-affected rock, ash and charcoal, shellfish remains, faunal bones, and cultural materials); and stone milling equipment (e.g., mortars, pestles, handstones). Prehistoric archaeological sites often contain human remains. Historical materials can include wood, stone, concrete, or adobe footings, walls and other structural remains; debris-filled wells or privies; and deposits of wood, glass, ceramics, metal and other refuse. Implementation of Mitigation Measure CULT-1 would reduce impacts to previously undiscovered resources to a less than significant level.

Mitigation Measure CULT-1: If deposits of precontact or historic-period archaeological materials are discovered during project activities, all work within 50 feet of the discovery shall be redirected. Project personnel shall not collect or move any archaeological materials. A qualified archaeologist shall be contacted to assess
the situation and consult with the U.S. Army Corps of Engineers and Yolo County. The archaeologist shall make recommendations for the treatment of the discovery.

Accidental cultural resource discoveries during project construction shall be evaluated by an archaeologist. Based on the archaeologist’s evaluation, mitigation can include, but is not necessarily limited to, excavation of the deposit in accordance with a data recovery plan and standard archaeological field methods and procedures; laboratory and technical analyses of recovered archaeological materials; preparation of a report detailing the methods, findings, and significance of the archaeological site and associated materials; and, if appropriate, accessioning the historic archaeological material and technical report to an archaeological repository. Educational public outreach shall be conducted as appropriate as determined by the archaeologist.

Upon completion of the assessment, the archaeologist shall prepare a report documenting the methods and results of resource evaluation and mitigation efforts. The report shall be submitted to the Northwest Information Center at Sacramento State University.

b. Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED. No archaeological resources, as defined by §15064.5, have been identified in the project area. Archaeological resources are not anticipated to be discovered during project activities. If, however, such resources are discovered, implementation of Mitigation Measure CULT-1 described above, would reduce potential impacts to a less than significant level.

c. Would the project disturb any humans remains, including those interred outside of formal cemeteries?

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED. No human remains are known to exist within the APE. Section 7050.5 of the California Health and Safety Code states that in the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of Woodland has determined whether or not the remains are subject to the Coroner’s authority. There is no indication that human remains are present within the project site. Implementation of Mitigation Measure CULT-2 would ensure that potential impacts to human remains, should they be encountered, would be reduced to a less than significant level.

Mitigation Measure CULT-2: If human remains are discovered during project activities the procedures outlined in Section 7050.5 of the California Health and Safety Code shall be implemented. Work within 50 feet of the discovery shall be redirected and the Yolo County Coroner notified immediately. At the same time, the
U.S. Army Corps of Engineers cultural resources staff shall be contacted to assess the situation and consult with SHPO. Project personnel shall not collect or move any human remains and associated materials.

If the human remains are of Native American origin, the Coroner must notify the Native American Heritage Commission within 24 hours of this identification. The Native American Heritage Commission will identify a Most Likely Descendant to inspect the site and provide recommendations for the proper treatment of the remains and associated grave goods.
3.6 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>d. Result in a 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>e. 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>

3.6.1 Environmental Setting

The proposed project includes the construction of a pedestrian overcrossing over SR-113 along the southern city limits of Woodland. The City of Woodland General Plan 2035 includes the following policies related to energy.

Policy 5.K.6 Promote Energy Conservation. Promote energy-saving practices and encourage energy efficiency through good urban design and site-planning practices, as well as through building design, maintenance, and retrofit.

Policy 5.K.7 Renewable Energy. Promote the installation of public and private renewable energy production systems including photovoltaics, wind turbines, geothermal systems, and other appropriate technologies.

3.6.2 Impact Analysis

a. Would the project result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation?

LESS THAN SIGNIFICANT IMPACT. The proposed Project would include the construction of a pedestrian overcrossing and would require consumption of energy resources during construction and to provide lighting along the bridge. However, best management practices such as limiting construction equipment idling would ensure energy use is efficient and not wasteful or unnecessary. Once operation, the proposed Project would include high efficiency lights along the bridge. As such, the proposed Project would result in less than significant impact.

b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

NO IMPACT. The City of Woodland Climate Action Plan proposes a strategy for lighting efficiency upgrades to meet the objective to reduce building energy use. As stated above, the proposed project would include energy efficient lighting, once operational. The proposed Project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. No impact would occur and no mitigation would be necessary.
3.7 GEOLOGY AND SOILS

<table>
<thead>
<tr>
<th>Would the project:</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant with Mitigation</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☒</td>
</tr>
<tr>
<td>i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☒</td>
</tr>
<tr>
<td>ii. Strong seismic ground shaking?</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☒</td>
</tr>
<tr>
<td>iii. Seismic-related ground failure, including liquefaction?</td>
<td>☐</td>
<td>☒</td>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td>iv. Landslides?</td>
<td>☐</td>
<td>☒</td>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td>b. Result in substantial soil erosion or the loss of topsoil?</td>
<td>☐</td>
<td>☒</td>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td>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?</td>
<td>☐</td>
<td>☒</td>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td>d. Be located on expansive soil, as defined in Table 18-1-8 of the Uniform Building Code (1994), creating direct or indirect substantial risks to life or property?</td>
<td>☐</td>
<td>☒</td>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td>e. Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?</td>
<td>☐</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
</tr>
<tr>
<td>f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?</td>
<td>☐</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
</tr>
</tbody>
</table>

3.7.1 Environmental Setting

3.7.1.1 Geology

Yolo County is located within the Great Valley geomorphic province of California, which is characterized by Jurassic through Holocene-aged sedimentary deposits. The Great Valley is composed of thousands of feet of sedimentary deposits that have undergone periods of subsidence and uplift over millions of years. Most of the surface of the Great Valley is covered with Holocene (i.e., 11,700 years Before Present [B.P.] to present day) and Pleistocene (i.e., 2.6 million–11,700 years B.P.) alluvium. This alluvium is composed of sediments from the Sierra Nevada to the east and the Coast Range to the west that were carried by water and deposited on the valley floor (City of Woodland 2017a).

The project site is located in an area that is generally flat and largely devoid of sloping topography. Elevation on the project site ranges from 49 to 60 feet above mean sea level.
3.7.1.2 Soils

The project site is comprised of one soil: Yolo silt loam, 0 to 2 percent slopes, Major Land Resource Area 17. Yolo silt loam is found in alluvial fans and flood plains, and its parent material is alluvium derived from igneous, metamorphic and sedimentary rock. Additional attributes of this soil are described in Table 2, some of which are explained in more detail below.

**Table 2: Project Site Soils**

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Yolo silt loam, 0 to 2 percent slopes, MLRA 17</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depth to restrictive feature</td>
<td>More than 80 inches</td>
</tr>
<tr>
<td>Natural drainage class</td>
<td>Well drained</td>
</tr>
<tr>
<td>Runoff class</td>
<td>Low</td>
</tr>
<tr>
<td>Depth to water table</td>
<td>More than 80 inches</td>
</tr>
<tr>
<td>Frequency of flooding</td>
<td>Rare</td>
</tr>
<tr>
<td>Frequency of ponding</td>
<td>None</td>
</tr>
<tr>
<td>Hydrologic soil group</td>
<td>B</td>
</tr>
<tr>
<td>K factor, whole soil</td>
<td>.49</td>
</tr>
<tr>
<td>Linear Extensibility</td>
<td>3.2 percent</td>
</tr>
</tbody>
</table>

Source: NRCS 2018

**Hydrologic Soil Group.** Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups based on the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms. Soils within the project site are assigned to Hydrological Soil Group B, defined as “soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well-drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission” (NRCS 2018).

**Erosion Factor (K Factor), Whole Soil.** Erosion factor K indicates the susceptibility of a soil to sheet and rill erosion by water. Sheet erosion removes a layer of exposed surface soil (topsoil) by the action of rainfall splash and runoff. Rill erosion develops as flowing runoff concentrates in grooves, called rills, which cut several inches into the soil surface. Rills grow to deeper and wider gullies where concentrated flow of water moves over the soil. Loss of soil is also dependent on the soil type, surface slope and vegetative cover. Values of K range from 0.02 to 0.69 and in general, the higher the value, the more susceptible the soil is to sheet and rill erosion by water. Therefore, soils on the project site have a moderately high susceptibility to sheet and rill erosion by water (NRCS 2018).

**Linear Extensibility.** Linear extensibility (shrink-swell potential) is an expression of the volume change of an unconfined clod as moisture content is decreased from a moist to a dry state. The amount and type of clay minerals in the soil influence volume change. When the soil takes on water, the volume change is reported as percent change for the whole soil. The linear extensibility rating for the project site soils is 3.2 percent, which indicates a moderately low shrink-swell potential.
3.7.1.3 Seismicity

According to the City of Woodland 2035 General Plan and Climate Action Plan Environmental Impact Report (Woodland General Plan EIR), “there are no known fault traces within or adjacent to the Planning Area” (City of Woodland 2017a). However, the Woodland General Plan EIR also notes that segments 3 and 4 of the Great Valley Fault Zone are approximately six miles to the west of the City. The Great Valley Fault Zone is a blind-thrust fault belt located along the margin between the Central Valley and the Coast Ranges (City of Woodland 2017a). Additional fault zones within 50 miles of the City include the Dunnigan Hills Fault, Concord-Green Valley Fault, Hunting Creek-Berryessa Fault, West Napa Fault, Marsh Creek-Greenville Fault, Maacama Fault, and Hayward-Rodgers Creek Fault (City of Woodland 2017a).

The California Geologic Survey Probabilistic Seismic Hazard Assessment calculates earthquake shaking hazards using historic seismic activity and fault slip rate data. Shaking from faults is expressed as the Peak Ground Acceleration measured as a percentage (or fraction) of acceleration due to gravity (percent g) from ground motion that has a 10 percent probability of being exceeded in 50 years. The project site is located in an area with a Peak Ground Acceleration of 25.7 percent (0.257g) (Department of Conservation 2008).

The Alquist-Priolo Fault Zoning Act provides policies and criteria to assist cities, counties, and State agencies in restricting development on active faults. The Alquist-Priolo Act requires the State geologist to delineate regulatory zones that encompass all potentially and recently active traces of named faults and other such faults, or fault segments that are deemed sufficiently active and well defined as to constitute a potential hazard to structures from surface faulting or fault creep. The project site is not located within an Alquist-Priolo Fault Zone. The closest Alquist-Priolo Fault Zone to the project site is the Green Valley Fault Zone, located approximately 29.5 miles to the northwest (City of Woodland 2017a).

Seismic Hazards

*Liquefaction.* Liquefaction is a process by which water-saturated sand and silt temporarily lose strength and act as a liquid during strong seismic shaking events. According to the United States Geological Survey (USGS) Earthquake Hazards Program, the project area has a moderate to high liquefaction susceptibility (USGS n.d.).

*Landslides.* Landslides generally occur in areas with steep slopes, where underlying materials have become weak or fractured as a result of erosion, snowmelt or heavy rains, earthquakes, or other factors. The project site is located in a region with high landslide susceptibility; however, the project site is located on flat land. Therefore, the probability of a landslide within the project site boundary is low.
3.7.2 Impact Analysis

a. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

NO IMPACT. Surface rupture occurs when the ground surface is broken due to fault movement during an earthquake. The project is not located along a known fault, nor is it within an area delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map. As discussed above, the nearest active fault, the Green Valley Fault Zone, is nearly thirty miles away. While there is the possibility of neighboring seismic activity being felt in Woodland, and earthquakes from other regions have occasionally caused minor damage, it is unlikely to cause substantial adverse effects.

ii. Strong seismic ground shaking?

NO IMPACT. As discussed above, the project is not located along a known fault. Historically, Woodland has experienced relatively low levels of seismic activity. However, there is the possibility of neighboring seismic activity being felt in Woodland, and earthquakes from other regions have occasionally caused minor damage. There is, therefore, little likelihood of strong seismic ground shaking. Additionally, the proposed project would be engineered and designed based on the Caltrans Seismic Design Criteria, which includes measures for bridges to reduce their susceptibility to strong seismic shaking.

iii. Seismic-related ground failure, including liquefaction?

LESS THAN SIGNIFICANT IMPACT. The project site is underlain by soils with a moderate to high susceptibility for liquefaction. Given the soils on the project site and the project area’s potential for strong seismic shaking events, the project site could be susceptible to liquefaction events. However, the proposed project would be engineered and designed based on the Caltrans Seismic Design Criteria, which includes measures for bridges to reduce their susceptibility to liquefaction. Therefore, impacts associated with seismic-related ground failure, including liquefaction, would be less than significant.

iv. Landslides?

LESS THAN SIGNIFICANT IMPACT. The proposed project would not alter slopes in the project area in a manner that would increase the risk of landslides. Although the likelihood of landslide is minimal in the generally flat project area, the new pedestrian bridge associated with the proposed project would be designed in accordance with modern engineering standards to withstand potential landslide activity. Implementation of the proposed project would not adversely affect persons or structures due to landslides. Impacts would be less than significant.
b. **Would the project result in substantial soil erosion or the loss of topsoil?**

**LESS THAN SIGNIFICANT IMPACT WITH MITIGATION INCORPORATED.** Soils on the project site have a moderately high susceptibility to sheet and rill erosion by water. Ground disturbing activities during construction of the proposed project would have the potential to result in soil erosion.

To reduce the significance of this potential impact, **Mitigation Measure GEO-1** would be implemented.

**Mitigation Measure GEO-1:** The City shall require that the Contractor prepare an Erosion and Sediment Control Plan for the proposed project prior to construction. Below are some of the measures that shall be implemented to reduce soil erosion and protect water quality during construction. Best management practices (BMP) shall be implemented to reduce erosion and prevent sediment or other potential pollutants from leaving the work site. The City shall require the Contractor to implement BMPs for erosion and sedimentation outlined in the most recent version of the Erosion and Sediment Control Field Manual (CRWQCD 2002), or an equivalent publication.

- BMPs outlined in the most recent version of the Erosion and Sediment Control Field Manual, published by the Regional Water Quality Control Board, or equivalent publication, shall be implemented for erosion, sediment and turbidity control during and after any ground clearing activities or any other project activities that could result in erosion or sediment discharges to surface water.

- Exposed slopes shall be protected using temporary erosion control blankets, fiber rolls, silt fences, or other approved erosion and sediment controls.

- Erosion prevention and sediment control measures shall be inspected and maintained until disturbed areas are stabilized.

- Disturbed ground surfaces shall be revegetated and monitored for future erosion.

- At the end of each working day, roadways shall be cleaned and swept, and scrap, debris, and waste material shall be collected and disposed of properly.

- Vehicle or equipment cleaning shall be performed with water only, and in a designated, bermed area that shall not allow rinse water to run off-site.

- Maintenance and fueling of construction vehicles and equipment shall be performed in a designated, bermed area or over a drip pan that shall not allow run-on of stormwater or runoff of spills.
c. Would the project 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?

