**INITIAL STUDY/**
**MITIGATED NEGATIVE DECLARATION**
**CEQA-24-0010 (Olivehurst Roadway Climate Resiliency Project)**

| | |
|---|---|
| **Project Title:** | Olivehurst Roadway Climate Resiliency Project |
| **Lead Agency Name and Address:** | County of Yuba<br>Planning Department<br>915 8th Street, Suite 123<br>Marysville, CA 95901 |
| **Project Location:** | Community of Olivehurst |
| **Applicant/Owner** | County of Yuba<br>Public Work's Department<br>915 8th Street, Suite 125<br>Marysville, CA 95901 |
| **General Plan Designation(s):** | Valley Neighborhood |
| **Zoning:** | "RS" Single Family Residential, "RM" Medium Density Residential, "RH" High Density Residential, "NMX" Neighborhood Mixed Use, "DC" Downtown Core District |
| **Contact Person:** | Ciara Fisher, Planner III |
| **Phone Number:** | 530-749-5463 |
| **Date Prepared** | July 2024 |

## Project Description

Yuba County (County) proposes to construct drainage infrastructure and establish a multi-modal transportation network along 13 road segments in the community of Olivehurst, as part of the Olivehurst Roadway Climate Resiliency Project (Project). Roadways in Olivehurst currently consist of simple paved roadways with open ditches on both sides of the roadway to collect stormwater. The Project will include a new underground storm drain network, roadway pavement rehabilitation, and roadway improvements such as curbs, gutters, sidewalks with Americans with Disabilities Act (ADA) compliant ramps, bike facilities, striping, and traffic control devices. The purpose of the proposed Project is to improve transportation efficiency within the community of Olivehurst and upgrade the Communities' storm drain infrastructure to handle larger more intense rain events expected in the coming years due to climate change. This Project is needed to increase facility resilience to climate change, improve mobility and accessibility for local residents, and improve transportation safety. Olivehurst is west of State Route 70 and east of the Feather River in Yuba County, California (Figure 1. Project Vicinity; Figure 2. Project Location).

The proposed Project will eliminate the existing roadside ditches and install a new underground storm drain system sized to accommodate projected runoff from heavy rain events. Approximately 26,000 linear feet of storm drain will be constructed, as well as 52,000 linear feet of sidewalks, 52,000 linear feet of Class III bike routes, crosswalks, ADA complaint ramps, striping and curbs and gutters (Figure 3. Project Features). This Project will connect to existing sidewalk and bicycle facilities throughout many of the remaining roads within the community of Olivehurst, improving the connectivity and safety of the communities' multi-modal transportation network.

Road segments within the Project Area include:

| | | | |
|---|---|---|---|
| 2nd Avenue | 3rd Avenue | 4th Avenue | 5th Avenue |
| 6th Avenue | 8th Avenue | 9th Avenue | 10th Avenue |
| 11th Avenue | Western Avenue | Beaver Lane | Canal Street |
| Tulsa Avenue | | | |

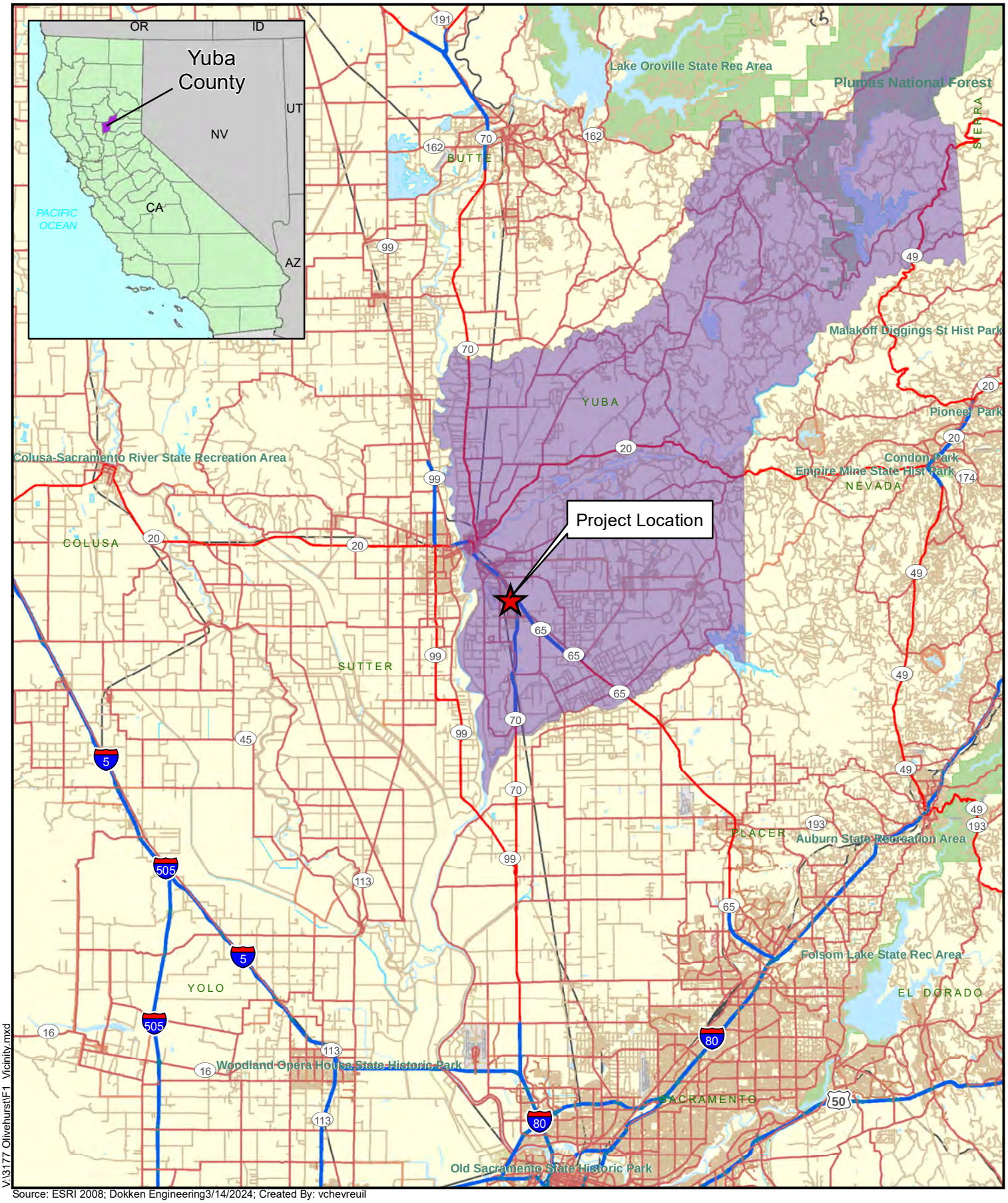
Right-of-way (ROW) acquisition, utility relocations, and temporary construction easements (TCEs) may be needed on a limited basis to accommodate construction. The Project is state funded through the Local Transportation Climate Adaptation Program (LTCAP); as such, it requires compliance with the California Environmental Quality Act (CEQA). The lead agency for the CEQA compliance is the County. The Project is expected to begin construction in the February 2026 and be fully constructed by August 2027.

## Environmental Setting

The Project Area is approximately 30.5 acres in size and spans between 2nd Avenue and 11th Avenue and encompassing the residential roadways between Olivehurst Avenue and the Clark Lateral Canal, as well as the entire length of 8th Avenue. Regionally, the Project is west of State Route 70 and east of the Feather River in Yuba County, California.

Olivehurst is within the northern Sacramento Valley, which is characterized by a Mediterranean climate, with cool, rainy winters and hot, dry summers. The average annual temperature for the Project Area ranges from 48-75ºF, with the hottest temperatures occurring in July, reaching on average a maximum of 95ºF. The average yearly rainfall total is 22.75 inches, with peak precipitation in January (U.S. Climate Data 2024). Topography ranges between 60 and 70 feet above mean sea level. Land cover includes developed (e.g. roadways, homes, landscaping, businesses), ruderal (e.g. weedy vegetation), drainage channels, and riparian vegetation.

The project is located in the Olivehurst Public Utility District (OPUD), which provides wastewater collection, treatment and disposal for residents within the Project Area. The County will work closely with OPUD to install the proposed storm drainage system. Additional impacts to Linda County Water District (LCWD) water and sewer lines may also be present. To help expedite the project schedule, LCWD has indicated they will have crews on-site during construction to relocate their facilities as conflicts arise.



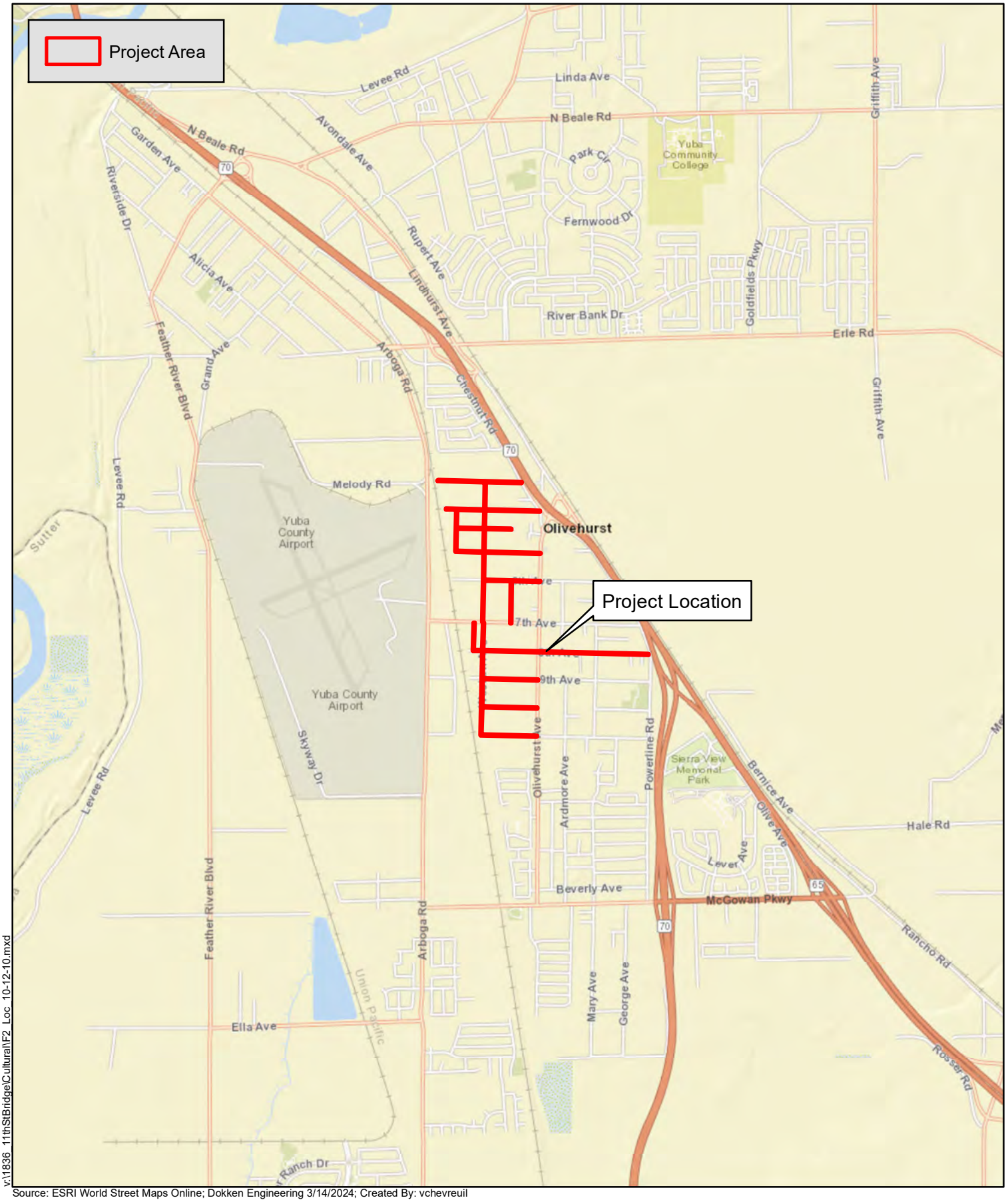

Source: ESRI 2008; Dokken Engineering3/14/2024; Created By: vchevreuil

V:\3177 Olivehurst\F1 Vicinity.mxd

0 5 10 15 Miles

**FIGURE 1**
**Project Vicinity**

Olivehurst Roadway Climate Resiliency Project
Yuba County, California




v:\1836_11thStBridge\Cultural\F2_Loc_10-12-10.mxd

Source: ESRI World Street Maps Online; Dokken Engineering 3/14/2024; Created By: vchevreuil

1 in = 3,000 ft

0 0.5 1 1.5 2 Mile

**FIGURE 2**
**Project Vicinity**

Olivehurst Roadway Climate Resiliency Project
Yuba County, California

Biological Study Area (54.72 acres)

Project Area (30.53 acres)

Jurisdictional Drainages within the BSA

Page 2

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Clark Lateral Canal

Arboga Rd

Olivehurst Ave

6th Ave

7th Ave

9th Ave

11th Ave

Clark Slough

70

65

V:\3177 Olivehurst\F3_Project Features 2024_03.mxd

Source: ESRI Maps Online; Dokken Engineering 4/18/2024; Created By: kjacobson

1 inch = 800 feet

0 800 1,600 2,400 3,200 4,000 Feet

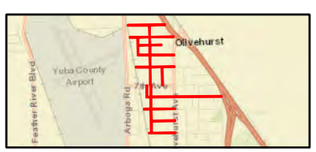



**FIGURE 3**
**Project Features**


Olivehurst Roadway Climate Resiliency Project
Yuba County, California

Biological Study Area (54.72 acres)
Project Area (30.53 acres)

**Roadway Features**
Sidewalk
Curb Ramp
Curb and Gutter

**Drainage Features**
Drainage Inlet
Drainage Manhole
OPUD Water Fire Hydrant
OPUD Water Meter
OPUD Water Valve
Proposed RSP

8-inch Drainage Pipe
12-inch Drainage Pipe
24-inch Drainage Pipe
18-inch Drainage Pipe
36-inch Drainage Pipe
Lateral Drainage Pipe
Outfall Location

2nd Ave

Clark Lateral Canal

V:\3177 Olivehurst\F3_Project Features 2024_03.mxd

Source: ESRI Maps Online; Dokken Engineering 5/31/2024; Created By: kjacobson

1 inch = 50 feet

0 50 100 150 200 250 Feet

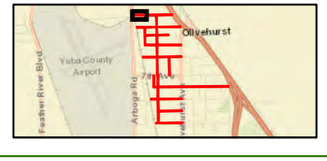



**FIGURE 3**
**Project Features**

Biological Study Area (54.72 acres)
Project Area (30.53 acres)

**Roadway Features**
Sidewalk
Curb Ramp
Curb and Gutter

**Drainage Features**
Drainage Inlet
Drainage Manhole
OPUD Water Fire Hydrant
OPUD Water Meter
OPUD Water Valve
Proposed RSP

8-inch Drainage Pipe
12-inch Drainage Pipe
24-inch Drainage Pipe
18-inch Drainage Pipe
36-inch Drainage Pipe
Lateral Drainage Pipe
Outfall Location

3rd Ave
Canal St
Clark Lateral Canal

V:\3177 Olivehurst\F3_Project Features 2024_03.mxd

Source: ESRI Maps Online; Dokken Engineering 5/31/2024; Created By: kjacobson

1 inch = 50 feet

0 50 100 150 200 250 Feet




**FIGURE 3**
**Project Features**

Biological Study Area (54.72 acres)
Project Area (30.53 acres)

**Roadway Features**
- Sidewalk
- Curb Ramp
- Curb and Gutter

**Drainage Features**
- Drainage Inlet
- Drainage Manhole
- OPUD Water Fire Hydrant
- OPUD Water Meter
- OPUD Water Valve
- Proposed RSP
- 8-inch Drainage Pipe
- 12-inch Drainage Pipe
- 24-inch Drainage Pipe
- 18-inch Drainage Pipe
- 36-inch Drainage Pipe
- Lateral Drainage Pipe
- Outfall Location




V:\3177 Olivehurst\F3_Project Features 2024_03.mxd

Source: ESRI Maps Online; Dokken Engineering 5/31/2024; Created By: kjacobson

1 inch = 50 feet

0 50 100 150 200 250 Feet




**FIGURE 3**
**Project Features**

Biological Study Area (54.72 acres)
Project Area (30.53 acres)

**Roadway Features**
Sidewalk
Curb Ramp
Curb and Gutter

**Drainage Features**
Drainage Inlet
Drainage Manhole
OPUD Water Fire Hydrant
OPUD Water Meter
OPUD Water Valve
Proposed RSP

8-inch Drainage Pipe
12-inch Drainage Pipe
24-inch Drainage Pipe
18-inch Drainage Pipe
36-inch Drainage Pipe
Lateral Drainage Pipe
Outfall Location

9th Ave
Western Ave
Clark Lateral Canal

V:\3177 Olivehurst\F3_Project Features 2024_03.mxd

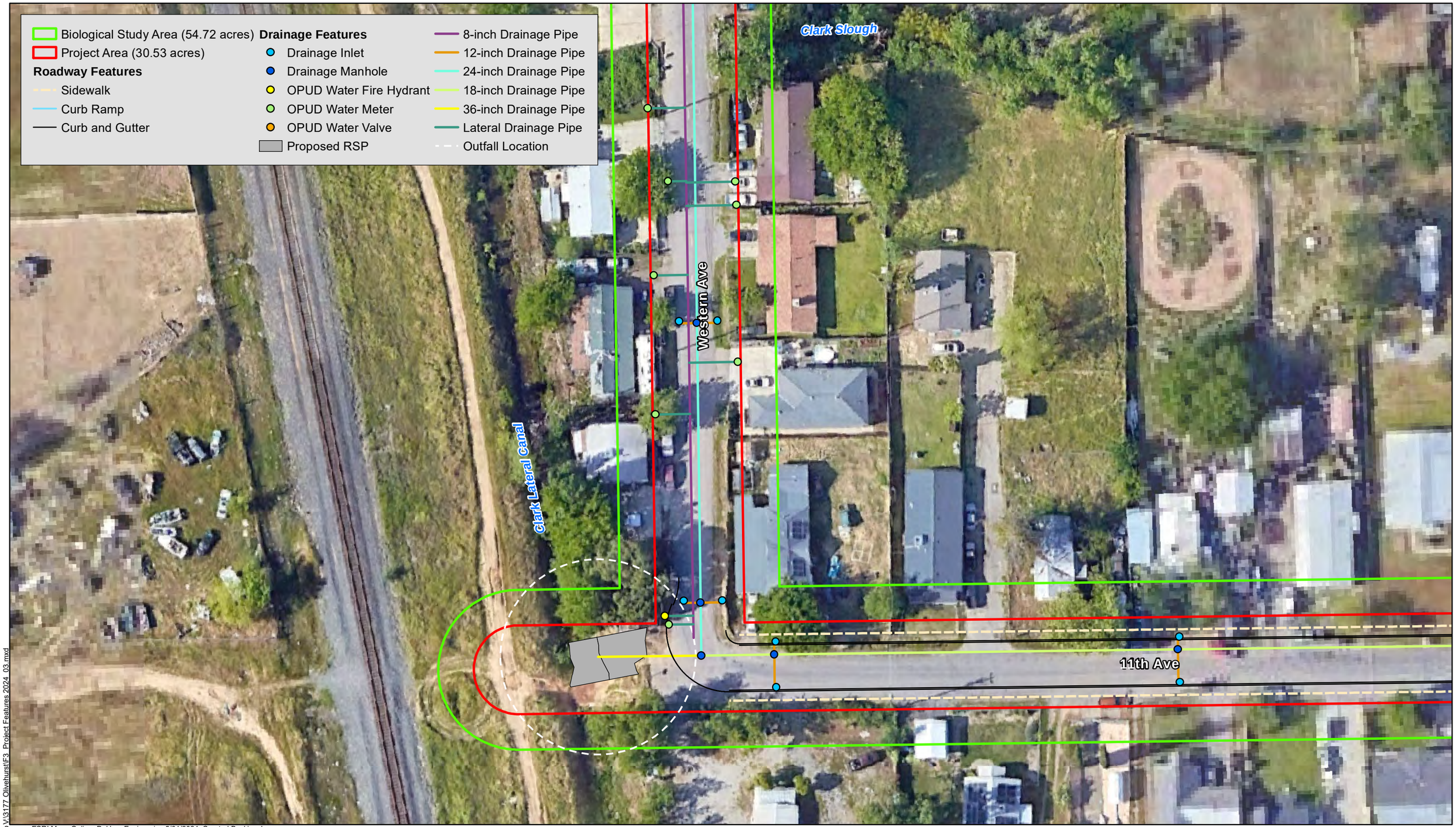
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1 inch = 50 feet

0 50 100 150 200 250 Feet




**FIGURE 3**
**Project Features**




v:\3177 Olivehurst\F3_Project Features 2024_03.mxd

Source: ESRI Maps Online; Dokken Engineering 5/31/2024; Created By: kjacobson

1 inch = 50 feet

0 50 100 150 200 250 Feet




**FIGURE 3**
**Project Features**

Biological Study Area (54.72 acres)
Project Area (30.53 acres)

**Roadway Features**
Sidewalk
Curb Ramp
Curb and Gutter

**Drainage Features**
Drainage Inlet
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OPUD Water Fire Hydrant
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OPUD Water Valve
Proposed RSP

8-inch Drainage Pipe
12-inch Drainage Pipe
24-inch Drainage Pipe
18-inch Drainage Pipe
36-inch Drainage Pipe
Lateral Drainage Pipe
Outfall Location

Clark Slough
Pvt Dr
8th Ave
Pvt Dr

V:\3177 Olivehurst\F3_Project Features 2024_03.mxd

Source: ESRI Maps Online; Dokken Engineering 5/31/2024; Created By: kjacobson

1 inch = 50 feet

0 50 100 150 200 250 Feet




**FIGURE 3**
**Project Features**


Olivehurst Roadway Climate Resiliency Project
Yuba County, California

**Environmental Factors Potentially Affected:**
The environmental factors checked below would be potentially affected by this project, as indicated by the checklist and corresponding discussion on the following pages:

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

**DETERMINATION**: (To be completed by the Lead Agency)

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 EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.



July 31, 2024

Planner's Signature — Date

Ciara Fisher, Planner III

## PURPOSE OF THIS INITIAL STUDY

This Initial Study has been prepared consistent with CEQA Guidelines Section 15063, to determine if the Olivehurst Roadway Climate Resiliency Project as proposed, may have a significant effect upon the environment. Based upon the findings contained within this report, the Initial Study will be used in support of the preparation of a Mitigated Negative Declaration.

## EVALUATION OF ENVIRONMENTAL IMPACTS

1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on project-specific screening analysis).
2) All answers must take into account the whole action involved, including offsite as well as onsite, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.
4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level mitigation measures from Section XVII, "Earlier Analyses," may be cross-referenced.
5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c) (3) (D). In this case, a brief discussion should identify the following:
    a) Earlier Analysis Used. Identify and state where they are available for review.
    b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
    c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, development code). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

8) The explanation of each issue should identify:

    a) The significance criteria or threshold, if any, used to evaluate each question; and

    b) The mitigation measure identified, if any, to reduce the impact to less than significance.