LESS THAN SIGNIFICANT IMPACT. As described above, the potential hazards from liquefaction events at the project site are moderate to high, while the potential hazards from landslide events at the project site are low. The proposed project would be engineered and designed based on the Caltrans Seismic Design Criteria, which includes measures for bridge construction to reduce their susceptibility to soil instability. Therefore, impacts associated with seismic-related ground failure, including liquefaction, subsidence, lateral spreading, and landslides would be less than significant.

d. Would the project 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?

LESS THAN SIGNIFICANT IMPACT. The northern portion of the project site is located atop soils with a high shrink-swell potential and the southern portion of the project site is located atop soils with a moderate shrink-swell potential. As a result of adherence to the City of Woodland Policy 8.A.3, which requires “appropriate design specification including special slabs where foundations are in areas of expansive soils” as well as Caltrans Bridge Design Specifications, impacts associated with expansive soil would be less than significant.

e. Would the project have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

NO IMPACT. The project does not propose the use or construction of septic tanks or alternative wastewater disposal systems. Such facilities are not needed, as the project would be limited to the construction of the pedestrian overpass. The project would have no impacts on the area’s ability to adequately support the use of septic tanks or alternative waste water disposal systems.

f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED. No paleontological resources or unique geologic features are known to exist within the APE. However, should paleontological resources be discovered during project construction, implementation of Mitigation Measure PALEO-1 would reduce potential impacts to paleontological resources to a less than significant level.

**Mitigation Measure PALEO-1**: If paleontological resources are encountered during project subsurface construction and no monitor is present, all ground-disturbing activities shall be redirected within 50 feet of the find until a qualified paleontologist can be contacted to evaluate the find and make recommendations. If found to be significant and proposed project activities cannot avoid the paleontological resources, a paleontological evaluation and monitoring plan, as described above, shall be implemented. Adverse impacts to paleontological resources shall be
mitigated, which may include monitoring, data recovery and analysis, a final report, and the accession of all fossil material to a paleontological repository. Upon completion of project ground-disturbing activities, a report documenting methods, findings, and recommendations shall be prepared and submitted to the paleontological repository.
3.8 GREENHOUSE GAS EMISSIONS

<table>
<thead>
<tr>
<th>Would the project:</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant with Mitigation</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>

3.8.1 Environmental Setting

Greenhouse gases (GHG) are present in the atmosphere naturally, are released by natural sources, or are formed from secondary reactions taking place in the atmosphere. The gases that are widely seen as the principal contributors to human-induced global climate change are:

- Carbon dioxide (CO₂);
- Methane (CH₄);
- Nitrous oxide (N₂O);
- Hydrofluorocarbons (HFC);
- Perfluorocarbons; and
- Sulfur Hexafluoride (SF₆).

Over the last 200 years, humans have caused substantial quantities of GHGs to be released into the atmosphere. These extra emissions are increasing GHG concentrations in the atmosphere and enhancing the natural greenhouse effect, believed to be causing global warming. While manmade GHGs include naturally occurring GHGs such as CO₂, methane, and N₂O, some gases, like HFCs, PFCs, and SF₆ are completely new to the atmosphere.

Certain gases, such as water vapor, are short-lived in the atmosphere. Others remain in the atmosphere for significant periods of time, contributing to climate change in the long term. Water vapor is excluded from the list of GHGs above because it is short-lived in the atmosphere and its atmospheric concentrations are largely determined by natural processes, such as oceanic evaporation.

These gases vary considerably in terms of Global Warming Potential (GWP), a concept developed to compare the ability of each GHG to trap heat in the atmosphere relative to another gas. The GWP is based on several factors, including the relative effectiveness of a gas to absorb infrared radiation and length of time that the gas remains in the atmosphere (“atmospheric lifetime”). The GWP of each gas is measured relative to CO₂, the most abundant GHG. The definition of GWP for a particular GHG is the ratio of heat trapped by one unit mass of the GHG to the ratio of heat trapped by one unit mass of CO₂ over a specified time period. GHG emissions are typically measured in terms of pounds or tons of “equivalent carbon dioxide” (CO₂e).
3.8.2 Impact Analysis

a. Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED. The following section describes the proposed Project’s construction- and operational-related GHG emissions and contribution to global climate change.

Short-Term GHG Emissions. Construction activities, such as site preparation, site grading, on-site heavy-duty construction vehicles, equipment hauling materials to and from the site, and motor vehicles transporting the construction crew would produce combustion emissions from various sources. During construction of the proposed Project, GHGs would be emitted through the operation of construction equipment and from worker and builder supply vendor vehicles, each of which typically use fossil-based fuels to operate. The combustion of fossil-based fuels creates GHGs such as CO₂, CH₄, and N₂O. Furthermore, CH₄ is emitted during the fueling of heavy equipment. Exhaust emissions from on-site construction activities would vary daily as construction activity levels change.

The YSAQMD does not have an adopted threshold of significance for construction-related GHG emissions. However, lead agencies are encouraged to quantify and disclose GHG emissions that would occur during construction. Using Roadmod, it is estimated that the Project would generate approximately 400.5 metric tons of CO₂e during construction of the Project. Implementation of Mitigation Measure AIR-1, as discussed in Section 3.3.2.b, would reduce construction GHG emissions by limiting construction idling emissions.

Long-Term GHG Emissions. Long-term GHG emissions are those typically associated with area and mobile sources, and indirect emissions from sources associated with energy consumption. According to the YSAQMD’s CEQA Handbook, there are no specific thresholds associated with GHG emissions; however, the YSAQMD recommends lead agencies provide a qualitative discussion of GHG emissions associated with proposed Projects. The proposed Project would construct a pedestrian overcrossing to connect new and planned development on the east side of SR-113 with a school, a sports park, and existing residential facilities on the west side of SR-113. Implementation of the proposed Project would create better access and a more pedestrian-friendly environment. The proposed Project would result in low levels of off-site emissions due to energy generation associated with lighting along the overcrossing. However, these emissions would be minimal and would not exceed the pollutant thresholds established by the YSAQMD. Therefore, the Project would have a less-than-significant impact on the environment related to GHG emissions.
b. Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

LESS THAN SIGNIFICANT. In 2005, Governor Schwarzenegger established California’s GHG emissions reduction targets in Executive Order S-3-05. The Executive Order established the following goals for the State of California GHG emissions: reduce to 2000 levels by 2010; reduce to 1990 levels by 2020; and reduce to 80 percent below 1990 levels by 2025.

The California State legislature passed the major initiative for reducing GHG emissions, AB 32, the “Global Warming Solutions Act” in 2006. This aims at reducing GHG emissions to 1990 levels at 427 million metric tons (MMT) of CO₂e by 2020. AB 32 requires the ARB to prepare a Scoping Plan that outlines the main State strategies for meeting the 2020 deadline and to reduce GHGs that contribute to climate change. The Scoping Plan was approved by ARB in 2008, and includes measures to address GHG emissions reduction strategies related to energy efficiency, water use, and recycling and solid waste, among other measures. The Scoping Plan includes a range of GHG reduction actions that may include direct regulations, alternative compliance mechanisms, monetary and non-monetary incentives, voluntary actions, and market-based mechanisms, such as a cap-and-trade system.

In addition to reducing GHG emissions to 1990 levels by 2020, AB 32 directed ARB to identify a list of “discrete early action GHG reduction measures” that can be adopted and made enforceable by January 1, 2010. In 2007, ARB approved a list of 37 early action measures, including three discrete early action measures (Low Carbon Fuel Standard, Restrictions on High Global Warming Potential Refrigerants, and Landfill Methane Capture). Discrete early action measures are measures that are required to be adopted as regulations and made effective by January 1, 2010, the date established by Health and Safety Code Section 38560.5. The ARB adopted additional early action measures in October 2007 that tripled the number of discrete early action measures.

ARB’s focus in identifying the early action items was to recommend measures that ARB staff concluded were “expected to yield significant GHG emission reductions, are likely to be cost-effective and technologically feasible”. The combination of early action measures is estimated to reduce Statewide GHG emissions by approximately 16 MMT. The early action items focus on industrial production processes, agriculture, and transportation sectors. None of these early action items apply to the proposed Project.

The ARB approved the First Update to the Climate Change Scoping Plan on May 22, 2014. The First Update identifies opportunities to leverage existing and new funds to further drive greenhouse gas emission reductions through strategic planning and targeted low carbon investments. The First Update defines ARB’s climate change priorities until 2020, and also sets the groundwork to reach long-term goals set forth in Executive Orders S-3-05 and B-16-2012. The Update highlights California’s progress toward meeting the “near-term” 2020 greenhouse gas emission reduction goals as defined in the initial Scoping Plan. It also evaluates how to align the State’s “longer-term” greenhouse gas reduction strategies with other State policy priorities for water, waste, natural resources, clean energy, transportation, and land use. ARB recently released a second update to the Scoping Plan, the Draft 2017 Scoping Plan, to reflect the 2030 target set by Executive Order B-30-15.
The City of Woodland adopted the City of Woodland Final 2035 Climate Action Plan (CAP) in May 2017. The City’s CAP is aimed at reducing GHG emissions in order to achieve Woodland’s GHG targets by 2035. The CAP focused on six areas of analysis:

- Energy
- Transportation and Land Use
- Urban Forest and Open Space
- Water and Solid Waste
- Public Involvement
- Municipal Operations

The proposed Project would not conflict with the City of Woodland’s goals for GHG emissions reductions. Additionally, the proposed Project would not conflict with the State goal of reducing GHG emissions and would not conflict with the AB 32 Scoping Plan or the early action measures. The proposed Project would provide new pedestrian and bicycle access between residential, recreational, and educational land uses, which would potentially reduce GHG emissions from vehicle trips in the Project area. The proposed Project would be subject to all applicable permit and planning requirements in place or adopted by the City of Woodland. Therefore, the proposed Project would not conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases. This impact would be less than significant.
3.9 HAZARDS AND HAZARDOUS MATERIALS

<table>
<thead>
<tr>
<th>Would the project:</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant with Mitigation</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 2 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>

3.9.1 Environmental Setting

The parcels immediately surrounding the project site consist of agricultural fields, and a church and school. Future residential development is planned for the parcels east of SR-113, and the Woodland Christian School, located northwest of SR-113, maintains the parcel southwest of SR-113 to accommodate future growth. SR-113, which runs through the center of the proposed project area, is a four-lane state highway that runs north-south from just west of Rio Linda to just south of Yuba City. Within the project limits, both SR-113 and the surrounding parcels remain generally flat in elevation. A drainage ditch runs east-west under SR-113 through the project area.

Asbestos. No materials potentially containing asbestos would be removed or disturbed during project construction

Naturally Occurring Asbestos (NOA). NOA can occur in serpentine. The most common forms of NOA minerals are chrysotile, actinolite, and tremolite. A review of the “General Location Guide for Ultramafic Rocks in California – Areas Likely to Contain Naturally Occurring Asbestos” (DOC DGM 2000) and the “Reported Historic Asbestos Mines, Historic Asbestos Prospects, and Other Natural
Occurrences of Asbestos in California” (USGS & California Geological Survey 2011) indicate that no NOA is mapped on, or in the near vicinity, of the project site.

**Aerially Deposited Lead (ADL).** The proposed project would disturb soil near SR-113. Though this portion of SR-113 was not built until after 1970, when the phasedown of lead in gasoline had begun, ADL has the potential to be present in the soil at the roadside. No removal of soils from the project site is proposed so soils potentially containing ADL would not be transported to landfill.

**Lead-based Paint.** No removal or disturbance of roadway striping or any other materials likely to contain lead-based paint is proposed.

Recommendations regarding waste management and worker safety are discussed in response to the following CEQA threshold questions in the Hazards and Hazardous Materials section.

### 3.9.2 Impact Analysis

a. Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

**LESS THAN SIGNIFICANT IMPACT.** The project would construct a pedestrian bridge over SR-113, but would not demolish existing streets or sidewalks to do so, and would not export soil from the project site. The project would not introduce or increase any handling, transport, use, or disposal of hazardous materials and would, therefore, have a less-than-significant impact.

b. Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

**LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED.** Hazardous materials (e.g. fuel, lubricant, concrete curing materials) may be used by construction equipment and for proposed project improvements during construction. These materials would be used in accordance with all applicable laws and regulations and, if used properly, would not pose a hazard to people, animals, or plants. All refueling and maintenance of construction vehicles and equipment would occur within the designated staging area for the proposed project. The use of hazardous materials for construction equipment would be temporary and the proposed project would not include a permanent use or source of hazardous materials. Mitigation provided below as well as Mitigation Measure AIR-1 would reduce potential impacts to a less-than-significant level.

**Mitigation Measure HAZ-1:** The contractor shall prepare a Spill Prevention and Countermeasure Plan (SPCP) prior to the commencement of construction activities. The SPCP shall include information on the nature of all hazardous materials that would be used on-site. The SPCP shall also include information regarding proper handling of hazardous materials, and clean-up procedures in the event of an accidental release. The phone number of the agency overseeing hazardous materials and toxic clean-up shall be provided in the SPCP. Implementation of this mitigation measure would reduce potential impacts to a less-than-significant level.
Mitigation Measure HAZ-2: The contractor shall provide worker training regarding the potential presence of ADL prior to the commencement of construction activities. The contractor shall provide soap and water and shall require all construction personnel to wash hands prior to eating and prior to leaving the worksite.

c. Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?  

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED. Schools are considered sensitive receptors for hazardous material issues because children are more susceptible than adults to the effects of many hazardous materials. The project is within a quarter mile of one existing school: the Woodland Christian School is located on the northwestern edge of the project site. Because construction and operation activities could potentially involve hazardous materials, the proposed project would have the potential to emit hazardous emissions or handle hazardous materials, substances, or waste within one-quarter mile of the existing school. The implementation of Mitigation Measure HAZ-1 and Mitigation Measure HAZ-2, described above, and Mitigation Measure AIR-1, described in Section 3.3.2, would prevent any airborne ADL from leaving the project site, and potential impacts would be reduced to a less-than-significant level.

d. Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?  

NO IMPACT. The project site is not included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. Neither an EnviroStor record search nor a GeoTracker map provided any results in or adjacent to the project site. Therefore, implementation of the proposed project would not create a significant hazard to the public or the environment. No impact would occur.

e. Would the project be located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?  

NO IMPACT. The nearest public airports are the Watts-Woodland Airport, located approximately 6.3 miles northwest of the project site, and the Sacramento International Airport, located approximately 8.2 miles northeast of the project site. The project site is not located within an airport land use plan or within 2 miles of a public airport or public use airport. No impact would occur.

f. Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?  

LESS THAN SIGNIFICANT IMPACT. The proposed project includes the construction of a pedestrian bridge structure over SR-113. Though construction of the proposed project could result in nighttime lane closures and detours on SR-113, a traffic management plan would be in place to minimize interference with adopted emergency response and evacuation plans. Once complete, the newly
constructed pedestrian bridge crossing over SR-113 would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

\textbf{g. Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?}

\textbf{NO IMPACT.} The project site is surrounded by urban and agricultural development and no wildlands are located in the project vicinity. Therefore, the project would not expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires. No impact would occur.
3.10 HYDROLOGY AND WATER QUALITY

<table>
<thead>
<tr>
<th>Would the project:</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant with Mitigation</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 groundwater 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>
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<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>
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</tr>
</tbody>
</table>

3.10.1 Environmental Setting

The Project site is located within the jurisdiction of the Central Valley Regional Water Quality Control Board (CVRWQCB); which is under the direction of the California State Water Resources Control Board. Under the federal Clean Water Act and the California Porter-Cologne Water Quality Control Act, the CVRWQCB has regulatory responsibility for protecting water quality.