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

**Discussion/Conclusion/Mitigation:**

a) The project is within the community of Olivehurst, which is a highly developed residential area that lacks scenic vistas. Therefore, there will be ***no impacts*** to scenic vistas as a result of the project.

b) The project is not located within a state scenic highway, therefore there would be ***no impact***.

c) Given the residential setting of the project, the project would not significantly degrade the visual character or quality of the project site or vicinity. The proposed project will convert the existing roadside drainage ditches within the community of Olivehurst to an upgraded underground stormwater system with curbs, gutters and sidewalks. Although this upgrade will change the visual character of the site from rural to suburban, these improvements are not anticipated to degrade the existing visual character or quality within the Project Area. Therefore, impacts to the existing visual character of the site would be ***less than significant***.

d) The proposed project would be conducted during daytime hours; no nighttime construction is proposed. The project may install safety features along crosswalks including rectangular rapid flashing beacons (RRFB). RRFBs consist of two, rectangular- shaped yellow indications, each with a light-emitting diode (LED)-array-based light source. RRFBs flash with an alternating high frequency when activated to enhance conspicuity of pedestrians at the crossing to drivers. The proposed RRFBs would not create a substantial amount of light or glare and would enhance safety within the Project Area for both pedestrians and drivers.

The light intensity of the yellow indications during daytime conditions shall meet the minimum specifications for Class I yellow peak luminous intensity in the Society of Automotive Engineers (SAE) Standard J595 (Directional Flashing Optical Warning Devices for Authorized Emergency, Maintenance, and Service Vehicles) dated January 2025. Furthermore, to minimize excessive glare during nighttime conditions, an automatic signal dimming device should be used to reduce the brilliance of the RRFB indications during nighttime conditions. Therefore, no mitigation is required and impacts to lighting ***are less than significant***.

## II. 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 Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.

| **Would the project:** | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? | ☐ | ☐ | ☐ | ☒ |
| b) Conflict with existing zoning for agricultural use, or a Williamson Act contract? | ☐ | ☐ | ☐ | ☒ |
| c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))? | ☐ | ☐ | ☐ | ☒ |
| d) Result in the loss of forest land or conversion of forest land to non-forest use? | ☐ | ☐ | ☐ | ☒ |
| e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use? | ☐ | ☐ | ☐ | ☒ |

### Discussion/Conclusion/Mitigation:

a) The proposed project will include installation of a new storm drain infrastructure, pavement rehabilitation, as well as roadway improvements such as installation of curbs, gutter, sidewalks, ADA-compliant ramps, bike lines, striping and traffic control devices. Nearly all project activity is within residential or commercial zones so no farmland conversion would be required for this project. Therefore, no loss or conversion of farmland would result from the proposed project and ***no impact*** to agricultural lands is anticipated.

b) The Project Area, consisting of residential homes and small commercial businesses, is designated as Valley Neighborhood by the Yuba County 2030 General Plan (Yuba County 2011). The surrounding project zoning is "RS" Single Family Residential, "RM" Medium

Density Residential, "RH" High Density Residential, "NMX" Neighborhood Mixed Use, "DC" Downtown Core District. The proposed project is consistent with the General Plan and zoning. The property is not under a Williamson Act contract, as Yuba County has not established a Williamson Act program. The project would result in ***no impact*** to Williamson Act contracts or existing agricultural uses.

c) The property is not zoned for or used as forestry land. The project would result in ***no impact***.

d) The project will not involve any changes to the existing environment which could result in the conversion of farmland to non-agricultural use or conversion of forest land to non-forest use as the property is not zoned for agricultural or forest land. The project would result in ***no impact***.

## III. AIR QUALITY

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

| Would the project: | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| a) Conflict with or obstruct implementation of the applicable air quality plan? | ☐ | ☐ | ☒ | ☐ |
| b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation? | ☐ | ☒ | ☐ | ☐ |
| c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)? | ☐ | ☒ | ☐ | ☐ |
| d) Expose sensitive receptors to substantial pollutant concentrations? | ☐ | ☐ | ☒ | ☐ |
| e) Create objectionable odors affecting a substantial number of people? | ☐ | ☐ | ☒ | ☐ |

### Discussion/Conclusion/Mitigation:

a) In 2021, the Triennial Air Quality Attainment Plan was adopted for the Northern Sacramento Valley Air Basin (NSVAB), which includes Yuba County. The 2021 triennial update of the NSVPA Air Quality Attainment Plan assess the progress made in implementing the previous triennial update and proposes modifications to the strategies necessary to attain the California Ambient Air Quality Standards (CAAQS) by the earliest practicable date. The 2021 Plan includes an assessment of progress towards achieving the control measure commitments in the previous Triennial Plan, a summary of the last three years of ozone data, a comparison of the expected versus actual emissions reductions for each measure committed to in the previous Triennial Plan, updated control measure commitments, and updated growth rates of population, industry, and vehicle related emissions. The NSVPA air districts have adopted several control measures and programs that reduce emissions from new development either through the planning process or through control of specific sources of emissions. New development proposed by the project would be in compliance with the rules and programs of the FRAQMD (Table V-6). The 2021 Triennial Air Quality Attainment Plan is available here: https://bcaqmd.org/wp-content/uploads/2-2021-Triennial-AQAP_BCC-Approved.pdf.

The Triennial Air Quality Attainment Plan also deals with emissions from mobile sources, cars, trucks, and trains, or area sources such as consumer products or wildfires. Data in the

Triennial Plan, which was incorporated in the State Implementation Plan (SIP), are based on the most currently available growth and control data. The project would be consistent with this data. As is stated in the guidelines of FRAQMD, projects are considered to have a significant impact on air quality if they reach emission levels of at least 25 pounds per day of reactive organic gases (ROG), 25 pounds per day of nitrogen oxides (NOx), and/or 80 pounds per day for PM10. FRAQMD has established a significance threshold of 130 single-family homes, which is the number estimated to generate emissions of 25 pounds per day of ROG and 25 pounds per day of NOx (FRAQMD, 2010). The Sacramento Metropolitan Air Quality Management District (SMAQMD) Road Construction Emissions Model Version 9.0.0 was used to estimate the daily construction emissions generated by the proposed project. Results of the Model indicate that the daily emissions estimates for all pollutants are far below the significance thresholds set forth by FRAQMD (Appendix C. Road Construction Emissions Model). The project will include installation of a new storm drain infrastructure, pavement rehabilitation, as well as roadway improvements such as installation of curbs, gutter, sidewalks, ADA-compliant ramps, bike lines, striping and traffic control devices which is not anticipated to emit a significant amount of air pollutants. Additionally, the project will not be increasing the capacity of the roadway or promoting an increase in Vehicle Miles Traveled (VMT), therefore operational air quality emissions, beyond the construction phase, would not substantially add to the Air Quality Attainment Plan and FRAQMD thresholds. Therefore, impacts to air quality plans would be ***less than significant***.

b) The California Air Resources Board provides information on the attainment status of counties regarding ambient air quality standards for certain pollutants, as established by the federal and/or state government. As of 2019, Yuba County was re-designated as non-attainment-transitional status for state and national (one and eight hour) air quality standards for ozone, and state standards for particulate matter less than 10 microns in diameter (PM10). The County is in attainment or maintenance status for all other pollutants for which standards have been established.

Under the guidelines of FRAQMD, projects are considered to have a significant impact on air quality if they reach emission levels of at least 25 pounds per day of reactive organic gases (ROG), 25 pounds per day of nitrogen oxides (NOx), and/or 80 pounds per day for PM10. ROG and NOx are ingredients for ozone. As discussed above, the SMAQMD Road Construction Emissions Model Version 9.0.0 was used to estimate the daily construction emissions generated by the proposed project. Results of the Model indicate that the daily emissions estimates for all pollutants are far below the significance thresholds set forth by FRAQMD (Appendix C). However, FRAQMD does recommend the following construction phase Standard Mitigation Measures for projects that do not exceed district operational standards:

**AQ-1:**

- Implement FRAQMD Fugitive Dust Plan
- Implement FRAQMD standard construction phase mitigation measures. (https://www.fraqmd.org/ceqa-planning)

**AQ-2: Fugitive Dust Control for Construction**

1. Water inactive construction sites and exposed stockpile sites at least twice daily.
2. Pursuant to California Vehicle Code, all trucks hauling soil and other loose material to and from the construction site shall be covered or should maintain at least 6 inches of freeboard (i.e. minimum vertical distance between top of load and the trailer).
3. Any topsoil that is removed for the construction operation shall be stored on-site in piles not to exceed 4 feet in height to allow development of microorganisms prior to replacement of soil in the construction area. These topsoil piles shall be clearly marked and flagged. Topsoil piles that will not be immediately returned to use shall be revegetated with a non-persistent erosion control mixture.
4. Soil piles for backfill shall be marked and flagged separately from native topsoil stockpiles. These soil piles shall also be surrounded by silt fencing, straw wattles, or other sediment barriers or covered unless they are to be immediately used.
5. Equipment or manual watering shall be conducted on all stockpiles, dirt/gravel roads, and exposed or disturbed soil surfaces, as necessary, to reduce airborne dust.

These mitigation measures are to be incorporated as part of the project to reduce dust emissions associated with construction of the project and implementation of these mitigation measures would reduce project impacts on air quality standards would be ***less than significant with mitigation***.

c) Construction associated with future development is expected to generate a limited amount of PM10, mainly dust. Rule 3.16 of FRAQMD Regulations requires a person to take "every reasonable precaution" not to allow the emissions of dust from construction activities from being airborne beyond the property line. Reasonable precautions may include the use of water or chemicals for dust control, the application of specific materials on surfaces that can give rise to airborne dust (e.g., dirt roads, material stockpiles), or other means approved by FRAQMD. Enforcement of this rule would reduce the amount of PM10 that would be generated by residential development on the project site. Additionally with mitigation measure, AQ-1 and AQ-2, prior to the issuance of any grading, a Fugitive Dust Permit will be required to be obtained from FRAQMD. Therefore, construction related impacts to the air would be ***less than significant with mitigation***.

d) A temporary increase in pollutants associated with diesel construction equipment and asphalt repaving will occur during construction of the project. However, these increases will be intermittent and will not expose sensitive receptors to substantial pollutant concentrations. As discussed above, the estimated emissions during construction of the project are anticipated to be far below FRAQMD significance thresholds (Appendix C). Therefore, impacts to sensitive receptors would be ***less than significant***.

e) Roadway reconstruction will occur as part of the proposed project which will involve asphalt paving. This process may create an objectionable odor within the vicinity of the project to nearby residences. However, these odors will dissipate within a few days once the paving is complete. Therefore, there would be ***a less than significant*** impact related to odors.

| IV. BIOLOGICAL RESOURCES<br>**Would the project:** | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? | ☐ | ☒ | ☐ | ☐ |
| b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Game or US Fish and Wildlife Service? | ☐ | ☒ | ☐ | ☐ |
| c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? | ☐ | ☐ | ☐ | ☒ |
| d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites? | ☐ | ☐ | ☐ | ☒ |
| e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? | ☐ | ☐ | ☐ | ☒ |
| f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan? | ☐ | ☐ | ☐ | ☒ |

## Discussion/Conclusion/Mitigation:

### a) Special Status Species Potential

Prior to field surveys, a list of regional special-status wildlife species with potential to occur within the Project vicinity was compiled from database searches (Appendix A. Biological Resources Technical Report). The potential for each species to occur within the BSA was determined by analyzing the habitat requirements of each species and comparing the habitat requirements to available habitat within the BSA. After a careful comparison between habitat requirements and the habitat available within the BSA, the following special status wildlife species have low potential occur within the BSA: burrowing owl (*Athene cunicularia*), giant gartersnake (*Thamnophis gigas*), Swainson's hawk (*Buteo swainsoni*), and white-tailed kite (*Elanus leucerus*).

Burrowing Owl

The burrowing owl is not a state or federally listed species but is listed as a CDFW Species of Special Concern (SSC) and a USFWS Migratory Nongame Bird of Management Concern. Burrowing owls were historically common throughout much of California; however, due to habitat degradation and urbanization, populations have been drastically reduced. The owl is a migrant or yearlong resident occupying disturbed open, arid habitats, particularly grasslands, deserts, and abandoned agricultural areas. The species requires friable soils for burrow construction and an adequate prey base (Zeiner et al. 1988-1990). Burrowing owls rely on California ground squirrels and other fossorial mammals for burrow construction. Although active throughout the day, burrowing owls mainly forage nocturnally for small vertebrate and invertebrate prey including mammals, lizards, birds, and beetles (Shuford 2008). Burrowing owl nests can be identified by the presence of owl excrement, pellets, debris, grass, and feathers in the vicinity of a burrow. Human development threatens burrowing owl populations by reducing available nesting habitat and decreasing rodent populations, which serve as the owl's main food source.