**Surface Water.** There are no natural surface water features in the city of Woodland, though several exist nearby: the Sacramento River is located two miles to the east of the city; Willow Slough and Putah Creek are located south of the city; and Cache Creek is approximately one-half mile north and northeast of the city. The proposed pedestrian bridge crosses over SR-113. Aquatic features within the review area include three large interconnected drainage ditches.

Water from the nearby Sacramento River, Cache Creek, and Putah Creek supplies Woodland’s drinking water. The Woodland-Davis Clean Water Agency has recently implemented a conversion to using Sacramento River water as the primary source of drinking water through the city, reserving groundwater only to fulfill any remaining unmet demands.
Groundwater. The project is located in the Sacramento Valley Groundwater Basin, Yolo Sub-basin. The Yolo Sub-basin roughly follows the Sacramento Valley topography, and drains into the Sacramento-San Joaquin Delta. Elevations range from approximately 400 feet at the base of the Coast Range to the west to nearly sea level in the eastern areas of the sub-basin. It is estimated that water storage below the ground surface ranges from between 20 and 420 feet and that the sub-basin can hold up to 14,038,000 acre-feet.

Floodplain. The Federal Emergency Management Agency (FEMA) issues the Flood Insurance Rate Maps (FIRM) for communities that participate in the National Flood Insurance Program. FEMA FIRM 06113C0445H and 06113C0465H (both last revised in 5/16/2012) provided the limits of the floodplain at the Project site. According to the FIRM, the existing floodplain at the project site is classified as Zone X: Area of Minimal Flood Hazard.

3.10.2 Impact Analysis

a. Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?

NO IMPACT. Pursuant to the Porter-Cologne Water Quality Control Act (California Water Code Sections 13000 – 16104), the CVRWQCB prepares and updates the Water Quality Control Plan for the Sacramento and San Joaquin River Basins (Basin Plan) every three years. The most recent update was completed in April 2016. The Basin Plan also includes standards for ground waters in addition to surface waters. The project would comply with the Water Quality Control Plan, and would therefore not violate any water quality standards or regulations.

b. Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

NO IMPACT. The project is located in the Sacramento Valley Groundwater Basin, Yolo Sub-basin. Groundwater in this sub-basin is affected by periods of drought as a result of groundwater pumping and less surface water recharge. During construction of the project, water required for dust control would be imported from off-site. Operation of the project would not require water service. Groundwater quality is considered good for agricultural as well as municipal uses. In 2010, groundwater flow direction was estimated to in a southeasterly direction with a reported gradient of 0.0018 feet per-foot. Depth to water was measured at approximately 14 feet below ground surface. The project would not require digging or excavation at depths where groundwater aquifers used for drinking water occur. Construction contractors would be required to prepare and implement a Stormwater Pollution Prevention Plan (SWPPP) and comply with the conditions of the National Pollution Discharge Elimination System (NPDES) general stormwater permit for construction activity. The project would adhere to the SWPPP, comply with the conditions of the NPDES general stormwater permit, and would not require groundwater supplies or interfere substantially with groundwater recharge. As such, this effect would be less than significant.
c. Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

i. Result in substantial erosion or siltation on- or off-site;

**NO IMPACT.** The project would result in additional impervious surfaces. However, the project would not alter the existing drainage pattern of the site, nor would it alter the course of any stream or river. Project design would ensure the existing drainage pattern is maintained and no substantial erosion or siltation on- or off-site would occur. There would be no impact.

ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;

**NO IMPACT.** The project would result in additional impervious surfaces. However, the project would not alter the existing drainage pattern of the site, nor would it alter the course of any stream or river. Project design would ensure the existing drainage pattern is maintained and no substantial increase in the rate or amount of surface runoff would result in flooding on- or off-site. There would be no impact.

iii. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or

**LESS THAN SIGNIFICANT IMPACT WITH MITIGATION INCORPORATED.** Construction contractors would be required to prepare and implement a SWPPP and comply with the conditions of the NPDES general stormwater permit for construction activity. The SWPPP would include implementation of a monitoring program; a Spill Prevention Control and Countermeasures Plan; and a bentonite slurry spill contingency plan. The contractor would be required to obtain a permit from the Central Valley RWQCB detailing a plan to control any spills that would occur during construction. The plan would describe the construction activities to be conducted, BMPs that would be implemented to prevent discharges of contaminated stormwater into waterways, and inspection and monitoring activities that would be conducted. With implementation of mitigation measures HYDRO-1 and HYDRO-2, impacts would be less than significant.

**Mitigation Measure HYDRO-1:** The City of Woodland shall prepare and implement construction site temporary BMPs in compliance with the provisions of the NPDES Permit and any subsequent permit pertaining to construction of the proposed Project. The County shall submit a Notice of Construction to the CVRWQCB at least 30 days prior to the commencement of construction and shall submit a Notice of Termination to the CVRWQCB upon completion of the proposed Project. The temporary BMPs shall be installed prior to commencement of any construction activities and shall be in place for the duration of the construction period. The removal of the BMPs shall be the final operation, along with the Project site cleanup.
Mitigation Measure HYDRO-2: A SWPPP shall be prepared by the contractor in accordance with typical provisions associated with a Regional General Permit for Construction Activities (on file with the CVRWQCB). The SWPPP shall contain a Spill Response Plan with instructions and procedures for reporting spills, the use and location of spill containment equipment, and the use and location of spill collection materials. Implementation of the SWPPP shall minimize effects to aquatic resources, surrounding habitat, and species that use the area from potential spills associated with construction activities.

iv. Impede or redirect flood flows?

NO IMPACT. The project is located in an area delineated as Zone X: Area of Minimal Flood Hazard according to FEMA National Flood Hazard Layer. The proposed Project would not alter the existing drainage pattern of the site, nor would it alter the course of any stream or river. Additional impervious surfaces constructed as part of the project would not impede or redirect flood flows. No impact would occur.

d. In flood hazard, tsunami, or seiche zones, would the project risk release of pollutants due to project inundation?

NO IMPACT. The project includes the construction of a pedestrian bridge and is not subject to tsunami risk, as the project site is at a great distance from any ocean. Levees along Putah Creek and the Yolo Bypass protect the project area from exposure to seiches. The levees were designed and engineered to withstand seismic activity, including the potential for seiches. The project area is in an area delineated as Zone X: Area of Minimal Flood Hazard. The project would not risk release of pollutants due to project inundation and there would be no impact.

e. Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

NO IMPACT. As discussed above, the project would comply with the Water Quality Control Plan, SWPPP, and NPDES permit. The project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. No impact would occur.
3.11 LAND USE AND PLANNING

<table>
<thead>
<tr>
<th>Would the project:</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant with Mitigation</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>

3.11.1 Environmental Setting

The proposed project is located on the east and west sides of SR-113 along the southern city limits of Woodland. Land uses surrounding the project site include school, church, residential, and agricultural uses.

3.11.2 Impact Analysis

a. Would the project physically divide an established community?

NO IMPACT. The proposed project would not divide an established community as the project includes construction of a new pedestrian overcrossing. The project would in fact provide new connections between communities in Woodland. Therefore, the proposed project would have no impacts associated with the division of an established community.

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

NO IMPACT. The proposed project is located within the Spring Lake Specific Plan, adopted December 18, 2001. The proposed project would not alter any land uses and would therefore not conflict with the Spring Lake Specific Plan. There would be no impact.
### 3.12 MINERAL RESOURCES

<table>
<thead>
<tr>
<th>Would the project:</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant Impact with Mitigation</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>

#### 3.12.1 Environmental Setting

Minerals are any naturally occurring chemical element or compound, or groups of elements and compounds, formed from inorganic processes and organic substances including, but not limited to, coal, peat and oil bearing rock, but excluding geothermal resources, natural gas and petroleum. Rock, sand, gravel, and earth are also considered minerals by the California Department of Conservation when extracted by surface mining operations. According to the Woodland General Plan EIR, the project area is not located in a Mineral Resource Area (City of Woodland 2017a). No mines are located on or in the vicinity of the project site.

#### 3.12.2 Impact Analysis

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

**No Impact.** The proposed project is not located in a Mineral Resource Area, nor is one located near the site. Therefore, the proposed project would not result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state. No impact would occur.

b. *Would the project result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?*

**No Impact.** No mineral resource recovery sites near the project area are delineated in the City of Woodland General Plan. No mines are located on or in the vicinity of the project site. Implementation of the proposed project would not result in the loss of such locally-important mineral resources. No impact would occur.
### 3.13 NOISE

<table>
<thead>
<tr>
<th>Would the project result in:</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant with Mitigation</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 2 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>

#### 3.13.1 Environmental Setting

A project would normally have a significant effect on the environment related to noise if it would substantially increase the ambient noise levels for adjoining areas or conflict with the adopted environmental plans and goals of the community in which it is located. The applicable noise standards governing the Project site are the criteria in the City General Plan Noise Element and the Noise Ordinance. Noise impacts can be described in three categories. The first is audible impacts that increase noise levels noticeable to humans. Audible increases in noise levels generally refer to a change of 3.0 decibels (dB) or greater since this level has been found to be barely perceptible in exterior environments. The second category, potentially audible, is the change in the noise level between 1.0 and 3.0 dB. This range of noise levels has been found to be noticeable only in laboratory environments. The last category is changes in noise level of less than 1.0 dB, which are inaudible to the human ear. Only audible changes in existing ambient or background noise levels are considered potentially significant. For the purpose of this analysis, the proposed Project would create a significant noise impact if the Project-related noise increase at an existing sensitive receptor is greater than 3 dB and the resulting noise level is greater than the standards cited below or if the Project-related increase in noise is greater than 5 A-weighted decibels (dBA) (a measurement of sound that accounts for the sensitivity of the average human ear), yet the resulting noise levels are within the applicable land use compatibility standards for the sensitive use.

Certain land uses are considered more sensitive to noise than others. Examples of these include residential areas, educational facilities, hospitals, childcare facilities, and senior housing. An entitled development (Calwest III and IV), which commenced construction in summer 2019, will develop single-family residential units, as close as 160 feet from the Project site. Existing single-family residential units are approximately 330 feet from the Project site and Woodland Christian School is approximately 530 feet from the Project site.
The primary existing noise sources contributing to ambient noise in the Project area are traffic associated with SR-113 and other noise from motor vehicles generated by engine vibrations, the interaction between the tires and the road, and vehicle exhaust systems.

The City of Woodland’s Safety Element of the General Plan (City of Woodland 2017a) contains goals and policies that strive to achieve an acceptable noise environment for the environmental, health, and safety needs of Woodland residents and workers. The City of Woodland also addresses noise in Section 15-26 of the Municipal Code (City of Woodland 2017b) and Construction Noise Guidelines (City of Woodland n.d.), which set allowable hours for construction activity. According to the Municipal Code and Construction Noise Guidelines, construction shall be limited to the hours between 7:00 a.m. and 6:00 p.m., Monday through Saturday, and between the hours of 9:00 a.m. and 6:00 p.m. on Sundays.

3.13.2 Impact Analysis

a. Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED. The following section addresses the short-term construction and long-term operational noise impacts of the proposed Project.

**Short-Term (Construction) Noise Impacts.** Project construction would result in short-term noise impacts on the nearby sensitive receptors and would require pile driving. Maximum construction noise would be short-term, generally intermittent depending on the construction phase, and variable depending on receiver distance from the active construction zone. The duration of noise impacts generally would be from one day to several days depending on the phase of construction. The level and types of noise impacts that would occur during construction are described below.

Short-term noise impacts would occur during grading and site preparation activities. Table 3 lists typical construction equipment noise levels ($L_{max}$) recommended for noise impact assessments, based on a distance of 50 feet between the equipment and a noise receptor, obtained from the Federal Highway Administration (FHWA) Roadway Construction Noise Model. Construction-related short-term noise levels would be higher than existing ambient noise levels currently in the Project area but would no longer occur once construction of the Project is completed.
Table 3: Noise Emission Reference Levels and Usage Factors

<table>
<thead>
<tr>
<th>Equipment Description</th>
<th>Acoustical Usage Factor</th>
<th>Predicted $L_{\text{max}}$ at 50 feet (dBA, slow)</th>
<th>Actual Measured $L_{\text{max}}$ at 50 feet (dBA, slow)</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Other Equipment &gt; 5 HP</td>
<td>50</td>
<td>85</td>
<td>N/A</td>
</tr>
<tr>
<td>Backhoe</td>
<td>40</td>
<td>80</td>
<td>78</td>
</tr>
<tr>
<td>Chain Saw</td>
<td>20</td>
<td>85</td>
<td>84</td>
</tr>
<tr>
<td>Compactor (ground)</td>
<td>20</td>
<td>80</td>
<td>83</td>
</tr>
<tr>
<td>Concrete Batch Plant</td>
<td>15</td>
<td>83</td>
<td>N/A</td>
</tr>
<tr>
<td>Concrete Mixer Truck</td>
<td>40</td>
<td>85</td>
<td>79</td>
</tr>
<tr>
<td>Concrete Pump Truck</td>
<td>20</td>
<td>82</td>
<td>81</td>
</tr>
<tr>
<td>Crane</td>
<td>16</td>
<td>85</td>
<td>81</td>
</tr>
<tr>
<td>Dump Truck</td>
<td>40</td>
<td>84</td>
<td>76</td>
</tr>
<tr>
<td>Excavator</td>
<td>40</td>
<td>85</td>
<td>81</td>
</tr>
<tr>
<td>Flat Bed Truck</td>
<td>40</td>
<td>84</td>
<td>74</td>
</tr>
<tr>
<td>Front-End Loader</td>
<td>40</td>
<td>80</td>
<td>79</td>
</tr>
<tr>
<td>Generator</td>
<td>50</td>
<td>82</td>
<td>81</td>
</tr>
<tr>
<td>Impact Pile Driver</td>
<td>20</td>
<td>95</td>
<td>101</td>
</tr>
<tr>
<td>Man Lift</td>
<td>20</td>
<td>85</td>
<td>75</td>
</tr>
<tr>
<td>Paver</td>
<td>50</td>
<td>85</td>
<td>77</td>
</tr>
<tr>
<td>Pickup Truck</td>
<td>40</td>
<td>55</td>
<td>75</td>
</tr>
<tr>
<td>Pneumatic Tools</td>
<td>50</td>
<td>85</td>
<td>85</td>
</tr>
<tr>
<td>Pumps</td>
<td>50</td>
<td>77</td>
<td>81</td>
</tr>
<tr>
<td>Roller</td>
<td>20</td>
<td>85</td>
<td>80</td>
</tr>
<tr>
<td>Tractor</td>
<td>40</td>
<td>84</td>
<td>N/A</td>
</tr>
<tr>
<td>Vacuum Excavator (Vac-Truck)</td>
<td>40</td>
<td>85</td>
<td>85</td>
</tr>
<tr>
<td>Vacuum Street Sweeper</td>
<td>10</td>
<td>80</td>
<td>82</td>
</tr>
<tr>
<td>Ventilation Fan</td>
<td>100</td>
<td>85</td>
<td>79</td>
</tr>
<tr>
<td>Vibrating Hopper</td>
<td>50</td>
<td>85</td>
<td>87</td>
</tr>
<tr>
<td>Vibratory Concrete Mixer</td>
<td>20</td>
<td>80</td>
<td>80</td>
</tr>
<tr>
<td>Vibratory Pile Driver</td>
<td>20</td>
<td>95</td>
<td>101</td>
</tr>
<tr>
<td>Welder/Torch</td>
<td>40</td>
<td>73</td>
<td>74</td>
</tr>
</tbody>
</table>

Note: Noise levels reported in this table are rounded to the nearest whole number.

1 Usage factor is the percentage of time during a construction noise operation that a piece of construction equipment is operating at full power.

2 Maximum noise levels were developed based on Specification (Spec.) 721.560 from the Central Artery/Tunnel (CA/T) program to be consistent with the City of Boston’s Noise Code for the “Big Dig” project.

3 The maximum noise level was developed based on the average noise level measured for each piece of equipment during the CA/T program in Boston, Massachusetts.

4 Since the maximum noise level based on the average noise level measured for this piece of equipment was not available, the maximum noise level developed based on Spec 721.560 would be used.

dBA = A-weighted decibels

$L_{\text{max}} = $ maximum instantaneous noise level

CA/T = Central Artery/Tunnel

N/A = not applicable

HP = horsepower

Two types of short-term noise impacts could occur during construction of the proposed Project. The first type involves construction crew commutes and the transport of construction equipment and materials to the site, which would incrementally increase noise levels on roads leading to the site. As shown in Table 3, there would be a relatively high single-event noise exposure potential at a maximum level of 84 dBA $L_{\text{max}}$ with trucks passing at 50 feet.
The second type of short-term noise impact is related to noise generated during excavation, grading, and construction on the Project site. Construction is performed in discrete steps, or phases, each with its own mix of equipment and, consequently, its own noise characteristics. These various sequential phases would change the character of the noise generated on site. Therefore, the noise levels vary as construction progresses. Despite the variety in the type and size of construction equipment, similarities in the dominant noise sources and patterns of operation allow construction-related noise ranges to be categorized by work phase.

Table 3 lists maximum noise levels recommended for noise impact assessments for typical construction equipment, based on a distance of 50 feet between the equipment and a noise receptor. Typical maximum noise levels range up to 87 dBA $L_{\text{max}}$ at 50 feet during the noisiest construction phases and up to 95 dBA $L_{\text{max}}$ at 50 feet if pile driving is used. The site preparation phase, including excavation and grading of the site, tends to generate the highest noise levels because earthmoving machinery is the noisiest construction equipment. Earthmoving equipment includes excavating machinery such as backfillers, bulldozers, draglines, and front loaders. Earthmoving and compacting equipment includes compactors, scrapers, and graders. Typical operating cycles for these types of construction equipment may involve 1 or 2 minutes of full-power operation followed by 3 or 4 minutes at lower power settings.

Although not built yet, residential units that will be part of the entitled CalWest III and IV developments will be as close as 160 feet from construction activities. These sensitive receptors would be exposed to an increase in short-term noise levels during project construction, which could reach 76.9 dBA $L_{\text{max}}$ without pile driving activities and 84.9 dBA $L_{\text{max}}$ during pile driving activities. Existing single-family residential units are located along Hoffman Street, approximately 330 feet west of the Project site. These sensitive receptors could be exposed to construction noise levels without pile driving activities reaching 70.6 dBA $L_{\text{max}}$ and 78.6 dBA $L_{\text{max}}$ during pile driving activities. Finally, Woodland Christian School would be located approximate 530 feet from the Project site and could be exposed to construction noise levels reaching 66.5 dBA $L_{\text{max}}$ without pile driving activities and 74.5 dBA $L_{\text{max}}$ during pile driving activities.

Construction noise is permitted by the Municipal Code and Construction Noise Guidelines when activities occur between the hours of 7:00 a.m. and 6:00 p.m., Monday through Saturday, and between the hours of 9:00 a.m. and 6:00 p.m. on Sundays. The City’s Municipal Code does not include any maximum noise level standards for construction noise. As discussed above, construction noise would result in a temporary or periodic increase in ambient noise levels in the Project vicinity above levels existing without the Project. Implementation of the following mitigation measure for Project construction would reduce potential construction period noise impacts for the indicated sensitive receptors to less-than-significant levels.

**Mitigation Measure NOI-1:** The Project contractor shall implement the following measures during construction of the Project:

- Equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers consistent with manufacturers’ standards.
- Place all stationary construction equipment so that emitted noise is directed away from sensitive receptors nearest the active Project site.

- Locate equipment staging in areas that would create the greatest possible distance between construction-related noise sources and noise-sensitive receptors nearest the active Project site during all Project construction.

- Ensure that all general construction related activities are restricted to between the hours of 7:00 a.m. and 6:00 p.m., Monday through Saturday, and between the hours of 9:00 a.m. and 6:00 p.m. on Sundays. If the City determines that the public health and safety will not be impaired by the erection, demolition, alteration or repair of any building or the excavation of streets and highways within the hours of 6:00 p.m. and 7:00 a.m. on weekdays and 6:00 p.m. and 9:00 a.m. on Sundays, and if the City shall further determine that loss or inconvenience would result to any part in interest, the City may grant permission for such work to be done within the hours of 6:00 p.m. and 7:00 a.m. on weekdays and 6:00 p.m. and 9:00 a.m. on Sundays, upon application being made at the time the permit for the work is awarded or during the progress of the work.

- Designate a “disturbance coordinator” who shall be responsible for responding to any local complaints about construction noise. The disturbance coordinator shall determine the cause of the noise complaint (e.g., starting too early, bad muffler) and shall determine and implement reasonable measures warranted to correct the problem.

Implementation of Mitigation Measure NOI-1 would limit construction activities to the less noise-sensitive periods of the day and would reduce construction impacts to a less-than-significant level.

**Operational Noise Impacts.** Operation of the pedestrian overcrossing would not result in exposure of persons to or generation of noise levels in excess of standards established in the General Plan or Noise Ordinance, since the Project is not expected to generate substantial vehicular traffic or other operational noise. Talking associated with the pedestrians or bicyclists may generate noise intermittently while using the trail; however, this noise level would not generate noise levels that would exceed the applicable standards. Therefore, the proposed Project would not expose persons to noise levels in excess of local standards. This impact would be considered less than significant.

b. **Would the project result in generation of excessive groundborne vibration or groundborne noise levels?**

**LESS THAN SIGNIFICANT.** Vibration refers to groundborne noise and perceptible motion. Groundborne vibration is almost exclusively a concern inside buildings and is rarely perceived as a problem outdoors. Vibration energy propagates from a source, through intervening soil and rock layers, to the foundations of nearby buildings. The vibration then propagates from the foundation throughout the remainder of the structure. Building vibration may be perceived by the occupants as
the motion of building surfaces, rattling of items on shelves or hanging on walls, or as a low-frequency rumbling noise. The rumbling noise is caused by the vibrating walls, floors, and ceilings radiating sound waves. Annoyance from vibration often occurs when the vibration exceeds the threshold of perception by 10 dB or less. This is an order of magnitude below the damage threshold for normal buildings.

Typical sources of groundborne vibration are construction activities (e.g., pavement breaking and operating heavy-duty earthmoving equipment), and occasional traffic on rough roads. In general, groundborne vibration from standard construction practices is only a potential issue when within 25 feet of sensitive uses. Groundborne vibration levels from construction activities very rarely reach levels that can damage structures; however, these levels are perceptible near the active construction site. With the exception of old buildings built prior to the 1950s or buildings of historic significance, potential structural damage from heavy construction activities rarely occurs. When roadways are smooth, vibration from traffic (even heavy trucks) is rarely perceptible.

The streets surrounding the Project area are paved, smooth, and unlikely to cause significant groundborne vibration. In addition, the rubber tires and suspension systems of buses and other on-road vehicles make it unusual for on-road vehicles to cause groundborne noise or vibration problems. It is, therefore, assumed that no such vehicular vibration impacts would occur and, therefore, no vibration impact analysis of on-road vehicles is necessary. Additionally, once constructed, the proposed Project would not contain uses that would generate groundborne vibration.

**Construction Vibration.** This construction vibration impact analysis discusses the level of human annoyance using vibration levels in vibration velocity decibels (VdB) and will assess the potential for building damages using vibration levels in peak particle velocity (PPV) (in/sec) because vibration levels calculated in root-mean-square (RMS) are best for characterizing human response to building vibration, while vibration level in PPV is best used to characterize potential for damage. The Federal Transit Authority (FTA) provides threshold limits for building damage and human response to groundborne vibrations associated with construction activities.\(^1\) The threshold limit, for building damage, for Non-engineered timber and masonry buildings is 94 VdB. Vibration levels reaching 75 VdB, according to the FTA, is the approximate dividing line between barely perceptible and distinctly perceptible in humans.

Table 4 shows the PPV and VdB values at 25 feet from a construction vibration source. As shown in Table 4, bulldozers and other heavy-tracked construction equipment (except for pile drivers and vibratory rollers) generate approximately 87 VdB of groundborne vibration when measured at 25 feet, based on the Transit Noise and Vibration Impact Assessment. At this level, groundborne vibration would result in potential annoyance to residences and workers, but would not cause any damage to the buildings. Construction vibration, similar to vibration from other sources, would not have any significant effects on outdoor activities (e.g., those outside of residences and school uses in the Project vicinity). Construction of the overcrossing is expected to use a pile driver for the bridge

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\(^1\) *Transit Noise and Vibration Impact Assessment Manual*, U.S. Department of Transportation Federal Transit Administration, September 2018, Table 5-5 pg. 120 and Table 7-5 pg. 186.
footings. Pile drivers generate approximately 104 VdB of groundborne vibration when measured at 25 feet, as shown in Table 4. At this level, groundborne vibration would have the potential to cause damage to nearby buildings. The distance to the nearest buildings for vibration impact analysis is measured between the nearest off-site buildings and the Project boundary (assuming the construction equipment would be used at or near the Project boundary) because vibration impacts occur normally within the buildings. The formula for vibration transmission is provided below.

$$L_{vdB} (D) = L_{vdB} (25 \text{ ft}) - 30 \log (D/25)$$

$$PPVequip = PPVref x (25/D)^{1.5}$$

Table 4: Vibration Source Amplitudes for Construction Equipment

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Reference PPV/LV at 25 feet</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PPV (in/sec)</td>
</tr>
<tr>
<td>Pile Driver (Impact), Typical</td>
<td>0.644</td>
</tr>
<tr>
<td>Pile Driver (Sonic), Typical</td>
<td>0.170</td>
</tr>
<tr>
<td>Vibratory Roller</td>
<td>0.210</td>
</tr>
<tr>
<td>Hoe Ram</td>
<td>0.089</td>
</tr>
<tr>
<td>Large Bulldozer b</td>
<td>0.089</td>
</tr>
<tr>
<td>Caisson Drilling</td>
<td>0.089</td>
</tr>
<tr>
<td>Loaded Trucks</td>
<td>0.076</td>
</tr>
<tr>
<td>Jackhammer</td>
<td>0.035</td>
</tr>
<tr>
<td>Small Bulldozer</td>
<td>0.003</td>
</tr>
</tbody>
</table>


- RMS vibration velocity in decibels (VdB) is 1 µin/sec.
- Equipment shown in bold is expected to be used on site.

µin/sec = micro-inches per second  
ppm/sec = micro-inches per second  
VdB = vibration velocity decibels

For typical construction activity, the equipment with the highest vibration generation potential is the impact pile driver, which would generate 104 VdB at 25 feet. Single-family residential structures that will be part of the CalWest III and IV development would be approximately 160 feet from the Project site and could be exposed to vibration levels from impact pile drivers reaching up to 80 VdB. Existing residential units and Woodland Christian School are approximately 330 feet and 530 feet from the Project site, respectively, and could be exposed to vibration levels during impact pile driver activities reaching 70.5 VdB and 64.3 VdB, respectively. Such vibration levels would not exceed the FTA threshold of 94 VdB for building damage. Groundborne vibration impacts experienced at nearby sensitive receptors would be considered barely perceptible to people, based on the FTA’s “barely perceptible” human response criteria of 75 VdB for vibration exposure. Therefore, groundborne vibration impacts from Project-related construction activities would be considered less than significant.
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 2 miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

NO IMPACT. The proposed Project is not located within the vicinity of a private airstrip or 2 miles of a public or public use airport. The closest private airstrip is Medlock Field, approximately 2.5 miles south of the project site. The nearest airports are the Watts-Woodland Airport, located approximately 6.3 miles northwest of the project site, and Sacramento International Airport, located approximately 8.4 miles west of the Project site. Aircraft flyover noise is occasionally audible at the Project site; however, no portion of the Project site lies within the 65 dBA community noise equivalent level noise contours of any public airport nor does any portion of the Project site fall within 2 miles of any private airfield or heliport. Therefore, there would be no impact related to noise levels from aviation sources.
3.14 POPULATION AND HOUSING

<table>
<thead>
<tr>
<th>Would the project:</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant with Mitigation</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>
<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>
<td>☑</td>
</tr>
</tbody>
</table>

3.14.1 Environmental Setting

The project site is located along the southern city limits of the City of Woodland. Proximate land uses include Agriculture and Specific Plan. Within the Spring Lake Specific Plan, land uses are School, Residential, Park, and Neighborhood Commercial. The proposed project straddles two Census Tracts: 112.04 and 112.06. The 2012-2016 American Community Survey 5-Year Estimates indicate a population of 5,425 people within Census Tract 112.04 and 8,143 people within Census Tract 112.06 (U.S. Census Bureau 2016a). The City of Woodland has an estimated total of 57,552, and Yolo County has an estimated population of 209,671 people. Data from the 2012-2016 American Community Survey 5-Year Estimates reported that Census Tract 112.04 had a total of 1,869 occupied housing units, of which 1,362 were owner occupied units and 507 were renter occupied units (U.S. Census Bureau 2016b). Census Tract 112.06 had a total of 2,665 occupied housing units, of which 1,895 were owner occupied units and 575 were renter occupied units (U.S. Census Bureau 2016b).