*Survey Results*

There is one recent (2018) eBird occurrence located approximately 1.5 miles north of the BSA in West Linda. In addition, there are vacant grassland fields adjacent to the roadway that may provide suitable habitat for the species. However, during the April 2024 biological surveys, no burrows or other evidence of burrowing owl occupation was observed within the BSA. Due to the recent occurrences and potentially suitable habitat, this species has a low potential to occur within the BSA.

*Project Impacts*

Project impacts will be limited to the roadway and shoulders of the various project roadways, as well as within Clark Lateral Canal and its associated riparian habitat. No impacts to suitable grassland habitat would result from construction of the Project. Therefore, no impacts to burrowing owl or it's associated habitat are anticipated as a result of the proposed Project.

Giant Gartersnake (GGS)

GGS is a state and federally listed species associated with low-gradient streams, wetlands, and marshes of California's Central Valley. The conversion of Central Valley wetlands for agriculture and urban uses has resulted in the loss of as much as 95% of historical habitat for the GGS (Wylie et al. 1997). Due mainly to loss or degradation of aquatic habitat resulting from agricultural and urban development, the GGS has been either extirpated or else suffered serious declines throughout much of its former range.

Essential habitat components for GGS consist of (1) adequate water during the snake's active period (i.e., early spring through mid-fall) to provide a prey base and cover, (2) emergent, herbaceous wetland vegetation, such as cattails and bulrushes, for escape cover and foraging habitat; (3) upland habitat for basking, cover, and retreat sites; and (4) high elevation uplands for cover and refuge from flood waters. GGS are typically absent from larger rivers and other water bodies that support introduced populations of large, predatory fish, and from wetlands

with sand, gravel, or rock substrates. Riparian woodlands do not provide suitable habitat because of excessive shade, lack of basking sites, and absence of prey populations (USFWS 1997).

*Survey Results*
The nearest documented CNDDB occurrence of GGS is approximately 8 miles northwest of the BSA (2012), which is outside of the maximum dispersal distance recorded for the species of 5 miles (Wylie et al. 1997). The BSA contains Clark Slough which may provide potentially suitable aquatic habitat for this species. During the April 2024 biological surveys, little to no water was present within these stream channels. However, Clark Slough may provide marginally suitable dispersal habitat. Therefore, this species has a low potential to disperse through the BSA.

*Project Impacts*
Clark Slough within the BSA may provide suitable habitat for GGS. However, Project impacts will be limited to the roadway and shoulders of the various project roadways, as well as within Clark Lateral Canal and its associated riparian habitat. No impacts to suitable aquatic habitat (Clark Slough) would result from construction of the Project. Therefore, no impacts to GGS or it's associated habitat are anticipated as a result of the proposed Project.

Swainson's Hawk
The Swainson's hawk is a raptor species that is state listed as threatened. Swainson's hawk migrates annually from wintering areas in South America to breeding locations in northwestern Canada, the western U.S., and Mexico. In California, Swainson's hawk nest throughout the Sacramento and San Joaquin Valley in large trees in riparian habitats and in isolated trees in or adjacent to agricultural fields. The breeding season extends from late March through late August, with peak activity from late May through July (England et al. 1997). Swainson's hawks forage in large, open agricultural habitats, including alfalfa and hay fields. The breeding population in California has declined by an estimated 91% since 1900; this decline is attributed to the loss of riparian nesting habitats and the conversion of native grassland and woodland habitats to agriculture and urban development (CDFW 1994).

*Survey Results*
The BSA encompasses sparce riparian habitat that may provide suitable nesting habitat for this species. There are several recent and historical CNDDB occurrences of the species within 10 miles of the BSA, as well as a recent (2020) eBird occurrence of the species east of 6$^{th}$ Avenue near Clark Slough. However, the area surrounding the BSA is highly developed and lacks open foraging habitat that would be suitable for this species. There were also no individuals of the species observed during the April 2024 biological surveys. Due to the presence of marginally suitable nesting habitat as well as the recent eBird occurrences, this species has a low potential of occurring within the BSA.

*Project Impacts*
Project impacts will be limited to the roadway and shoulders of the various project roadways, as well as within Clark Lateral Canal and its associated riparian habitat. Several trees within the riparian habitat are anticipated for removal including one valley oak and six interior live

oak trees. During the biological survey conducted on April 17, 2024, no nests or individuals of the species were observed within any of these trees the BSA. With the implementation of avoidance and minimization measures **BIO-6** and **BIO-7**, no impacts to Swainson's hawk are anticipated to result from the proposed Project:

**BIO-7:** Prior to vegetation removal or initial ground disturbance during the nesting bird season (February 1st – September 30th) a pre-construction nesting bird survey must be conducted by a Project biologist prior to the start of work. The nesting bird survey must include the Project Area plus a 250-foot buffer. Within one week of the nesting bird survey, all vegetated areas surveyed, that are designated for removal, must be cleared.

If an active nest is discovered during construction, the contractor must immediately stop work until the appropriate no-work buffer is established, to be determined by a Project biologist. Other avoidance and minimization measures, such as visual and sound barriers, may be considered to avoid take of an active nest but must be approved by a Project biologist prior to implementation. A Project biologist must monitor the initial implementation of alternative avoidance strategies. If the Project biologist determines that avoidance strategies are insufficient to avoid take of active nests, all Project activities shall cease, and work will not resume until the Project biologists determines that the young have fledged.

If a Swainson's hawk or white-tailed kite nest is observed during the pre-construction survey CDFW will be contacted for further guidance. The contractor is prohibited from conducting work that could result in take of an active nest.

White-tailed Kite

White-tailed kite is a fully protected species under CFG Code Section 3511. The species has a restricted distribution in the U.S., occurring only in California and western Oregon and along the Texas coast (American Ornithologists' Union 1983). The species is fairly common in California's Central Valley margins with scattered oaks and river bottomlands. White-tailed kites nest in riparian and oak woodlands and forage in nearby grasslands, pastures, agricultural fields, and wetlands. They use nearby treetops for perching and nesting sites. Voles and mice are common prey species.

*Survey Results*

There are multiple recent (2020-2022) eBird occurrences within 0.5 miles of the BSA. There is also a historic (2003) CNDDB occurrence of the species in the southern portion of Shay Avenue, approximately 0.25 miles south of 11th Avenue within the BSA. The riparian habitat present within the BSA may provide suitable nesting habitat for this species. However, no individuals of the species were observed during the April 2024 biological surveys. Due to the presence of locally suitable habitat as well as the recent local occurrences, the species has a low to moderate potential to occur within the BSA.

*Project Impacts*

Project impacts will be limited to the roadway and shoulders of the various project roadways, as well as within Clark Lateral Canal and its associated riparian habitat. Several trees within the riparian habitat are anticipated for removal including one valley oak and six interior live oak trees. During the biological survey conducted on April 17, 2024, no nests or individuals of the species were observed within any of these trees the BSA. With the implementation of avoidance and minimization measures **BIO-6** and **BIO-7**, no impacts to white-tailed kite are anticipated to result from this Project.

Therefore, impacts to special-status species within the Project Area will be ***less than significant with mitigation incorporated.***

b) Habitats are considered to be of special concern based on federal, state, or local laws regulating their development; limited distributions; and/or the habitat requirements of special-status plants or animals occurring on site. Wetlands and waters of the U.S are also considered sensitive by both federal and state agencies. Within the BSA, Clark Slough, Clark Lateral Canal and their associated riparian habitat have been identified as natural communities of special concern and are discussed in this section. Minor permanent and temporary impacts are anticipated to occur within Clark Lateral Canal and its associated riparian habitat as a result from the construction of the Project.

Jurisdictional Drainages

Clark Lateral Canal is a perennial stream which has been channelized to collect storm water runoff from the surrounding communities of Olivehurst and Linda. Drainage from the East Linda area flows west to south into Olivehurst to the Clark Lateral Canal, then to Reeds Creek, then to the Western Pacific Interceptor Canal, and ultimately flows into the Bear River. Within the BSA, Clark Lateral Canal runs north to south is confined to the eastern edges of 2nd Avenue, 3rd Avenue, 6th Avenue, 9th Avenue and 11th Avenue. Minimal surface water was present during the biological surveys conducted on April 17, 2024. Isolated pools of water were present in Clark Lateral Canal at 11th Avenue and water was also present in the canal at 9th Avenue.

Clark Slough is a manmade stream channel and a tributary to Algodon Slough, which passes through Plumas Lake and flows into the Bear River. Within the BSA, Clark Slough flows underneath the roadway at two locations, 8th Avenue east of Olivehurst Avenue and Western Avenue, north of 11th Avenue. No surface water was present in the channel during the biological survey conducted on April 17, 2024. Both of these jurisdictional drainages provide suitable habitat for a diverse array of wildlife, including reptiles, amphibians, mammals and birds.

The upgraded drainage system proposed by the Project has five separate outfall locations within Clark Lateral Canal at 2nd Avenue, 3rd Avenue, 6th Avenue, 9th Avenue and 11th Avenue. Rock slope protection (RSP) will be placed around the new 36-inch drainage outfall pipes at these five locations. Permanent impacts of approximately 0.014 acres (~640 square feet [sq.ft.]) to jurisdictional drainage habitat will occur due to the placement of RSP within the bed and banks of the Clark Lateral Canal. Additionally, approximately 0.05 acres of

temporary impacts are anticipated within the Clark Lateral Canal to facilitate access during construction. All temporary impacts will be restored to pre-construction conditions at the completion of construction.

With the implementation of avoidance and minimization measures **BIO-1** through **BIO-5**, no impacts to jurisdictional drainage habitat are anticipated to result from this Project.

**BIO-1:** Every individual working on the Project must attend a biological awareness training session delivered by a biologist. This training program shall include information regarding the sensitive habitats and special-status species occurring or potentially occurring within the Project Area, and the importance of avoiding impacts to these species and their habitat.

**BIO-2:** Prior to the start of construction activities, the Project limits adjacent to Clark Lateral Canal and Clark Slough will be marked with high visibility Environmentally Sensitive Area (ESA) fencing or staking to ensure construction will not further encroach into sensitive resources.

**BIO-3:** Best Management Practices (BMPs) will be incorporated into Project design and Project management to minimize impacts on the environment including erosion and the release of pollutants (e.g., oils, fuels):

- Exposed soils and material stockpiles would be stabilized, through watering or other measures, to prevent the movement of dust at the Project site caused by wind and construction activities such as traffic and grading activities;
- All vehicle and equipment fueling/maintenance would be conducted outside of any surface waters;
- Equipment used in and around jurisdictional waters must be in good working order and free of dripping or leaking contaminants;
- Raw cement, concrete or concrete washings, asphalt, paint or other coating material, oil or other petroleum products, or any other substances that could be hazardous to aquatic life shall be prevented from contaminating the soil or entering jurisdictional waters;
- All erosion control measures, and storm water control measures would be properly maintained until the site has returned to a pre-construction state;
- All construction materials would be hauled off-site after completion of construction.

**BIO-4:** Vehicle maintenance, staging and storing equipment, materials, fuels, lubricants, solvents, and other possible contaminants must remain outside of sensitive habitat marked with high-visibility fencing. Any necessary equipment washing must occur where the water cannot flow into sensitive habitat communities.

**BIO-5:** A chemical spill kit must be kept onsite and available for use in the event of a spill.

Riparian Habitat

The riparian corridor within the BSA is considered a natural community of special concern through the CDFW. Riparian communities are associated with floodplains and occur as a transitional habitat between wetted areas and upland habitat types. In the Central Valley, mature riparian woodland canopies include species such as cottonwoods, sycamores, and oaks, and the understory is dominated by shrubs like willows, wild grape, and elderberry. These habitats are of ecological importance as they provide food, water, and shelter for many wildlife species. Within the BSA, marginal riparian habitat is present within the corridors of the Clark Lateral Canal and Clark Slough. These areas are sparsely vegetated with interior live oak (*Quercus wislizeni*), valley oak (*Quercus lobata*), and Fremont cottonwood (*Populus fremontii*) trees, with an understory of Himalayan blackberry (*Rubus armeniacus*) and various grass species.

Riparian habitat occurs on the banks of Clark Lateral Canal at 3rd Avenue and 9th Avenue. Rock slope protection (RSP) will be placed around the new 36-inch drainage outfall pipes at these two locations. Permanent impacts of approximately 0.01 acres (~450 sq. ft.) to riparian habitat will occur due to the placement of RSP on the banks of the Clark Lateral Canal. Due to the placement of RSP, several riparian trees are anticipated for removal, including six interior live oak trees at 3rd Avenue and one valley oak tree at 9th Avenue. Temporary impacts of approximately 0.014 acres are also anticipated within riparian habitat to facilitate access into the channel during construction. All temporary impacts will be restored to pre-construction conditions at the completion of construction.

With the implementation of avoidance and minimization measures **BIO-1** through **BIO-6**, no impacts to riparian habitat are anticipated to result from this Project.

**BIO-6:** Vegetation removal will not exceed what is shown on the plans without prior approval from the project biologist. If trees will be trimmed rather than removed, trimming must comply with ANSI A300 pruning standards and must not:

- leave branch stubs
- make unnecessary heading cuts
- cut off the branch collar (not make a flush cut)
- top or lion's tail trees (stripping a branch from the inside leaving foliage just at the ends)
- remove more than 25 percent of the foliage of a single branch
- remove more than 25 percent of the total tree foliage in a single year
- damage other parts of the tree during pruning
- use wound paint
- climb the tree with climbing spikes

Essential Fish Habitat

Essential fish habitat (EFH) means those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity (Magnuson-Stevens Fishery Conservation and

Management Act (MSA) §3). According to the NOAA habitat conservation Essential Fish Habitat View Tool, the BSA is within the Honcut Headwaters-Lower Feather watershed which is considered Essential Fish Habitat (EFH) for Chinook salmon (*Oncorhynchus tshawytscha*) (NOAA 2024). The Project will result in minor impacts to the Clark Lateral, including permanent impacts of approximately 0.014 acres (~640 sq.ft.), and approximately 0.05 acres of temporary impacts. However, the Clark Lateral Canal lacks the specific Habitat Areas of Particular Concern (HAPC) to support Chinook salmon individuals. The HAPC's for the species include complex channels and floodplain habitats, thermal refugia, spawning habitat, estuaries and marine and estuarine submerged aquatic vegetation. The Clark Lateral Canal contains minor thermal refugia from the riparian trees on its banks, however, it lacks complex channel morphology, spawning habitat and estuarine habitat features. There have also been no individuals of the species recorded in the Clark Lateral Canal, as it lacks water most of the year. Due to lack of EFH features, there will be no impacts to Chinook salmon EFH, and consultation with NMFS is not required.

Therefore, impacts to sensitive natural communities within the Project Area will be ***less than significant with mitigation incorporated.***

c) There are no wetlands present within the BSA. As such, there will be ***no impact*** on federally protected wetlands as defined by Section 404 of the Clean Water Act.

d) The CDFW Biogeographic Information & Observation System (CDFW 2024) was reviewed to determine if the BSA is located within an Essential Connectivity Area. The BSA is within an area of Terrestrial Connectivity Rank 1 – Limited Connectivity Opportunity. This ranking indicates that local land development may limit opportunities for connectivity and no connectivity importance has been identified within the BSA. Due to the low local terrestrial connectivity ranking as well as the scope of the Project, the Project itself would not permanently impact natural habitats in a way that would impair terrestrial movement by wildlife. There are also no native wildlife nursery sites within the Project vicinity. As such, the project would have ***no impact*** on movement of migratory wildlife.

e) There would be no conflicts with General Plan policies regarding Mitigation of biological resources. The County has no ordinances explicitly protecting biological resources. Therefore, there is ***no impact***.

f) No habitat conservation plans, or similar plans currently apply to the project site. Both Yuba and Sutter Counties recently ended participation in a joint Yuba-Sutter Natural Community Conservation Plan/Habitat Conservation Plan (NCCP/HCP). The project site is located within the proposed boundaries of the former plan; however, no conservation strategies have been proposed to date which would be in conflict with the project. Therefore, there is ***no impact***.

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

**Discussion/Conclusion/Mitigation:**
a) – d) A Cultural Resource Study which included a pedestrian field survey was conducted for the project by Michelle Campbell, M.A. from Dokken Engineering on May 17, 2024. Here is a summary of the study and proposed mitigation measures:

**ENVIROMENTAL SETTING AND BACKGROUND**

Since the project will involve physical disturbance to ground surface and sub-surface components, it has the potential to impact cultural resources that may be located within the Area of Potential Effects (APE). The Area of Potential Effects (APE) for the Project includes all design elements and activities as outlined above in Section 1.2 sufficiently buffered to provide for adequate construction workspaces, access, and an equipment and/or material staging area (Figure 4. Area of Potential Effect). New right-of-way will be required as part of the Project as well as temporary construction easements. The horizontal APE encompasses approximately 32.17 acres to accommodate sidewalk construction, utility relocations, and construction staging and access. The vertical APE for ground disturbance for roadway work will have a maximum depth of up to 3 feet, up to 8 feet for storm drain construction, and up to 6 feet for utility relocations. Up to 3 feet of disturbance is anticipated for work associated with drainage outfall connections to the canal.

The APE consists predominately of early Pleistocene age alluvium deposits from the Modesto and Riverbank Formations. The topography within the APE is relative flat, with slopes ranging from 0 to 1 percent and an elevation ranging from approximately 60 to 70 feet above mean sea level. The APE is located within the Reeds Creek watershed. Clark Slough and Clark Lateral Canal are the only two water features within the Project Area.

**Sources Consulted**

Several types of information were considered relevant to evaluating the types of archaeological sites and site distribution that might be encountered within the Project Area. The information evaluated prior to conducting the pedestrian survey includes data maintained by the North

Central Information Center, and available published and unpublished documents relevant to regional prehistory, ethnography, and early historic developments.

Records at North Central Information Center

A search of site records and inventory reports on file at the North Central Information Center (NCIC) was completed on March 12, 2024 (File # YUB-24-13) This search documented the following existing conditions for a 0.75-mile radius centered on the APE:

- According to the Information Center's records, no cultural resources have been documented within the APE. Twenty-nine (29) cultural resources have been documented within the 0.75-mile search radius.

- According to the Information Center, no cultural resources investigations have been conducted within the present APE. Nine (9) investigations have been documented within the 0.75-mile search radius. All nine (9) of these investigations are historic infrastructure and are summarized as follows:

| Primary No. (P-58-#) | Trinomial CA-YUB- | Resource Description | Era | Distance / Direction from APE |
|---|---|---|---|---|
| 001283 | 001239H | A 123-foot tall water tower | Historic | 720 feet south of APE |
| 001288 | 001244H | A concrete slab foundation used as a loading dock. | Historic | 2,800 feet northwest of APE |
| 001354 | 001910H | Segments of the former Central Pacific Railroad | Historic | 870 feet west of APE |
| 001372 | 001911H | Segments of the Western Pacific Railroad | Historic | 110 feet west of APE |
| 001745 | | A corrugated metal Quonset hut with asbestos lined walls. | Historic | 2,400 feet west of APE |
| 001746 | | Twin-frame hangars | Historic | 2,600 feet west of APE |
| 001747 | | A two-story frame building | Historic | 2,400 feet west of APE |
| 003423 | 002108H | The double-circuit Palermo-East Nicolaus Transmission Line supported by lattice towners. | Historic | 200 feet east of APE |
| 003424 | 002109H | The Palermo-Rio Oso No. 2 Transmission Line | Historic | 200 feet east of APE |

Other Sources Consulted

In addition to examining the archaeological site and survey records maintained at the North Central Information Center, the following sources were also included in the search conducted at the Information Center, or were evaluated separately:

- The National Register of Historic Places (1986, Supplements).
- The California Register of Historical Resources.
- The California Inventory of Historic Resources (State of California 1976).

- The California Historical Landmarks (State of California 1996).
- The California Points of Historical Interest (May 1992 and updates).
- The Historic Property Data File (OHP 2012).
- 1859 GLO Plat, T14N, R3E.
- USGS topographic maps (1911, 1953, 1959, 1966, and 1974).
- Aerials (1947, 1958, 1973, and 1984).

**Native American Coordination**

Native American Heritage Commission Coordination

On March 11, 2024, a letter and a map depicting the Project vicinity was sent to the NAHC, asking the NAHC commission to review the Sacred Lands File (SLF) for any Native American cultural resources that might be affected by the Project. The request to the NAHC seeks to identify any Native American cultural resources within or adjacent to the Project Area. A list of Native American individuals who might have information or concerns about the Project was also requested. On March 14, 2024, Pracilla Torres-Fuentes, Cultural Resources Analyst, informed via email that a review of the sacred lands file failed to indicate the presence of Native American cultural resources within the Project Area.

State-Level Native American Consultation

State-level AB52 consultation was initiated under the CEQA Initial Study process and due to the presence of an Indigenous resource. Consultation letters were emailed on March 27, 2024 to representatives of the following Tribes:

- Estom Yumeka Maidu Tribe
- Pakan'yani Maidu
- Tsi Akim Maidu
- United Auburn Indian Community
- Wilton Rancheria
- Nevada City Rancheria Nisenan Tribe

No responses have been received to date.

**CULTURAL RESOURCES SURVEY and CULTURAL INVENTORY**

**Survey Strategy and Field Work**

All of the APE was subjected to intensive pedestrian survey by means of walking parallel transects along the edge of the roadway and along portions of the Clark Lateral Canal.

During the survey, exposed subsurface cuts were examined for indications of surface or subsurface cultural resources, soil color change, and/or staining that could indicate past human activity or buried deposits.

Fieldwork was undertaken on May 17, 2024 by Principal Investigator, Michelle Campbell, M.A. Ms. Campbell is a professional archaeologist with more than 25 years of experience in archaeology, who meets the professional requirements of the Secretary of the Interior's

Standards and Guidelines for Archeology (Federal Register, Vol. 48, No. 190), as demonstrated in her listing on the California Historical Resources Information System list of qualified archaeologists.

**General Field Observations**

Fieldwork identified the following general conditions within the Project Area. All of the present APE has been impacted directly by residential development, roadway construction, and construction of the Clark Lateral Canal. The APE is comprised of paved roadway, driveways, dirt and gravel shoulders, vegetated roadside ditches, and the vegetated Clark Lateral Canal. During the pedestrian survey, surface visibility within the APE varied with no visibility available in the paved portions of the APE and 0-20% visibility on gravel shoulders and driveways. The roadside ditches were generally heavily vegetated with low visibility 20-50%. Clark Slough passes through two segments of the APE before connecting with the Clark Lateral Canal at the southwestern end of the project.

**Indigenous Resources**

No evidence of indigenous activity or occupation was observed during the present pedestrian survey. The absence of such resources may be explained, at least in part, by the historic through contemporary disturbances to the entire APE. Furthermore, Pleistocene age soils within the APE indicate the potential to encounter buried archaeological resources as *low*.

**Historic Resources**

One built environment resource was identified within the present APE: the Clark Lateral Canal (Primary number forthcoming). Examination of the USGS quadrangles, USGS topographic maps and historic aerials, indicate that while historic period homes are present adjacent to the APE, the Project activities are limited to the roadway corridor and frontage area where potential for subsurface deposits is considered *low*.

<u>Clark Lateral Canal (Primary number forthcoming)</u>
A portion of the Clark Lateral Canal within the APE is a north-south earthen ditch situated east of and parallel to the railroad along the western edge of the community of Olivehurst. Clark Slough, which runs east-west through Olivehurst, drains into this canal at between 10th and 11th Avenue.

As observed during the field survey for the current study on May 17, 2024, the canal is a narrow earthen v-ditch of variable width and depth with steeply sloped banks. Dimensions of the resource are variable across the portion with the Project and measure 5-18ft bottom width, 35-34ft top width, 5-25ft western berm height, and 7-25ft eastern berm height. No formalized bank tops are present. Access points are present at 2nd, 3rd, 6th, 9th, and 11th Avenues. A street crossing is present at 7th Avenue.