3.14.2 Impact Analysis

a. Would the project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

**NO IMPACT.** The proposed project would construct a new pedestrian overcrossing over SR-113 along the southern edge of the City of Woodland. The purpose of the project is to increase pedestrian access between planned and existing new development on the east side of SR-113 with existing schools, recreational facilities, retail, and residential areas west of SR-113. The proposed project would not directly induce population growth in the Woodland area as it does not include the development of new homes or businesses. Though the project is designed to accommodate planned growth in the City of Woodland General Plan, the project would not increase housing, jobs, or vehicle access. Therefore, the proposed project would not induce substantial unplanned population growth in the project area. There would be no impact.
b. Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

NO IMPACT. The proposed project would construct a pedestrian overpass over SR-113. There are no housing units in the project area. Implementation of the proposed project would not displace any people or housing units, and would not necessitate the construction of replacement housing elsewhere. No impact would occur.
3.15 PUBLIC SERVICES

<table>
<thead>
<tr>
<th>Potentialy Significant Impact</th>
<th>Less Than Significant with Mitigation</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Would the project:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>i. Fire protection?</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>ii. Police protection?</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>iii. Schools?</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>iv. Parks?</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>v. Other public facilities?</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
</tbody>
</table>

3.15.1 Environmental Setting

The project site is located along the city limits of the City of Woodland and public services are described below.

3.15.1.1 Fire Protection

The Woodland Fire Department provides emergency services within the City of Woodland and the Springlake Fire Protection District, including the project area. The Woodland Fire Department staffs three fire engines, a ladder truck, and a shift Battalion Chief. The Department is staffed every day of the year with a minimum of 13 operational personnel. The Department responds to more than 7,500 calls for service annually and is responsible for just over 56 square miles. The closest station to the project site is Fire Station 2, located at 1619 West Street in Woodland. Fire Station 1 is located about 1.3 miles north of the project site.

3.15.1.2 Law Enforcement

The Woodland Police Department provides law enforcement services to the City of Woodland. The Department headquarters are located at 1000 Lincoln Avenue, about 1.5 miles northwest of the project site. In addition to the Office of the Chief, the Department has a Community Relations Bureau, Investigations Bureau, Support Services Bureau, Specialty Assignments Bureau, and Patrol Bureau. The Patrol Bureau consists of 1 Lieutenant, 6 Sergeants, 4 Corporals, 24 Patrol Officers, 2 K-9 officers, and 2 Community Services Officers.

3.15.1.3 School

In the project area, the Woodland Joint Unified School District maintains educational facilities for students from kindergarten through twelfth grade, as well as adult education. These facilities include 12 elementary schools, two middle schools, three high schools, and adult education.
The schools nearest to the project area are Woodland Prairie Elementary School, about 0.7 mile north of the project site, Pioneer High School, about 0.7 mile northeast of the project site, and the private Woodland Christian School, which borders the project site on the northwest side.

3.15.1.4 Parks

The City of Woodland has 27 park facilities maintained by the City’s Parks and Urban Forestry Division. These include more than 394 acres of parks and recreation facilities, including 149 acres of developed parkland and 24 acres of other facilities. There are 24 mini neighborhood and community parks, a community sports park, a 50-meter aquatics complex, and six recreational facilities, including the 13-acre Woodland Community and Senior Center. The Woodland Community and Senior Center, which includes the Woodland Sports Complex and Woodland Off Leash Dog Park, is approximately 1,000 feet to the west of the project site. Spring Lake Park is approximately 2,000 feet to the east of the project site.

3.15.2 Impact Analysis

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:

   i, ii, iii, iv. Fire protection, Police protection, Schools, and Parks?

**NO IMPACT.** The proposed project would construct a pedestrian overpass over SR-113. Though the project would increase pedestrian and bicycle access to the facilities in the project area, particularly the Woodlake Community and Senior Center and its associated facilities, it would not increase vehicle access or population in the project area. The proposed project would not increase demand for public services, nor degrade the quality of existing public services. During construction, the construction contractor would coordinate with emergency service providers to ensure that construction activities would not impair emergency response times. During operation, the proposed project could improve traffic circulation by reducing vehicle trips to and from park, school, retail, and residential areas on either side of SR-113. The project would have no adverse impact to public services including fire and police protection, schools, and parks.

   v. Other public facilities?

**NO IMPACT.** Public parking in the project area, if considered a public facility, could be temporarily impacted by the project’s construction. However, plentiful additional street parking is available in the surrounding area, and local facilities such as the Woodland Christian School and the Woodland Community and Senior Center have their own parking. No impacts to parking would occur. Therefore, the project would have no impacts on other public facilities.
3.16 RECREATION

<table>
<thead>
<tr>
<th></th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant with Mitigation</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>
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</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>
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</tr>
</tbody>
</table>

3.16.1 Environmental Setting

The City of Woodland has 27 park facilities maintained by the City’s Parks and Urban Forestry Division. These 394 acres of parks and recreation facilities include 149 acres of developed parkland and 24 acres of other facilities. There are 24 mini neighborhood and community parks, a community sports park, a 50-meter aquatics complex, and six recreational facilities, including the 13-acre Woodland Community and Senior Center. The Woodland Community and Senior Center, which includes the Woodland Sports Complex and Woodland Off-Leash Dog Park, is approximately 1,000 feet to the west of the project site. Spring Lake Park is approximately 2,000 feet to the east of the project site (City of Woodland 2018).

3.16.2 Impact Analysis

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?

LESS THAN SIGNIFICANT IMPACT. The proposed project would construct a pedestrian bridge crossing over SR-113. Though the project would increase pedestrian and bicycle access to the facilities in the project area, particularly the Woodlake Community and Senior Center and its associated facilities, it would not increase vehicle access or population in the project area. Increased access would be limited to mostly existing local users for whom vehicle trips would be reduced. Impacts would be less than significant.

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

NO IMPACT. Recreational facilities would not be included as part of the project, and the expansion of an existing recreational facility would not be required. No impact would occur.
3.17 TRANSPORTATION

<table>
<thead>
<tr>
<th>Would the project:</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant with Mitigation</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>
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</tr>
<tr>
<td>b. Conflict or be inconsistent with CEQA Guidelines §15064.3, subdivision (b)?</td>
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<tr>
<td>c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?</td>
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<td>☐</td>
<td>☐</td>
<td>☑</td>
</tr>
<tr>
<td>d. Result in inadequate emergency access?</td>
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<td>☐</td>
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</tbody>
</table>

3.17.1 Environmental Setting

Existing conditions within the project area include three major roadways—SR-113, a four-lane freeway, Sports Park Drive, a two lane collector road, and Matmor Road, a two lane collector road. All other roads in the project area are local roads; some roads are planned but not completed on the east side of the project area. East Street and Gibson Road, both approximately 0.5 mile from the project site, provide access to the City of Woodland as well as SR-113 via the Gibson Road interchange.

Existing bus service, facilities and ridership in the study area includes local and regional bus service (provided by the Yolobus County Transportation District, also referred to as Yolobus), which operates twelve fixed routes in the City of Woodland. The ten routes operating near the project area are the 42A, 42B, 45, 209, 210, 211, 212, 214, 215, and 242. Ridership is high for routes 42A and 42B, which provide service between Woodland, Davis, West Sacramento, and Downtown Sacramento. Route 215, which provides service between Woodland and Cache Creek Casino Resort, also has high ridership. Stops for these routes are along Gibson Road to the north and East Street to the west of the project area, both 0.5 mile away from the project site. Regional bus lines such as Greyhound use the Downtown Sacramento station, which is about fourteen miles east of the project area.

Two rail lines operate within the project area—the California Northern Railroad and the Union Sierra Northern Railway. However, no passenger Stations or freight depots are within the project area. Truck traffic is allowed on SR-113 within the project area, as well as East Street and Gibson Road just outside the project area.

The proposed project would construct a pedestrian bridge crossing over SR-113. This overpass would not require the removal of any existing streets, sidewalks, or bicycle lanes. Construction of the proposed project would include some nighttime lane closures on SR-113.
3.17.2 Impact Analysis

a. Would the project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

NO IMPACT. The proposed project does not conflict with any plans, ordinances, or policies addressing the circulation system. The project would provide new circulation facilities for non-motorized travel, as discussed above. No impact would occur.

b. Would the project conflict with or be inconsistent with CEQA Guidelines §15064.3, subdivision (b)?

NO IMPACT. With increased pedestrian and bicycle access to schools, parks, and residential areas, the project would encourage alternative transportation, potentially leading to a reduction of cars on the road; thus generating less GHGs. The project would not result in additional vehicle miles traveled but rather would reduce vehicle miles traveled by providing bicycle and pedestrian access. No impact would occur.

c. Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

NO IMPACT. The proposed project would construct a pedestrian overpass over SR-113. There would be no incompatible uses, as the overpass would be for pedestrians and bicycles only, and there would be no design features that would introduce or increase hazards. No impact would occur.

d. Would the project result in inadequate emergency access?

LESS THAN SIGNIFICANT IMPACT. The proposed project would generally provide an improvement over current pedestrian, bicycle, and vehicle conditions, as described above. Though construction could temporarily result in inadequate emergency access during false work erection and removal across SR-113, any detour around these lane closures would add minimal delays (it would be approximately 0.2 mile longer to travel on surface streets from Country Road 25A, south of the proposed project, to Gibson Road, north of the proposed project, than it would be to drive on SR-113), allowing adequate emergency access.
3.18 TRIBAL CULTURAL RESOURCES

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

3.18.1 Environmental Setting

AB 52, a new state law recently (2014) signed by the governor, amended CEQA to require Tribal Cultural Resources to be considered as potentially significant cultural resources under the CEQA environmental review process. The new procedures under AB 52 offer the tribes an opportunity to take an active role in the CEQA process in order to protect tribal cultural resources. Much of the following discussion is in the Cultural Resources Section, above.

Consultation with the Native American Heritage Commission occurred on November 20, 2017, and the results indicated that a records search of the Sacred Lands File had negative results for Native American cultural resources within the project Area, but noted that “the absence of specific site information in the Sacred Lands File does not indicate the absence of Native American cultural resources in any APE.” Additionally, the NAHC provided three local Native American Tribe representatives who may have information or concerns regarding the project.

As discussed in the Cultural Resources Section, LSA assisted the City with AB 52 consultation. On March 2, 2018, LSA sent letters with maps depicting the APE/Permit Area to the following Native American contacts on the AB 52 list provided by the City. Three of the recipients are also on the NAHC list. The letters served to initiate consultation pursuant to AB 52 and to elicit input or concern. With no responses received within two weeks, on March 21, 2018, LSA made follow-up telephone calls to ensure the letters were received. Of the five Native American Tribe representatives
contacted, all but one responded. These representatives stated that their tribes had no comments regarding the project.

3.18.2 Impact Analysis

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

   i. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)? Or

   ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

LESS THAN SIGNIFICANT WITH MITIGATION As described in the Cultural Resources Section, research was conducted to determine if sensitive historical or Native American sites were located within the APE or surrounding the project site. Of the ten resources identified in the vicinity of the project, only one, Farmer’s Central Canal, is within the project site. This resource was once a canal but has been since filled in. This resource has not been evaluated for the National Register, California Register, or Local designation.

The possibility exists that previously unknown buried archaeological deposits could be discovered during grading and excavation work associated with construction. Prehistoric materials can include flaked-stone tools (e.g., projectile points, knives, choppers) or obsidian, chert, basalt or quartzite tool making debris; bone tools; culturally darkened soil (e.g., midden soil often containing heat-affected rock, ash and charcoal, shellfish remains, faunal bones, and cultural materials); and stone milling equipment (e.g., mortars, pestles, handstones). Prehistoric archaeological sites often contain human remains. Historical materials can include wood, stone, concrete, or adobe footings, walls and other structural remains; debris-filled wells or privies; and deposits of wood, glass, ceramics, metal and other refuse. Implementation of Mitigation Measure CULT-1 would reduce impacts to previously undiscovered resources to a less than significant level.

No human remains are known to exist within the APE. Section 7050.5 of the California Health and Safety Code states that in the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of Woodland has determined whether or not the remains are subject to the Coroner’s authority. There is no indication that human remains are present within the project site. Implementation of Mitigation Measure CULT-2 would ensure that potential impacts to human remains, should they be encountered, would be reduced to a less than significant level.
3.19 UTILITIES AND SERVICE SYSTEMS

Would the project:

<table>
<thead>
<tr>
<th>Would the project:</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant with Mitigation</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 stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?</td>
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<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>
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<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>
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<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>
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<tr>
<td>e. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?</td>
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</table>

3.19.1 Environmental Setting

The project site is located in an urban area of Woodland where utilities are available. Woodland is within the jurisdiction of Region 5S of the CVRWQCB.

The path and overpass will be located south of an existing 30-inch water main. The approach embankment to the overcrossing will provide a minimum 10-foot clearance to the water line. The existing drainage ditch on the west side of the freeway will not be impacted. The drainage ditch on the east side of the freeway is planned to be replaced with a storm drainage system with the development currently underway.

3.19.1.1 Water

The City of Woodland Public Works Department currently provides municipal water to residents and businesses. Treated Sacramento River water supplied by the Woodland-Davis Clean Water Agency’s Regional Water Treatment Facility is the primary source of drinking water. Woodland has a dedicated capacity of 18 million gallons per day (mgd) of supply from the water treatment plant and an additional 2,000,000 gallons of storage and a dedicated 4 mgd pump to supplement this supply at the Regional Water Treatment Facility. The City has an additional 3,500,000 gallons of storage and another 4 mgd of pumping capacity at the ground level tank.

Woodland continues to operate several groundwater wells located throughout the city to supplement surface water supplies. Of the 18 wells owned and operated by the City, 70 percent
have been in operation for 30 years or longer. The typical life of a well is between 30 and 50 years. Several of the older wells are planned to be converted to landscape irrigation or destroyed in the near future. Woodland implemented an Aquifer Storage and Recovery (ASR) program beginning in fall 2016, which will further improve groundwater supplies in Woodland.

The City has planned for the use of ASR wells to store treated surface water from excess supply in winter months to supplement supply in peak demand summer months and to prepare for future drought conditions. One ASR well was completed in 2013 and two additional wells were completed in 2017.

Ultimately, five ASR wells are planned for the system. Groundwater is a backup to the surface water supply and will supplement surface water during times of high demand or reduced surface water availability.

3.19.1.2 Wastewater

The City’s Department of Public Works owns 180 miles of sanitary sewer piping servicing approximately 15,000 lateral connections. The average lateral is 40 feet in length, translating to approximately 106 miles of sanitary sewer laterals within the sewer collection system. The collection system conveys an average of 4.5 million gallons of wastewater per day to the City Water Pollution Control Facility. The sewer collection system includes three lift stations. Spring Lake and Gibson Ranch lift stations serve developments in the southern part of the City, and one influent pump station delivers flow into the headworks of the Water Pollution Control Facility.

The City of Woodland prepared a Sanitary Sewer System Management Plan (SSSMP), certified by the City Council on June 16, 2009. The plan was subsequently submitted to the State Water Resource Control Board, and the requirements of the report were implemented by staff. The SSSMP was re-certified in 2015. Per the 2015 SSSMP, no sewer gravity mains are in or adjacent to the project area.

3.19.1.3 Solid Waste

Solid waste and yard waste collection and disposal and curbside recycling in Woodland are provided by a franchise agreement with Waste Management, with disposal and material processing at Yolo County Central Landfill. According to the Yolo County Integrated Waste Management Plan, as of 2012, the landfill had approximately 79 years of disposal capacity.

3.19.1.4 Power

Pacific Gas and Electric provides energy (electricity and natural gas) to the city of Woodland and has high voltage powerlines in the city.
3.19.2 Impact Analysis

a. Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

LESS THAN SIGNIFICANT IMPACT. During construction activities at the project site, water associated with dust controlling activities would be expected to be used in minimal amounts. The water that would be used during construction would be trucked in and housed in a water truck at construction staging areas at the project site. Any wastewater that is generated at the project site during construction would be hauled off-site to the city’s Water Pollution Control Facility for processing. The proposed project would require water and would generate wastewater only during construction. The amount of water required and wastewater anticipated to be generated during construction would be minimal and would occur on a temporary basis for the duration of construction activities. No new water treatment or wastewater treatment facilities would have to be developed in association with development of the proposed project. Operation of the proposed project would not result in any new residences or businesses, and would therefore not impact wastewater treatment.

The existing drainage ditch on the west side of the freeway would not be impacted. The drainage ditch on the east side of the freeway is planned to be replaced with a storm drainage system with the planned residential and mixed-use development currently underway east of SR-113 near the project area. The project would not require the construction or expansion of any new storm water drainage facilities.

The proposed Project would include pedestrian lighting on the overcrossing. This would require connection to electrical power; however, such facilities would not cause significant effects. No alterations to natural gas or telecommunication facilities would occur. Impacts would be less than significant.

b. Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

NO IMPACT. Water for dust control operations would be imported from off-site. No further water supplies would be required to serve the proposed project, and operation would not require water service. As such, no impacts would occur.

c. Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project’s projected demand in addition to the provider’s existing commitments?

NO IMPACT. During construction of the proposed project, workers on-site would generate a nominal amount of wastewater. Any amount of wastewater generated by construction workers would be hauled and treated off-site. No impacts would occur to wastewater treatment.
requirements, nor would new wastewater facilities or sewage systems need to be constructed. Operations would have no impact on wastewater. The project would have no impact.

d.  **Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?**

**LESS THAN SIGNIFICANT IMPACT.** The State of California has set a goal of 75 percent recycling, composting or source reduction of solid waste by 2020. The City of Woodland General Plan 2035 Policy 5.J.7 states “Promote solid waste reduction, recycling, and composting to Woodland residents and business as an important way to conserve limited natural resources. Encourage businesses to use recycled products in their manufacturing processes and consumers to buy recycled products”. The City’s Climate Action Plan identifies an objective to reduce solid waste emissions through solid waste reduction and waste processing improvements. The proposed project would temporarily generate construction and demolition debris during construction as the new bridge is developed. Construction-related solid waste generated by the proposed project would include wood and concrete debris, inert materials, and mixed municipal from construction workers on the project site. Once operational, the proposed project would not generate solid waste. The amount of solid waste that would be generated during construction of the proposed project would be minimal compared to the existing daily intake at the Yolo County Central Landfill. The landfill would be able to intake material from the project site during the temporary construction period and would still have remaining daily intake capacity to serve other solid waste disposal requirements. Considering that solid waste would be generated during construction only, and no solid waste would be generated during the operation of the project, solid waste reduction goals and disposal operations at Yolo County Central Landfill would not be impacted by the proposed project. Therefore, impacts would be less than significant.

e.  **Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?**

**NO IMPACT.** The proposed project would comply with Federal, State, and local management and reduction statutes and regulations related to solid waste. No impact would occur.
3.20 WILDFIRE

<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>
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</thead>
<tbody>
<tr>
<td>If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:</td>
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</tr>
<tr>
<td>a. Substantially impair an adopted emergency response plan or emergency evacuation plan?</td>
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</tr>
<tr>
<td>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?</td>
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<td>☐</td>
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</tr>
<tr>
<td>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?</td>
<td>☐</td>
<td>☐</td>
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<td>☐</td>
</tr>
<tr>
<td>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?</td>
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</tbody>
</table>

3.20.1 Environmental Setting

The proposed project is located on the east and west sides of SR-113 along the southern city limits of Woodland. The surrounding area is topographically flat and includes residential and agricultural development. According to the California Department of Forestry and Fire Protection, the project site is located in an urbanized unzoned area and is not within a high fire hazard severity zone.

3.20.2 Impact Analysis

a. Would the project substantially impair an adopted emergency response plan or emergency evacuation plan?

LESS THAN SIGNIFICANT IMPACT. Construction of the project would require temporary lane closures along SR-113 and may result in temporary traffic delays. However, a traffic management plan would be implemented to ensure emergency access is maintained and to minimize impacts to emergency response and evacuation. Once operational, the project would not impact any adopted emergency response plan or emergency evacuation plan. Less than significant impact would occur.

b. Would the project, due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

NO IMPACT. The Project vicinity is generally flat and largely developed. The Project site is not located in an area identified as a high fire hazard severity zone. The Project would not exacerbate wildfire risks and thereby expose project occupants to pollutant concentrations. No impact would occur.
c. **Would the project 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?**

**LESS THAN SIGNIFICANT IMPACT.** The proposed Project would include the construction of a pedestrian overcrossing in a developed area near Woodland. The existing area includes roads, power lines and other utilities. Any expansion of power lines to provide electricity to pedestrian lighting would be conducted in compliance with any applicable regulations and safety measures. The proposed Project would not include infrastructure that may exacerbate fire risk and would result in less than significant impact.

d. **Would the project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?**

**NO IMPACT.** The Project area is located in a generally flat area and is not located in a flood hazard zone. The proposed Project would not alter slopes or drainage patterns. No impact would occur.
3.21 MANDATORY FINDINGS OF SIGNIFICANCE

<table>
<thead>
<tr>
<th>Potential Impact</th>
<th>Less Than Significant with Mitigation</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?</td>
<td>☐</td>
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</tr>
<tr>
<td>b. Does the project have impacts that are individually limited, but cumulatively considerable? (&quot;Cumulatively considerable&quot; 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.)</td>
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</tr>
<tr>
<td>c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
</tr>
</tbody>
</table>

3.21.1 Impact Analysis

a. Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED. The proposed project would include the construction of a new pedestrian bridge crossing over SR-113 in Woodland. As described throughout this Initial Study, implementation of the proposed project would have the potential to adversely impact sensitive natural communities, special-status animals, and previously undiscovered cultural resources and/or human remains. With implementation of the mitigation measures recommended in this Initial Study, compliance with City of Woodland and Yolo County requirements, and application of standard practices, development of the proposed project would not: 1) degrade the quality of the environment; 2) substantially reduce the habitat of fish or wildlife species; 3) cause a fish or wildlife population to drop below self-sustaining levels; 4) threaten to eliminate a plant or animal community; 5) reduce the number or restrict the range of a rare or endangered plant or animal; or, 6) 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)?

**LESS THAN SIGNIFICANT.** The impacts of the proposed project would be individually limited and would not be cumulatively considerable. The proposed project would include the development of a new pedestrian bridge over SR-113. All environmental impacts that could occur as a result of the proposed project would be reduced to a less than significant level with implementation of the mitigation measures recommended throughout this Initial Study. When viewed in conjunction with other closely-related past, present or reasonably foreseeable future projects, development of this project would not cumulatively contribute to impacts.

c. **Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?**

**LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED.** The purpose of the proposed project is to provide pedestrian access between parks, schools, retail, and residential developments on the east and west sides of SR-113. As described in this Initial Study, implementation of the proposed project could result in temporary air quality, cultural, geology and soils, greenhouse gas, hazardous waste, hydrology, noise, transportation and traffic, and tribal resource impacts during the construction period. Implementation of the mitigation measures recommended in this Initial Study, compliance with City of Woodland regulations, and application of standard construction practices would ensure that the proposed project would not result in environmental impacts that would cause substantial direct or indirect adverse impacts on human beings.
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4.0 LIST OF PREPARERS

LSA Associates, Inc.
Roseville Office
201 Creekside Ridge Court, Suite 250
Roseville, California 95678

Edward Heming, Associate Environmental Planner and Project Manager
Kat Hughes, Environmental Planner
Ali Boule, Environmental Planner
Amy Fischer, Principal Air Quality and Noise Specialist
Cara Carlucci, Air Quality and Noise Specialist
Rhea Sanchez, Cultural Resources Specialist
Stephanie Powers, Document Management
5.0 REFERENCES


SMAQMD. 2013b. PM$_{2.5}$ Implementation/Maintenance Plan and Re-designation Request for Sacramento PM$_{2.5}$ Nonattainment Area. October 24.


APPENDIX A

ROAD CONSTRUCTION EMISSIONS MODEL
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Road Construction Emissions Model, Version 8.1.0

### Daily Emission Estimates for Sports Park Drive Pedestrian Path and Overcrossing

#### Project Phases (Pounds)

<table>
<thead>
<tr>
<th>Phase</th>
<th>ROG (lbs/day)</th>
<th>CO (lbs/day)</th>
<th>NOx (lbs/day)</th>
<th>PM10 (lbs/day)</th>
<th>Total PM2.5 (lbs/day)</th>
<th>Exhaust PM2.5 (lbs/day)</th>
<th>Fugitive Dust PM2.5 (lbs/day)</th>
<th>SOx (lbs/day)</th>
<th>CO2 (lbs/day)</th>
<th>CH4 (lbs/day)</th>
<th>N2O (lbs/day)</th>
<th>CO2e (lbs/day)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grubbing/Land Clearing</td>
<td>1.30</td>
<td>8.17</td>
<td>15.56</td>
<td>3.32</td>
<td>0.62</td>
<td>2.70</td>
<td>1.12</td>
<td>0.95</td>
<td>0.56</td>
<td>0.02</td>
<td>2,208.83</td>
<td>0.61</td>
</tr>
<tr>
<td>Grading/Excavation</td>
<td>2.34</td>
<td>16.30</td>
<td>24.11</td>
<td>4.04</td>
<td>1.34</td>
<td>2.70</td>
<td>1.70</td>
<td>1.14</td>
<td>0.56</td>
<td>0.04</td>
<td>4,408.88</td>
<td>0.81</td>
</tr>
<tr>
<td>Drainage/Utilities/Sub-Grade</td>
<td>2.77</td>
<td>23.94</td>
<td>27.04</td>
<td>4.17</td>
<td>1.47</td>
<td>2.70</td>
<td>1.91</td>
<td>1.35</td>
<td>0.56</td>
<td>0.05</td>
<td>4,873.99</td>
<td>1.00</td>
</tr>
<tr>
<td>Paving</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Maximum (pounds/day)</td>
<td>2.77</td>
<td>23.94</td>
<td>27.04</td>
<td>4.17</td>
<td>1.47</td>
<td>2.70</td>
<td>1.91</td>
<td>1.35</td>
<td>0.56</td>
<td>0.05</td>
<td>4,873.99</td>
<td>1.00</td>
</tr>
</tbody>
</table>

#### Total (tons/construction project)

| Phase                        | ROG (tons/phase) | CO (tons/phase) | NOx (tons/phase) | PM10 (tons/phase) | Total PM2.5 (tons/phase) | Exhaust PM2.5 (tons/phase) | Fugitive Dust PM2.5 (tons/phase) | SOx (tons/phase) | CO2 (tons/phase) | CH4 (tons/phase) | N2O (tons/phase) | CO2e (MT/phase) |
|------------------------------|------------------|-----------------|-----------------|-------------------|--------------------------|----------------------------|-------------------------------|-----------------|----------------|----------------|----------------|----------------|----------------|
| Grubbing/Land Clearing       | 0.01             | 0.08            | 0.15            | 0.03              | 0.01                     | 0.01                       | 0.01                          | 0.01            | 0.00           | 0.00           | 21.87          | 0.01           | 0.00           | 20.04          |
| Grading/Excavation           | 0.01             | 0.72            | 0.95            | 0.16              | 0.06                     | 0.11                       | 0.07                          | 0.05            | 0.02           | 0.00           | 174.59         | 0.03           | 0.00           | 159.65         |
| Drainage/Utilities/Sub-Grade | 0.14             | 1.19            | 1.34            | 0.21              | 0.07                     | 0.13                       | 0.09                          | 0.07            | 0.03           | 0.00           | 241.26         | 0.05           | 0.00           | 220.65         |
| Paving                       | 0.14             | 1.19            | 1.34            | 0.21              | 0.07                     | 0.13                       | 0.09                          | 0.07            | 0.03           | 0.00           | 241.26         | 0.05           | 0.00           | 220.65         |
| Maximum (tons/phase)         | 0.24             | 1.99            | 2.45            | 0.40              | 0.13                     | 0.27                       | 0.17                          | 0.12            | 0.06           | 0.00           | 437.72         | 0.09           | 0.01           | 400.53         |

### Notes:
- Project Start Year: 2019
- Project Length (months): 9
- Total Project Area (acres): 0
- Maximum Area Disturbed/Day (acres): 0
- Water Truck Used: Yes

PM10 and PM2.5 emissions assume 50% control of fugitive dust from watering and associated dust control measures if a minimum number of water trucks are specified.

Total PM10 emissions shown in column F are the sum of exhaust and fugitive dust emissions shown in columns G and H. Total PM2.5 emissions shown in Column I are the sum of exhaust and fugitive dust emissions shown in columns J and K.

CO2e emissions are estimated by multiplying mass emissions for each GHG by its global warming potential (GWP), 1, 25 and 298 for CO2, CH4 and N2O, respectively. Total CO2e is then estimated by summing CO2e estimates over all GHGs.

### Daily VMT (miles/day)

<table>
<thead>
<tr>
<th>Phase</th>
<th>Soil Hauling</th>
<th>Asphalt Hauling</th>
<th>Worker Commute</th>
<th>Water Truck</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grubbing/Land Clearing</td>
<td>0</td>
<td>0</td>
<td>200</td>
<td>40</td>
</tr>
<tr>
<td>Grading/Excavation</td>
<td>145</td>
<td>0</td>
<td>240</td>
<td>40</td>
</tr>
<tr>
<td>Drainage/Utilities/Sub-Grade</td>
<td>0</td>
<td>0</td>
<td>720</td>
<td>40</td>
</tr>
<tr>
<td>Paving</td>
<td>0</td>
<td>0</td>
<td>320</td>
<td>-30</td>
</tr>
</tbody>
</table>

PM10 and PM2.5 emissions assume 50% control of fugitive dust from watering and associated dust control measures if a minimum number of water trucks are specified.

Total PM10 emissions shown in column F are the sum of exhaust and fugitive dust emissions shown in columns G and H. Total PM2.5 emissions shown in Column I are the sum of exhaust and fugitive dust emissions shown in columns J and K.

CO2e emissions are estimated by multiplying mass emissions for each GHG by its global warming potential (GWP), 1, 25 and 298 for CO2, CH4 and N2O, respectively. Total CO2e is then estimated by summing CO2e estimates over all GHGs.

The CO2e emissions are reported as metric tons per phase.
APPENDIX B

SPECIES LISTS
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IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as trust resources) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Location
Yolo County, California

Local office
Sacramento Fish And Wildlife Office

📞 (916) 414-6600
💻 (916) 414-6713

Federal Building
2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846
Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population, even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act requires Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can only be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species are managed by the Ecological Services Program of the U.S. Fish and Wildlife Service.

1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the listing status page for more information.