Character defining features of the canal are its alignment; materials; height, depth, and width; cross-section shape; and embankments. The 7th Avenue crossing culvert is considered a non-contributing feature of the canal. The property boundaries are at the north end at 2nd Avenue and

at the south end at 11th Avenue. There is no listing of the canal in the in the BERD or the OHP Directory of Properties in the Historic Property Data File for Yuba County.

As part of RD 784, the Calrk Lateral Canal was most likely constructed when the Yuba County Airport was built to intercept the westwardly moving Clark Slough (historically referred to as Olivehurst Drain), at the southern end of the Project, and the Linda Drain (Horsemen's Ditch), at the northern end of the Project. The canal directed floodwaters south to the Western Pacific Intercept Canal (WPIC). The airport was constructed in the early 1940's and, at presumably the same time, the canal was constructed, most likely, by the USACE but it may have been constructed by Yuba County and City of Marysville. (Yuba County, personal communication, May 28, 2024)

While the Clark Lateral Canal was never formally utilized for irrigation, an exception was use of the canal by a local farmer just south of Olivehurst that would block the Canal and use a lift pump to irrigate rice fields just south of Olivehurst. Rice production occurred at this location from the 1950s through the 2010s. Overall, RD 784 has never provided irrigation services to the region but some of their drainage ditches/canals have been used by local farmers for irrigation, which continues to this day. Additionally, RD 784 at one time provided maintenance on a southern portion of the Clark Lateral Canal and its extent to the WPIC, however, more recent development projects have redirected water from residential developments to other district infrastructure and maintenance is no longer active on the Clark Lateral Canal. (Yuba County, personal communication, May 28, 2024)



**Image 1.** Overview of Clark Lateral Canal (vegetated ditch). Railroad grade elevated behind and above the canal. Looking southwest.



**Image 2.** Overview of Clark Lateral Canal (vegetated ditch). Railroad grade elevated left. Looking north.



**Image 3.** Overview of culvert at 7th Avenue crossing of Clark Lateral Canal. Looking west.

## DETERMINATION OF ELIGIBILITY

### Regulatory Framework

All findings under Section 106 of the National Historic Preservation Act (NHPA) apply to the California statues and are largely identical in their application. Cultural resources that meet the eligibility requirements for listing on the NRHP are *a priori* eligible for the CRHR. Historical resources determined eligible for listing in the CRHR may not be eligible for NRHP listing but may still be afforded some limited protection under CEQA.

National Register of Historic Places (NRHP) Evaluation Criteria

The NRHP was established by the NHPA as "an authoritative guide to be used by federal, State, and local governments, private groups and citizens to identify the Nation's cultural resources and to indicate what properties should be considered for protection from destruction or impairment" (CFR 36 CFR 60.2).

The NRHP recognizes properties that are significant at the national, state, and local levels. To be eligible for listing in the NRHP, a resource must be significant in American history, architecture, archaeology, engineering, or culture. Districts, sites, buildings, structures, and objects of potential significance must also possess integrity of location, design, setting, materials, workmanship, feeling, and association. A property is eligible for the NRHP if it is significant under one or more of the following criteria:

A. That are associated with events that have made a significant contribution to the broad patterns of our history; or
B. That are associated with the lives of significant persons in or past; or
C. That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
D. That have yielded or may be likely to yield, information important in history or prehistory.

In evaluating the National Register's significance of properties, Criterion D is most frequently applied to archaeological sites. Critical to addressing eligibility under Criterion D is identification of the kinds of important information that are sought and demonstration that the property is likely to contain that information. In National Register Bulletin 36, *Guidelines for Evaluating and Registering Archaeological Properties* (Little et al., 2000), a five-step process for determining the research potential of an archaeological site is presented (from Caltrans 2009:195):

1. Determine the property's structure and content, and categories of data it may contain.
2. Identify the appropriate historic context by which to evaluate it.
3. Identify important research themes and questions that the data it contains may be able to address.
4. Considering the property's integrity, assess whether the data it contains are of sufficient quality to address these important research themes and questions.
5. Identify the important information that an archaeological study of the property is likely to contain.

CEQA

The term historical resource includes, but is not limited to, any object, building, structure, site, area, place, record, or manuscript which is historically or archaeologically significant, or is significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of PRC (PRC Section 5020.1[j]).

Historical resources may be designated as such through three different processes:

1. Official designation or recognition by a local government pursuant to local ordinance or resolution (PRC Section 5020.1[k]);
2. A local survey conducted pursuant to PRC Section 5024.1(g); or
3. The property is listed in or eligible for listing in the National Register of Historic Places (NRHP) (PRC Section 5024.1[d][1]).

The process for identifying historical resources is typically accomplished by applying the criteria for listing in the CRHR, which states that a historical resource must be significant at the local, state, or national level under one or more of the following four criteria.

It is associated with events that have made a significant contribution to the broad patterns of:

1. California's history and cultural heritage;
2. It is associated with the lives of persons important in our past;
3. It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master or possesses high artistic values; or
4. It has yielded, or may be likely to yield, information important in prehistory or history. (CCR 14 Section 4852).

To be considered a historical resource under the CEQA, the resource must also have integrity, which is the authenticity of a resource's physical identity evidenced by the survival of characteristics that existed during the resource's period of significance. Resources, therefore, must retain enough of their historic character or appearance to be recognizable as historical resources and to convey the reasons for their significance. Integrity is evaluated with regard to the retention of location, design, setting, materials, workmanship, feeling, and association. It must also be judged with reference to the criteria under which a resource is eligible for listing in the CRHR (CCR 14 Section 4852[c]).

**Evaluation**

Clark Lateral Canal (Primary Number Forthcoming)

*NRHP Criterion A/CRHR 1*
The resource consists of an earthen ditch constructed to drain floodwater. The construction of the canal appears to have been necessitated by development of the airport and has functioned as a drainage canal since that time for different water agencies. While flood management is a prominent theme in the local and regional history of the area, this canal does not appear to be constructed as part of a project for flood protection of the region nor does it appear to be an integral feature in a flood control system associated with the region. As the canal cannot be associated with flood management that contributed prominently to the region, it does not appear eligible under NRHP Criterion A/CRHR 1.

*NRHP Criterion B/CRHR 2*
Through background records research, including records on file at the County and the Yuba Water Agency, the canal could not be confidently associated to any agency, owner/operator, or other person considered a significant person in regional or national history. Therefore, it does not appear significant under NRHP Criterion B/CRHR 2.

*NRHP Criterion C/CHRR 3*
The only feature of the site is the ditch. This earthen ditch is quite typical of simple canal construction; however, such a feature was ubiquitous as it was a practical and minimal type of construction, a practice which continues through to present day. As there are no other features to assess and as the canal exhibits no unique, artistic, or distinctive characteristics of a particular period, the site does not appear eligible under NRHP Criterion C/CRHR 3.

*NRHP Criterion D/CRHR 4*
The only component of the site is the canal. The canal itself provides no data potential beyond its location. As no artifacts were identified in association with the canal and as the canal itself does not have the potential to yield important information, the site does not appear eligible under NRHP Criterion D/CRHR 4.

It is recommended that the Clark Lateral Canal is not eligible for the NRHP/CRHR per 36 CFR § 800.4(c)(1) nor a significant resource per CEQA Guidelines §15064.5(a)(3).

**PROJECT EFFECTS**

A project may have a significant impact or adverse effect on significant historical resources/unique archaeological resources if the project will or could result in the physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance or values of the historic resource would be materially impaired. Actions that would materially impair a cultural resource are actions that would alter or diminish those attributes of a site that qualify the site for inclusion in the California Register of Historical Resources.

One built environment resource, the Clark Lateral Canal, was evaluated for NRHP and CRHR eligibility as part of the cultural resources inventory report. The property was found to be not eligible for the NRHP and CRHR. The resource, therefore, is not a historic property for the purposes of Section 106 compliance, nor a historical resource for the purpose of CEQA compliance.

**PROJECT SUMMARY**

To identify historic properties and historical resources that might be affected by the Project, a review of records on file at the NCIC, archival research, Native American consultation, and a pedestrian surface survey were conducted. The buried archaeological site potential was assessed through landform analysis, geologic maps, and opportunistic visual inspection of exposed subsurface soils within the APE during pedestrian survey.

As a result of the investigatory efforts, no Indigenous resources were identified, and one built environment resource was identified within the APE. It is recommended that the Clark Lateral Canal is *not* eligible for the NRHP per 36 CFR § 800.4(c)(1). The Clark Lateral Canal is *not* a historical resource under CEQA, per CEQA guidelines §15064.5, because it does not meet the CRHR criteria outlined in PRC §5024.1.

The probability of encountering buried archaeological sites within the APE is low. This conclusion is derived in part from the observed soils which have been subjected to a high degree of disturbance associated with roadway construction and maintenance activities as well as from geological mapping indicating that soils in the Project Area are Pleistocene in age and predate first human occupation of the area.

Based on the absence of significant historical resources/unique archaeological resources within the APE, no further investigation is recommended for the project as presently proposed.

With any Project requiring ground disturbance, there is always the possibility that unmarked burials or cultural materials may be unearthed during construction. This impact is considered potentially significant. Implementation of **Mitigation Measures 5.1** and **5.2** would reduce this impact to a **Less than Significant with Mitigation** level.

**CR-1 Inadvertent Discovery of Human Remains**

If human remains are encountered, State Health and Safety Code Section 7050.5 dictates that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to PRC 5097.98. The County Coroner must be notified of the find immediately. If the remains are determined to be prehistoric, the Coroner will notify the NAHC, which will determine and notify a MLD. With the permission of the landowner or his/her authorized representative, the MLD may inspect the site of the discovery. The MLD shall complete the inspection within 48 hours of notification by the NAHC. The MLD may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.

**CR-2 Inadvertent Discovery of Cultural Material**

If previously unidentified cultural materials are unearthed during geotechnical or construction activities, work shall be halted within 100 ft. of the area until the archaeological monitor can assess the significance of the find and develop a plan for documentation and removal of resources if necessary. This buffer can be reduced or increased, based on the type of discovery. Should the archaeological discovery include Native American resources, the MLD shall be contacted, to assist in the significance assessment and treatment recommendations.