The following species are potentially affected by activities in this location:

### Birds

<table>
<thead>
<tr>
<th>NAME</th>
<th>STATUS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Western Snowy Plover Charadrius alexandrinus nivosus</td>
<td>Threatened</td>
</tr>
<tr>
<td>There is final critical habitat for this species. Your location is outside the critical habitat.</td>
<td></td>
</tr>
<tr>
<td><a href="https://ecos.fws.gov/ecp/species/8035">https://ecos.fws.gov/ecp/species/8035</a></td>
<td></td>
</tr>
<tr>
<td>Yellow-billed Cuckoo Coccyzus americanus</td>
<td>Threatened</td>
</tr>
<tr>
<td>There is proposed critical habitat for this species. Your location is outside the critical habitat.</td>
<td></td>
</tr>
<tr>
<td><a href="https://ecos.fws.gov/ecp/species/3911">https://ecos.fws.gov/ecp/species/3911</a></td>
<td></td>
</tr>
</tbody>
</table>

### Reptiles

<table>
<thead>
<tr>
<th>NAME</th>
<th>STATUS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Giant Garter Snake Thamnophis gigas</td>
<td>Threatened</td>
</tr>
<tr>
<td>No critical habitat has been designated for this species.</td>
<td></td>
</tr>
<tr>
<td><a href="https://ecos.fws.gov/ecp/species/4482">https://ecos.fws.gov/ecp/species/4482</a></td>
<td></td>
</tr>
</tbody>
</table>

### Amphibians

<table>
<thead>
<tr>
<th>NAME</th>
<th>STATUS</th>
</tr>
</thead>
<tbody>
<tr>
<td>California Red-legged Frog Rana draytonii</td>
<td>Threatened</td>
</tr>
<tr>
<td>There is final critical habitat for this species. Your location is outside the critical habitat.</td>
<td></td>
</tr>
<tr>
<td><a href="https://ecos.fws.gov/ecp/species/2891">https://ecos.fws.gov/ecp/species/2891</a></td>
<td></td>
</tr>
<tr>
<td>California Tiger Salamander Ambystoma californiense</td>
<td>Threatened</td>
</tr>
<tr>
<td>There is final critical habitat for this species. Your location is outside the critical habitat.</td>
<td></td>
</tr>
<tr>
<td><a href="https://ecos.fws.gov/ecp/species/2076">https://ecos.fws.gov/ecp/species/2076</a></td>
<td></td>
</tr>
</tbody>
</table>

### Fishes

https://ecos.fws.gov/ipac/location/O6YFYIWXTWEXPHU5RU6CYZXM6A/resources

2/8
Insects

<table>
<thead>
<tr>
<th>NAME</th>
<th>STATUS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valley Elderberry Longhorn Beetle</td>
<td>Threatened</td>
</tr>
<tr>
<td>Desmocerus californicus dimorphus</td>
<td></td>
</tr>
<tr>
<td>There is final critical habitat for this species. Your location is outside the critical habitat.</td>
<td></td>
</tr>
<tr>
<td><a href="https://ecos.fws.gov/ecp/species/7850">Link</a></td>
<td></td>
</tr>
</tbody>
</table>

Crustaceans

<table>
<thead>
<tr>
<th>NAME</th>
<th>STATUS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vernal Pool Fairy Shrimp</td>
<td>Threatened</td>
</tr>
<tr>
<td>Branchinecta lynchi</td>
<td></td>
</tr>
<tr>
<td>There is final critical habitat for this species. Your location is outside the critical habitat.</td>
<td></td>
</tr>
<tr>
<td><a href="https://ecos.fws.gov/ecp/species/498">Link</a></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>NAME</th>
<th>STATUS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vernal Pool Tadpole Shrimp</td>
<td>Endangered</td>
</tr>
<tr>
<td>Lepidurus packardi</td>
<td></td>
</tr>
<tr>
<td>There is final critical habitat for this species. Your location is outside the critical habitat.</td>
<td></td>
</tr>
<tr>
<td><a href="https://ecos.fws.gov/ecp/species/2246">Link</a></td>
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</tr>
</tbody>
</table>

Flowing Plants

<table>
<thead>
<tr>
<th>NAME</th>
<th>STATUS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Palmate-bracted Bird’s Beak</td>
<td>Endangered</td>
</tr>
<tr>
<td>Cordylanthus palmatus</td>
<td></td>
</tr>
<tr>
<td>No critical habitat has been designated for this species.</td>
<td></td>
</tr>
<tr>
<td><a href="https://ecos.fws.gov/ecp/species/1616">Link</a></td>
<td></td>
</tr>
</tbody>
</table>

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act\(^1\) and the Bald and Golden Eagle Protection Act\(^2\).

Any activity that results in the take (to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct) of migratory birds or eagles is prohibited unless authorized by the U.S. Fish and Wildlife Service\(^3\). There are no provisions for allowing the take of migratory birds that are unintentionally killed or injured. Any person or organization who plans or conducts activities that may result in the take of migratory birds is responsible for complying with the appropriate regulations and implementing appropriate conservation measures, as described below.

2. The [Bald and Golden Eagle Protection Act](https://www.fws.gov/bald-eagle) of 1940.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

Additional information can be found using the following links:

- [Nationwide conservation measures for birds](http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf)
The birds listed below are USFWS Birds of Conservation Concern that might be affected by activities in this location. The list does not contain every bird you may find in this location, nor is it guaranteed that all of the birds on the list will be found on or near this location. To get a better idea of the specific locations where certain species have been reported and their level of occurrence, please refer to resources such as the E-bird data mapping tool (year-round bird sightings by birders and the general public) and Breeding Bird Survey (relative abundance maps for breeding birds). Although it is important to try to avoid and minimize impacts to all birds, special attention should be given to the birds on the list below. To get a list of all birds potentially present in your project area, visit the E-bird Explore Data Tool.

<table>
<thead>
<tr>
<th>NAME</th>
<th>BREEDING SEASON</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allen's Hummingbird</td>
<td>Breeds Feb 1 to Jul 15</td>
</tr>
<tr>
<td>Black Swift</td>
<td>Breeds Jun 15 to Sep 10</td>
</tr>
<tr>
<td>Black Turnstone</td>
<td>Breeds elsewhere</td>
</tr>
<tr>
<td>Black-chinned Sparrow</td>
<td>Breeds Apr 15 to Jul 31</td>
</tr>
<tr>
<td>Burrowing Owl</td>
<td>Breeds Mar 15 to Aug 31</td>
</tr>
<tr>
<td>California Thrasher</td>
<td>Breeds Jan 1 to Jul 31</td>
</tr>
<tr>
<td>Clark's Grebe</td>
<td>Breeds Jan 1 to Dec 31</td>
</tr>
<tr>
<td>Common Yellowthroat</td>
<td>Breeds May 20 to Jul 31</td>
</tr>
<tr>
<td>Costa's Hummingbird</td>
<td>Breeds Jan 15 to Jun 10</td>
</tr>
<tr>
<td>Lawrence's Goldfinch</td>
<td>Breeds Mar 20 to Sep 20</td>
</tr>
<tr>
<td>Lewis's Woodpecker</td>
<td>Breeds Apr 20 to Sep 30</td>
</tr>
<tr>
<td>Long-billed Curlew</td>
<td>Breeds elsewhere</td>
</tr>
<tr>
<td>Marbled Godwit</td>
<td>Breeds elsewhere</td>
</tr>
<tr>
<td>Mountain Plover</td>
<td>Breeds elsewhere</td>
</tr>
<tr>
<td>Nuttall's Woodpecker</td>
<td>Breeds Apr 1 to Jul 20</td>
</tr>
<tr>
<td>Oak Titmouse</td>
<td>Breeds Mar 15 to Jul 15</td>
</tr>
<tr>
<td>Red Knot</td>
<td>Breeds elsewhere</td>
</tr>
<tr>
<td>Rufous Hummingbird</td>
<td>Breeds elsewhere</td>
</tr>
<tr>
<td>Short-billed Dowitcher</td>
<td>Breeds elsewhere</td>
</tr>
</tbody>
</table>
Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds.

**Probability of Presence (a)**

Each green bar represents the bird’s relative probability of presence in your project’s counties during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.

2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is $0.25/0.25 = 1$; at week 20 it is $0.05/0.25 = 0.2$.

3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar’s probability of presence score, simply hover your mouse cursor over the bar.

**Breeding Season (a)**

Yellow bars denote when the bird breeds in the Bird Conservation Region(s) in which your project lies. If there are no yellow bars shown for a bird, it does not breed in your project area.

**Survey Effort (I)**

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the counties of your project area. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar’s survey effort range, simply hover your mouse cursor over the bar.

**No Data (−)**

A week is marked as having no data if there were no survey events for that week.

**Survey Timeframe**

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information.

### SPECIES

| Allen's Hummingbird | Breeds Mar 5 to Sep 15
|---------------------|------------------------|
| Song Sparrow Melospiza melodia maxillaris | Breeds Feb 20 to Sep 5
| Spotted Towhee Pipilo maculatus clementae | Breeds Apr 15 to Jul 20
| Tricolored Blackbird Agelaius tricolor | Breeds Mar 15 to Aug 10
| Whimbrel Numenius phaeopus | Breeds elsewhere
| Willet Tringa semipalmata | Breeds elsewhere
| Wrentit Chamaea fasciata | Breeds Mar 15 to Aug 10
| Yellow-billed Magpie Pica nuttalli | Breeds Apr 1 to Jul 31

### SPECIES

<table>
<thead>
<tr>
<th>SPECIES</th>
<th>JAN</th>
<th>FEB</th>
<th>MAR</th>
<th>APR</th>
<th>MAY</th>
<th>JUN</th>
<th>JUL</th>
<th>AUG</th>
<th>SEP</th>
<th>OCT</th>
<th>NOV</th>
<th>DEC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allen's Hummingbird</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

_Nationwide Conservation Measures_ describes measures that can help avoid and minimize impacts to all birds at any location year round. Such measures are particularly important when birds are most likely to occur in the project area. To see when birds are most likely to occur in your project area, view the Probability of Presence Summary. Special attention should be made to look for nests and avoid nest destruction during the breeding season. The best information about when birds are breeding can be found in _Birds of North America (BNA) Online_ under the “Breeding Phenology” section of each species profile. Note that accessing this information may require a subscription. Additional measures and/or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

[Table of bird species and their occurrence throughout the year]
What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) that might be affected by activities in your project location. These birds are of priority concern because it has been determined that without additional conservation actions, they are likely to become candidates for listing under the Endangered Species Act (ESA).

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets. The AKN list represents all birds reported to be occurring at some level throughout the year in the counties in which your project lies. That list is then narrowed to only the Birds of Conservation Concern for your project area.

Again, the Migratory Bird Resource list only includes species of particular priority concern, and is not representative of all birds that may occur in your project area. Although it is important to try to avoid and minimize impacts to all birds, special attention should be made to avoid and minimize impacts to birds of priority concern. To get a list of all birds potentially present in your project area, please visit the E-bird Explore Data Tool.

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the Avian Knowledge Network (AKN). This data is derived from a growing collection of survey, banding, and citizen science datasets. Probability of presence data is continuously being updated as new and better information becomes available.

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: The Cornell Lab of Ornithology All About Birds Bird Guide, or (if you are unsuccessful in locating the bird of interest there), the Cornell Lab of Ornithology Neotropical Birds guide. If a bird entry on your migratory bird species list indicates a breeding season, it is probable the bird breeds in your project's counties at some point within the time-frame specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS AT THIS LOCATION.

Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

Wetlands in the National Wetlands Inventory

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

THERE ARE NO KNOWN WETLANDS AT THIS LOCATION.

Data limitations

The Service’s objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions
Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tubercid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.
<table>
<thead>
<tr>
<th>Scientific Name</th>
<th>Common Name</th>
<th>Taxonomic Group</th>
<th>Element Code</th>
<th>Total Occs</th>
<th>Returned Occs</th>
<th>Federal Status</th>
<th>State Status</th>
<th>Global Rank</th>
<th>State Rank</th>
<th>Other Status</th>
<th>Habitats</th>
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<tbody>
<tr>
<td>Agelaius tricolor</td>
<td>tricolored blackbird</td>
<td>Birds</td>
<td>ABPBXB0020</td>
<td>951</td>
<td>6</td>
<td>None</td>
<td>Candidate Endangered</td>
<td>G2G3</td>
<td>S1S2</td>
<td>null</td>
<td>Freshwater marsh, Marsh &amp; swamp, Swamp, Wetland</td>
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<tr>
<td>Antrozous pallidus</td>
<td>pallid bat</td>
<td>Mammals</td>
<td>AMACC10010</td>
<td>410</td>
<td>1</td>
<td>None</td>
<td>None</td>
<td>G5</td>
<td>S3</td>
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<td>Chaparral, Coastal scrub, Desert wash, Great Basin grassland, Great Basin scrub, Mojavean desert scrub, Riparian woodland, Sonoran desert scrub, Upper montane coniferous forest, Valley &amp; foothill grassland</td>
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<tr>
<td>Astragalus tener var. tener</td>
<td>alkali milk-vetch</td>
<td>Dicots</td>
<td>PDFAB0F8R1</td>
<td>65</td>
<td>1</td>
<td>None</td>
<td>None</td>
<td>G2T2</td>
<td>S2</td>
<td>1B.2</td>
<td>Alkali playa, Valley &amp; foothill grassland, Vernal pool, Wetland</td>
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<tr>
<td>Atriplex depressa</td>
<td>brittlescale</td>
<td>Dicots</td>
<td>PDCHE042L0</td>
<td>61</td>
<td>4</td>
<td>None</td>
<td>None</td>
<td>G2</td>
<td>S2</td>
<td>1B.2</td>
<td>Alkali playa, Chenopod scrub, Meadow &amp; seep, Valley &amp; foothill grassland, Vernal pool, Wetland</td>
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<tr>
<td>Bombus occidentalis</td>
<td>western bumble bee</td>
<td>Insects</td>
<td>IIHYM24250</td>
<td>282</td>
<td>1</td>
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<td>None</td>
<td>G2G3</td>
<td>S1</td>
<td>null</td>
<td>USFS_Sensitive, XERCES_IM-Imperiled</td>
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<tr>
<td>Buteo swainsoni</td>
<td>Swainson's hawk</td>
<td>Birds</td>
<td>ABNKC19070</td>
<td>2443</td>
<td>108</td>
<td>None</td>
<td>Threatened</td>
<td>G5</td>
<td>S3</td>
<td>null</td>
<td>Great Basin grassland, Riparian forest, Riparian woodland, Valley &amp; foothill grassland</td>
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<td>Charadrius alexandrinus nivosus</td>
<td>western snowy plover</td>
<td>Birds</td>
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<td>None</td>
<td>G3T3</td>
<td>S2S3</td>
<td>null</td>
<td>CDFW_SSC-Species of Special Concern, NABCI_RWL-Red Watch List, USFWS_BCC-Birds of Conservation Concern</td>
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<td>Charadrius montanus</td>
<td>mountain plover</td>
<td>Birds</td>
<td>ABNNB03100</td>
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<td>None</td>
<td>G3</td>
<td>S2S3</td>
<td>null</td>
<td>BLM_Sensitive, Chenopod scrub, Valley &amp; foothill grassland</td>
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<tr>
<td>Scientific Name</td>
<td>Common Name</td>
<td>Kingdom</td>
<td>Phylum</td>
<td>Species</td>
<td>IUCN/USFWS Status</td>
<td>CDFW_SSC Status</td>
<td>Conservation Concern</td>
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<tr>
<td>Chloropyron palmatum</td>
<td>palmate-bracted salty bird's-beak</td>
<td>Dicots</td>
<td>Chlorophyta</td>
<td>Chloropyron</td>
<td>endemic</td>
<td>Endangered</td>
<td>grassland</td>
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<tr>
<td>Desmocerus californicus dimorphus</td>
<td>valley elderberry longhorn beetle</td>
<td>Insects</td>
<td>Arthropoda</td>
<td>Desmocerus</td>
<td>NT</td>
<td>Threatened</td>
<td>Riparian scrub</td>
<td></td>
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<tr>
<td>Extribejoaquinana</td>
<td>San Joaquin spearscale</td>
<td>Dicots</td>
<td>Dicotyledon</td>
<td>Extribejoaquinana</td>
<td>endemic</td>
<td>None</td>
<td>BLM S-Sensitive, SB_RSABG-Rancho Santa Ana Botanic Garden</td>
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<tr>
<td>Falco columbarius</td>
<td>merlin</td>
<td>Birds</td>
<td>Aves</td>
<td>Falco</td>
<td>Least Concern</td>
<td>G5 S3S4 null</td>
<td>Estuary, Great Basin grassland, Valley &amp; foothill grassland</td>
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<tr>
<td>Hibiscus lasiocarpos var. occidentalis</td>
<td>wooly rose-mallow</td>
<td>Dicots</td>
<td>Dicotyledon</td>
<td>Hibiscus</td>
<td>Least Concern</td>
<td>G5 S3S4 null</td>
<td>Freshwater marsh, Marsh &amp; swamp, Wetland</td>
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<tr>
<td>Lasiocytis noctivagans</td>
<td>silver-haired bat</td>
<td>Mammals</td>
<td>Chordata</td>
<td>Lasiocytis</td>
<td>Least Concern</td>
<td>G5 S3S4 null</td>
<td>Lower montane coniferous forest, Oldgrowth, Riparian forest</td>
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<tr>
<td>Lasiusinus cinereus</td>
<td>hoary bat</td>
<td>Mammals</td>
<td>Chordata</td>
<td>Lasiusinus</td>
<td>Least Concern</td>
<td>G5 S4 null</td>
<td>Broadleaved upland forest, Cismontane woodland, Lower montane coniferous forest, North coast coniferous forest</td>
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<tr>
<td>Lepidium latipes var. heckardii</td>
<td>Heckard's pepper-grass</td>
<td>Dicots</td>
<td>Dicotyledon</td>
<td>Lepidium</td>
<td>Least Concern</td>
<td>G5 S3S4 null</td>
<td>Valley &amp; foothill grassland, Vernal pool</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Lepidurus packardi</td>
<td>vernal pool tadpole shrimp</td>
<td>Crustaceans</td>
<td>Arthropoda</td>
<td>Lepidurus</td>
<td>Least Concern</td>
<td>G4 S3S4 null</td>
<td>Valley &amp; foothill grassland, Vernal pool, Wetland</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Melospiza melodia</td>
<td>song sparrow (<em>Modesto</em> population)</td>
<td>Birds</td>
<td>Aves</td>
<td>Melospiza</td>
<td>Least Concern</td>
<td>G5 S3? null</td>
<td>null</td>
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<tr>
<td>Oncorhynchus mykiss indeus pop. 11</td>
<td>steelhead - Central Valley DPS</td>
<td>Fish</td>
<td>Actinopterygii</td>
<td>Oncorhynchus</td>
<td>Least Concern</td>
<td>G5 S3S4 null</td>
<td>Aquatic, Sacramento/San Joaquin flowing waters</td>
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<td></td>
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<tr>
<td>Plegadis chihi</td>
<td>white-faced ibis</td>
<td>Birds</td>
<td>Aves</td>
<td>Plegadis</td>
<td>Least Concern</td>
<td>G5 S3S4 null</td>
<td>Marsh &amp; swamp, Wetland</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Pogonichtigys macrolepidotus</td>
<td>Sacramento splittail</td>
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<td>Actinopterygii</td>
<td>Pogonichtigys</td>
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<td>Aquatic, Estuary, Freshwater marsh, Sacramento/San Joaquin flowing waters</td>
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<tr>
<td>Puccinella simplex</td>
<td>California alkali grass</td>
<td>Monocots</td>
<td>Plantae</td>
<td>Puccinella</td>
<td>Least Concern</td>
<td>G5 S2 1B.2 null</td>
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https://map.dfg.ca.gov/rarefind/view/QuickElementListView.html
<table>
<thead>
<tr>
<th>Species</th>
<th>Scientific Name</th>
<th>Taxonomy</th>
<th>Status Code</th>
<th>Status</th>
<th>Threatened</th>
<th>Vulnerable</th>
<th>Critical Habitat</th>
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<tbody>
<tr>
<td>Spirinchus thaleichthys</td>
<td>longfin smelt</td>
<td>Fish</td>
<td>AFCHB03010</td>
<td>46</td>
<td>1</td>
<td>Candidate</td>
<td>Threatened G5 S1 null CDFW_SSC-Species of Special Concern Aquatic, Estuary</td>
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<tr>
<td>American badger</td>
<td>Taxidea taxus</td>
<td>Mammals</td>
<td>AMAJF04010</td>
<td>542</td>
<td>1</td>
<td>None</td>
<td>None G5 S3 null CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern</td>
</tr>
<tr>
<td>Thamnophis gigas</td>
<td>giant gartersnake</td>
<td>Reptiles</td>
<td>ARADB36150</td>
<td>365</td>
<td>14</td>
<td>Threatened</td>
<td>Threatened G2 S2 null IUCN_VU-Vulnerable Marsh &amp; swamp, Riparian scrub, Wetland</td>
</tr>
<tr>
<td>Trifolium hydrophilum</td>
<td>saline clover</td>
<td>Dicots</td>
<td>PDFAB400R5</td>
<td>49</td>
<td>1</td>
<td>None</td>
<td>None G2 S2 1B.2 null Marsh &amp; swamp, Valley &amp; foothill grassland Vernal pool, Wetland</td>
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<tr>
<td>Valley Oak Woodland</td>
<td>Valley Oak Woodland</td>
<td>Woodland</td>
<td>CTT71130CA</td>
<td>91</td>
<td>1</td>
<td>None</td>
<td>None G3 S2.1 null null Cismontane woodland</td>
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</tbody>
</table>
# Plant List

### Inventory of Rare and Endangered Plants

11 matches found.  *Click on scientific name for details*

<table>
<thead>
<tr>
<th>Scientific Name</th>
<th>Common Name</th>
<th>Family</th>
<th>Lifeform</th>
<th>Blooming Period</th>
<th>CA Rare Plant Rank</th>
<th>State Rank</th>
<th>Global Rank</th>
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</thead>
<tbody>
<tr>
<td>Astragalus pauperculus</td>
<td>depauperate milk-vetch</td>
<td>Fabaceae</td>
<td>annual herb</td>
<td>Mar-Jun</td>
<td>4.3</td>
<td>S4</td>
<td>G4</td>
</tr>
<tr>
<td>Astragalus tener var. tener</td>
<td>alkali milk-vetch</td>
<td>Fabaceae</td>
<td>annual herb</td>
<td>Mar-Jun</td>
<td>1B.2</td>
<td>S2</td>
<td>G2T2</td>
</tr>
<tr>
<td>Atriplex depressa</td>
<td>brittlescale</td>
<td>Chenopodiaceae</td>
<td>annual herb</td>
<td>Apr-Oct</td>
<td>1B.2</td>
<td>S2</td>
<td>G2</td>
</tr>
<tr>
<td>Centromadia parryi ssp. rudis</td>
<td>Parry's rough tarplant</td>
<td>Asteraceae</td>
<td>annual herb</td>
<td>May-Oct</td>
<td>4.2</td>
<td>S3</td>
<td>G3T3</td>
</tr>
<tr>
<td>Chloropyron palmatum</td>
<td>palmate-bracted bird's-beak</td>
<td>Orobanchaceae</td>
<td>annual herb (hemiparasitic)</td>
<td>May-Oct</td>
<td>1B.1</td>
<td>S1</td>
<td>G1</td>
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<tr>
<td>Extriplex joaquinana</td>
<td>San Joaquin spearscale</td>
<td>Chenopodiaceae</td>
<td>annual herb</td>
<td>Apr-Oct</td>
<td>1B.2</td>
<td>S2</td>
<td>G2</td>
</tr>
<tr>
<td>Hibiscus lasiocarpos var. occidentalis</td>
<td>woolly rose-mallow</td>
<td>Malvaceae</td>
<td>perennial rhizomatous herb (emergent)</td>
<td>Jun-Sep</td>
<td>1B.2</td>
<td>S3</td>
<td>G5T3</td>
</tr>
<tr>
<td>Lepidium latipes var. heckardii</td>
<td>Heckard's pepper-grass</td>
<td>Brassicaceae</td>
<td>annual herb</td>
<td>Mar-May</td>
<td>1B.2</td>
<td>S1</td>
<td>G4T1</td>
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<td>Lessingia hololeuca</td>
<td>woolly-headed lessingia</td>
<td>Asteraceae</td>
<td>annual herb</td>
<td>Jun-Oct</td>
<td>3</td>
<td>S3?</td>
<td>G3?</td>
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<tr>
<td>Puccinellia simplex</td>
<td>California alkali grass</td>
<td>Poaceae</td>
<td>annual herb</td>
<td>Mar-May</td>
<td>1B.2</td>
<td>S2</td>
<td>G3</td>
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<tr>
<td>Trifolium hydrophilum</td>
<td>saline clover</td>
<td>Fabaceae</td>
<td>annual herb</td>
<td>Apr-Jun</td>
<td>1B.2</td>
<td>S2</td>
<td>G2</td>
</tr>
</tbody>
</table>

### Suggested Citation

Quad Name: **Woodland**
Quad Number: **38121-F7**

**ESA Anadromous Fish**

SONCC Coho ESU (T) -  
CCC Coho ESU (E) -  
CC Chinook Salmon ESU (T) -  
CVSR Chinook Salmon ESU (T) - X  
SRWR Chinook Salmon ESU (E) - X  
NC Steelhead DPS (T) -  
CCC Steelhead DPS (T) -  
SCCC Steelhead DPS (T) -  
SC Steelhead DPS (E) -  
CCV Steelhead DPS (T) - X  
Eulachon (T) -  
sDPS Green Sturgeon (T) -  

**ESA Anadromous Fish Critical Habitat**

SONCC Coho Critical Habitat -  
CCC Coho Critical Habitat -  
CC Chinook Salmon Critical Habitat -  
CVSR Chinook Salmon Critical Habitat -  
SRWR Chinook Salmon Critical Habitat -  
NC Steelhead Critical Habitat -  
CCC Steelhead Critical Habitat -  
SCCC Steelhead Critical Habitat -  
SC Steelhead Critical Habitat -  
CCV Steelhead Critical Habitat -  
Eulachon Critical Habitat -  
sDPS Green Sturgeon Critical Habitat -  

**ESA Marine Invertebrates**

Range Black Abalone (E) -  


Range White Abalone (E) -

**ESA Marine Invertebrates Critical Habitat**

Black Abalone Critical Habitat -

**ESA Sea Turtles**

East Pacific Green Sea Turtle (T) -
Olive Ridley Sea Turtle (T/E) -
Leatherback Sea Turtle (E) -
North Pacific Loggerhead Sea Turtle (E) -

**ESA Whales**

Blue Whale (E) -
Fin Whale (E) -
Humpback Whale (E) -
Southern Resident Killer Whale (E) -
North Pacific Right Whale (E) -
Sei Whale (E) -
Sperm Whale (E) -

**ESA Pinnipeds**

Guadalupe Fur Seal (T) -
Steller Sea Lion Critical Habitat -

**Essential Fish Habitat**

Coho EFH -
Chinook Salmon EFH -
Groundfish EFH -
Coastal Pelagics EFH -
Highly Migratory Species EFH -

**MMPA Species (See list at left)**
**ESA and MMPA Cetaceans/Pinnipeds**
See list at left and consult the NMFS Long Beach office
562-980-4000

MMPA Cetaceans -
MMPA Pinnipeds -

Quad Name  **Grays Bend**
Quad Number **38121-F6**

**ESA Anadromous Fish**

SONCC Coho ESU (T) -
CCC Coho ESU (E) -
CC Chinook Salmon ESU (T) -
CVSR Chinook Salmon ESU (T) - X
SRWR Chinook Salmon ESU (E) - X
NC Steelhead DPS (T) -
CCC Steelhead DPS (T) -
SCCC Steelhead DPS (T) -
SC Steelhead DPS (E) -
CCV Steelhead DPS (T) - X
Eulachon (T) -
sDPS Green Sturgeon (T) - X

**ESA Anadromous Fish Critical Habitat**

SONCC Coho Critical Habitat -
CCC Coho Critical Habitat -
CC Chinook Salmon Critical Habitat -
CVSR Chinook Salmon Critical Habitat - X
SRWR Chinook Salmon Critical Habitat - X
NC Steelhead Critical Habitat -
CCC Steelhead Critical Habitat -
SCCC Steelhead Critical Habitat -
SC Steelhead Critical Habitat -
CCV Steelhead Critical Habitat - [X]
Eulachon Critical Habitat - [X]
sDPS Green Sturgeon Critical Habitat - [X]

**ESA Marine Invertebrates**

Range Black Abalone (E) -
Range White Abalone (E) -

**ESA Marine Invertebrates Critical Habitat**

Black Abalone Critical Habitat -

**ESA Sea Turtles**

East Pacific Green Sea Turtle (T) -
Olive Ridley Sea Turtle (T/E) -
Leatherback Sea Turtle (E) -
North Pacific Loggerhead Sea Turtle (E) -

**ESA Whales**

Blue Whale (E) -
Fin Whale (E) -
Humpback Whale (E) -
Southern Resident Killer Whale (E) -
North Pacific Right Whale (E) -
Sei Whale (E) -
Sperm Whale (E) -

**ESA Pinnipeds**

Guadalupe Fur Seal (T) -
Steller Sea Lion Critical Habitat -

**Essential Fish Habitat**

Coho EFH -
Chinook Salmon EFH - X
Groundfish EFH - X
Coastal Pelagics EFH -
Highly Migratory Species EFH -

**MMPA Species (See list at left)**

**ESA and MMPA Cetaceans/Pinnipeds**
See list at left and consult the NMFS Long Beach office
562-980-4000

MMPA Cetaceans -
MMPA Pinnipeds -
APPENDIX C

CULTURAL RESOURCES STUDY (CONFIDENTIAL)
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