Area of Potential Effects
Jurisdictional Drainage

Melody Rd
Mhp Rd
Chestnut Rd
Private Rd
Lindhurst Ave
2nd Ave
3rd Ave
4th Ave
5th Ave
6th Ave
7th Ave
8th Ave
9th Ave
10th Ave
11th Ave
Page 2
Page 3
Page 4
Page 5
Page 6
Page 7
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Page 12
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Page 14
Pvt Dr
Powerline Rd
Clark Slough
Turpen St
Olivehurst Ave
Okmulgee Ave
Clark Lateral Canal
Pacific Ave
Arboga Rd
Western Ave
Ardmore Ave
Fleming Way
Summer St
Meadow Ct
Sky Harbor Dr
Skyway Dr
70
65

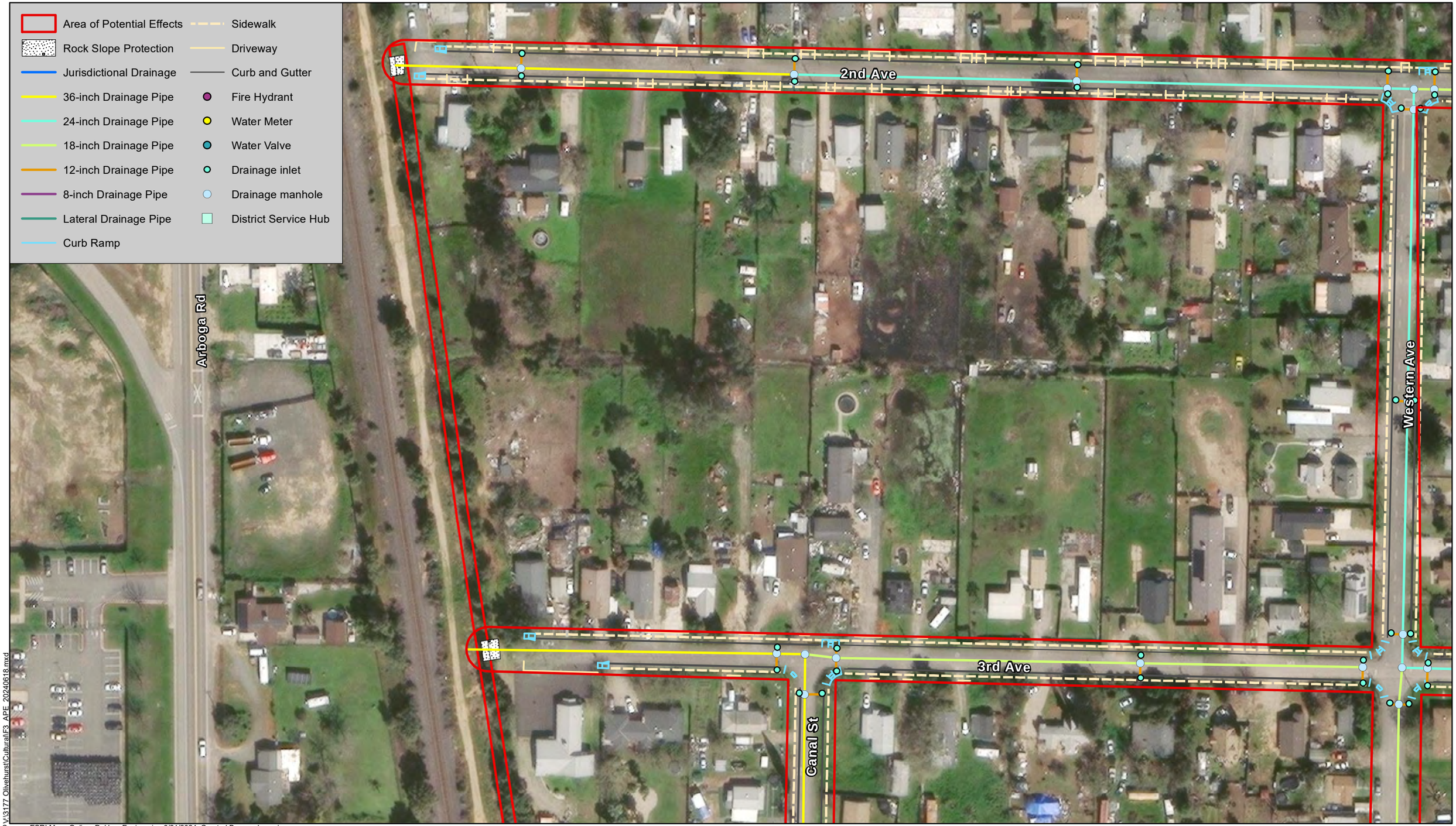
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Source: ESRI Maps Online; Dokken Engineering 6/21/2024; Created By: gzachoszaj

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**FIGURE 3**
**Area of Potential Effect**
Page 1 of 14
Olivehurst Roadway Climate Resiliency Project
Yuba County, California




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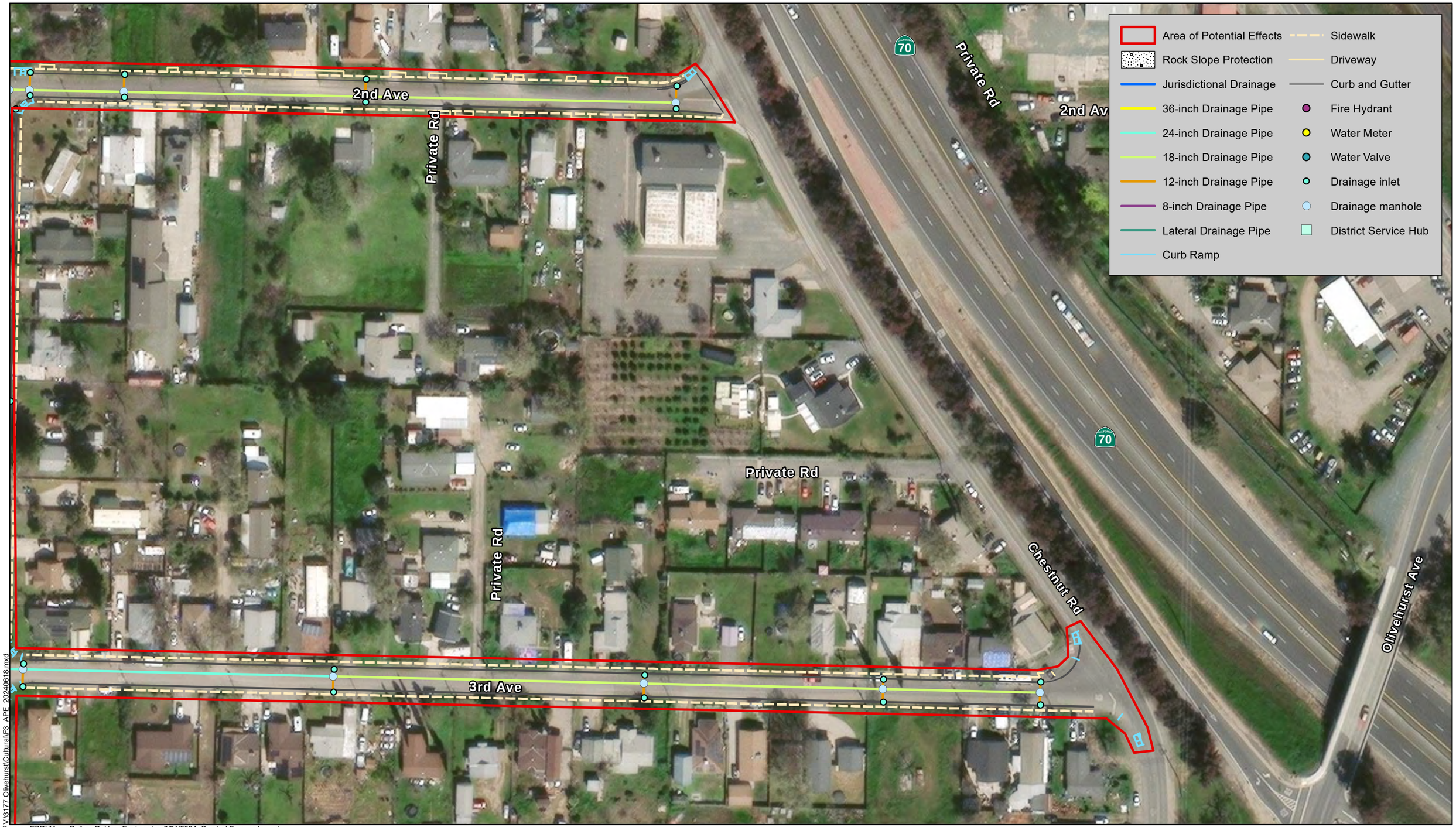
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**FIGURE 3**
**Area of Potential Effect**

Olivehurst Roadway Climate Resiliency Project
Yuba County, California




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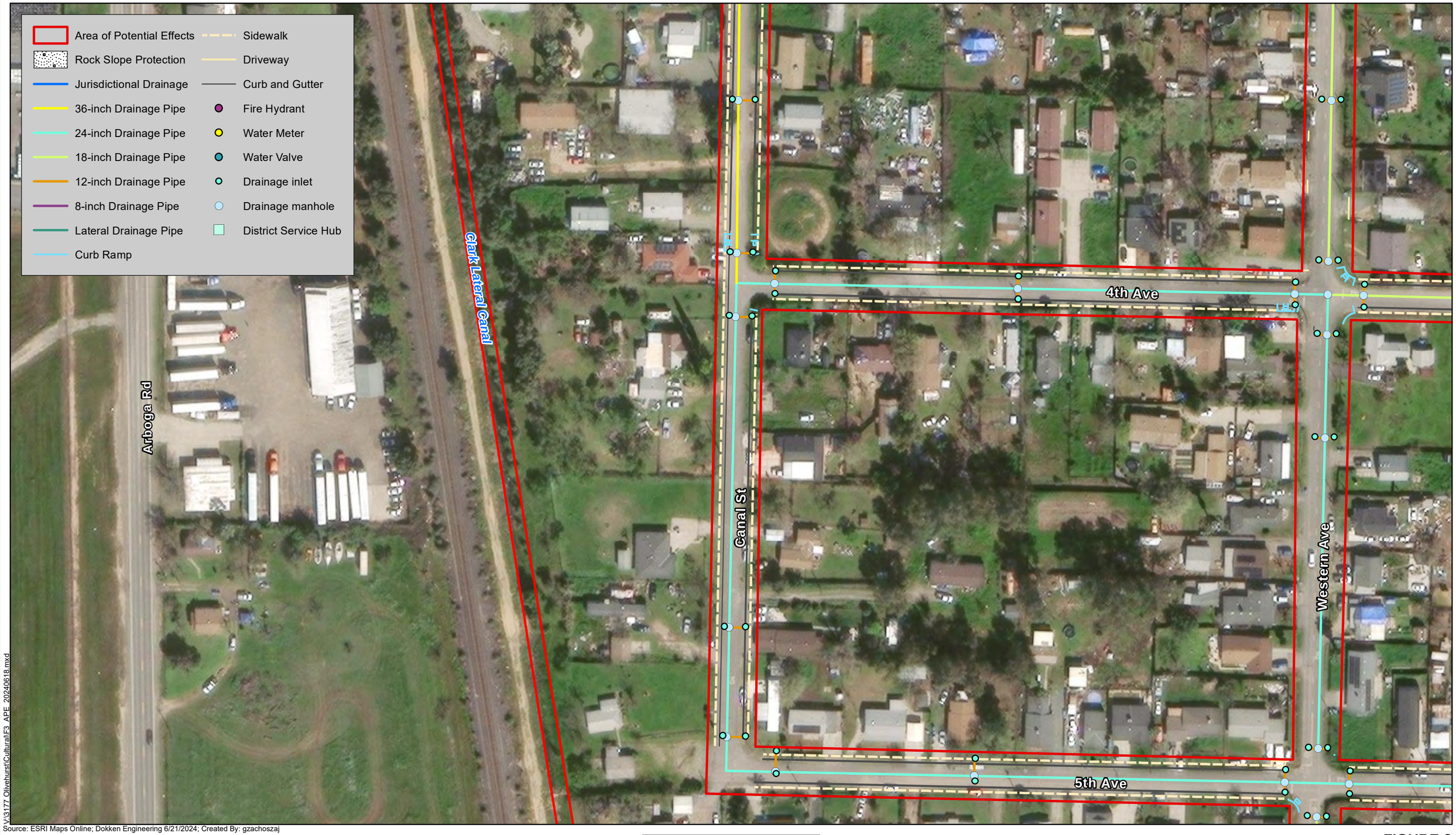
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**FIGURE 3**
**Area of Potential Effect**

Olivehurst Roadway Climate Resiliency Project
Yuba County, California




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**FIGURE 3**
**Area of Potential Effect**

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Yuba County, California




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**FIGURE 3**
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Yuba County, California




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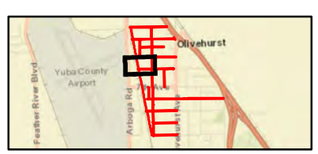
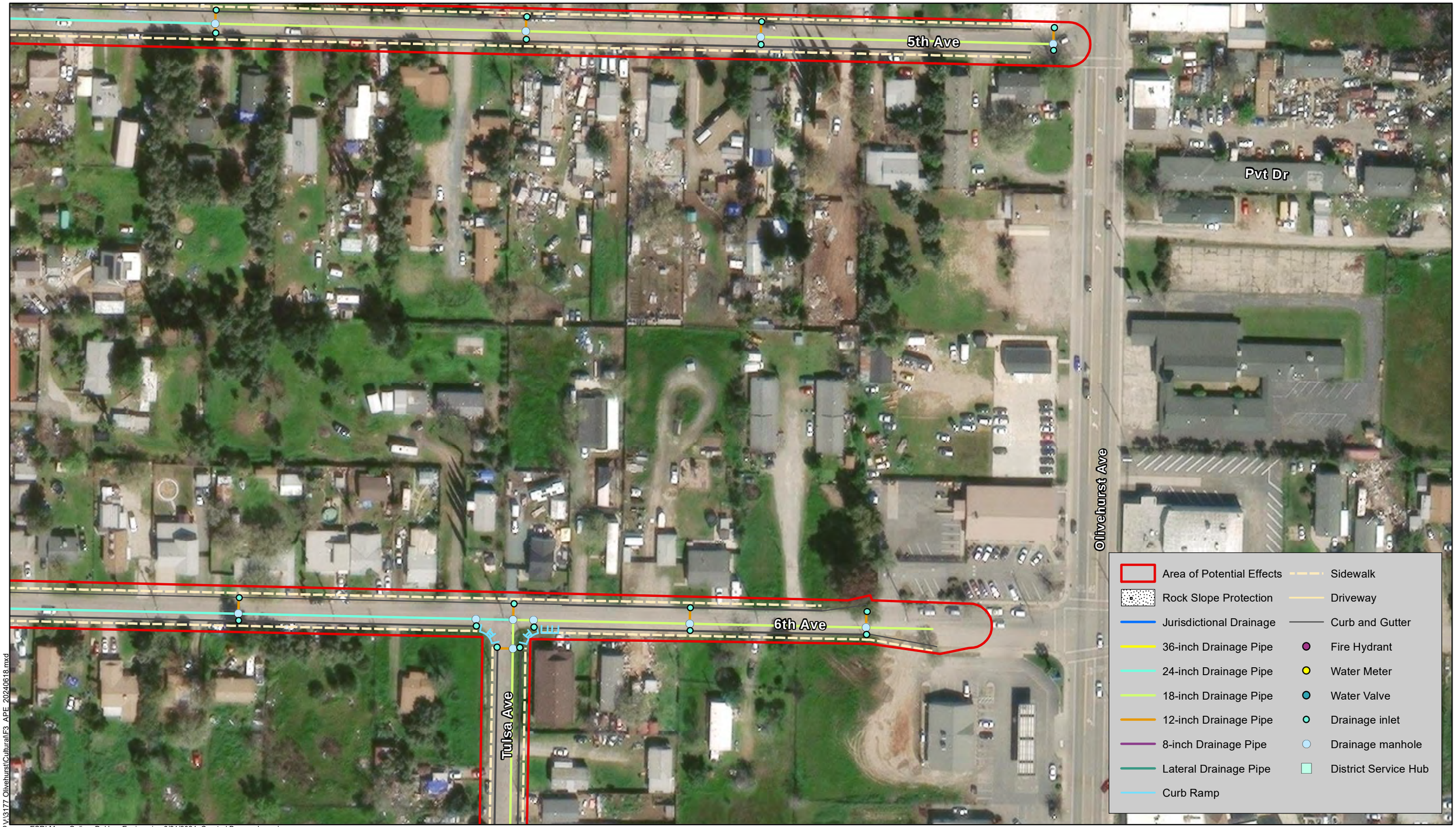



**FIGURE 3**
**Area of Potential Effect**

Olivehurst Roadway Climate Resiliency Project
Yuba County, California




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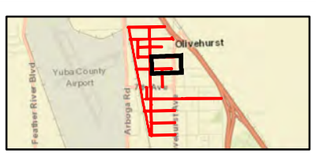
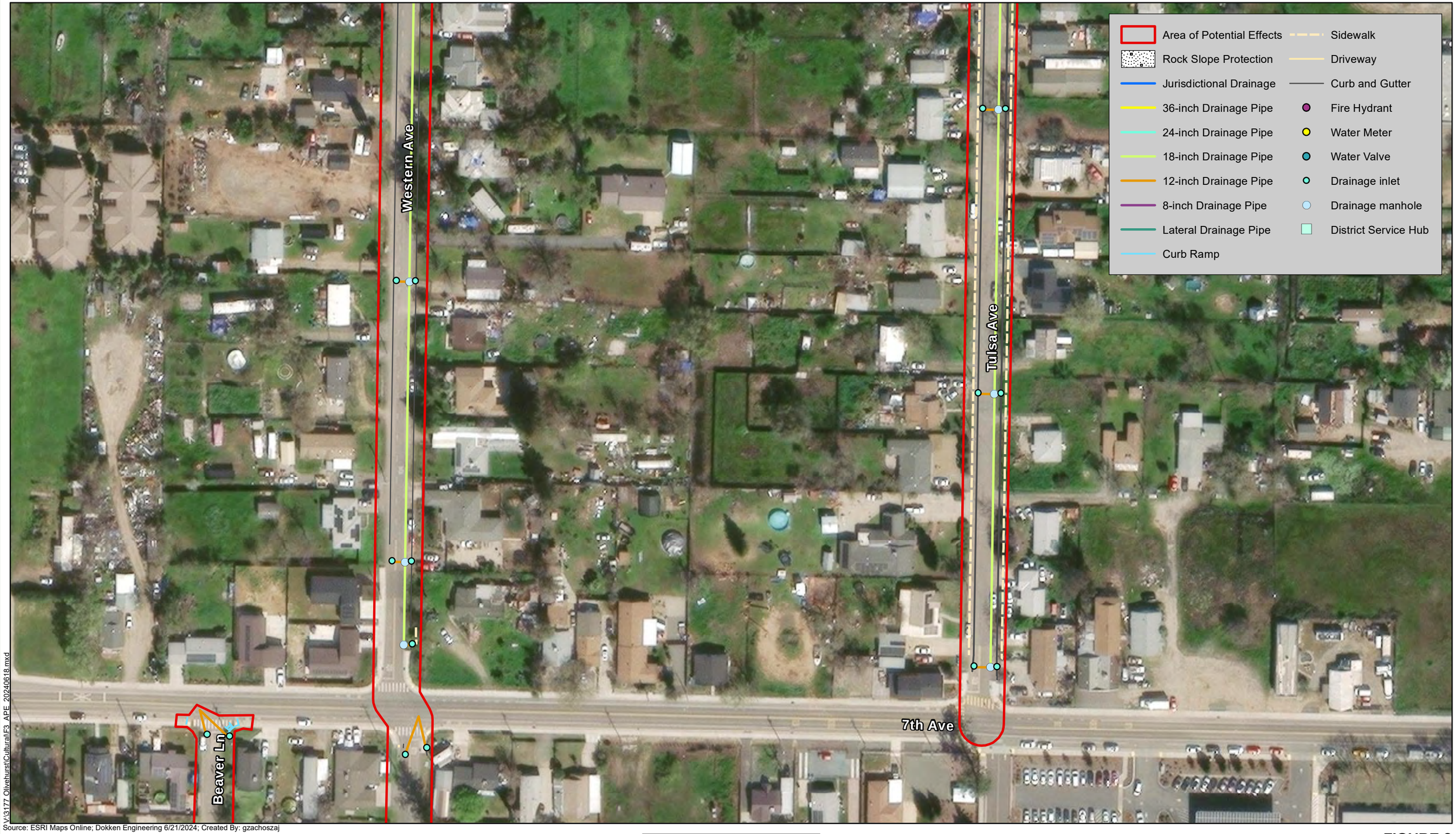



**FIGURE 3**
**Area of Potential Effect**


Olivehurst Roadway Climate Resiliency Project
Yuba County, California




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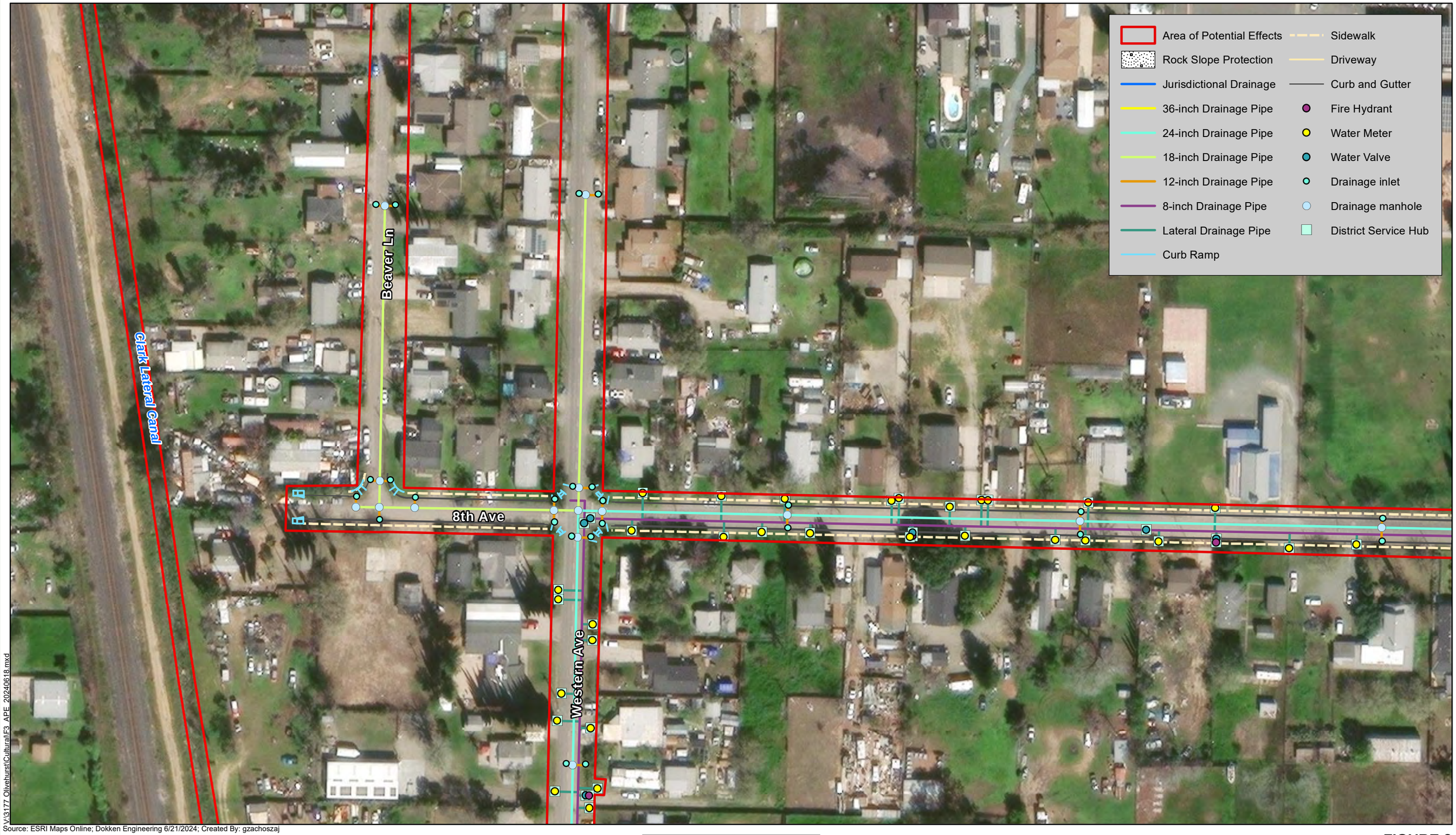
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**FIGURE 3**
**Area of Potential Effect**

Olivehurst Roadway Climate Resiliency Project
Yuba County, California




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**FIGURE 3**
**Area of Potential Effect**

Olivehurst Roadway Climate Resiliency Project
Yuba County, California

Area of Potential Effects
Rock Slope Protection
Jurisdictional Drainage
36-inch Drainage Pipe
24-inch Drainage Pipe
18-inch Drainage Pipe
12-inch Drainage Pipe
8-inch Drainage Pipe
Lateral Drainage Pipe
Curb Ramp
Sidewalk
Driveway
Curb and Gutter
Fire Hydrant
Water Meter
Water Valve
Drainage inlet
Drainage manhole
District Service Hub

Pvt Dr
Okmulgee Ave
Pvt Dr
Pvt Dr
Olivehurst Ave
Clark Slough
8th Ave
Pvt Dr
Pvt Dr
Pvt Dr
Pvt Dr
Pvt Dr

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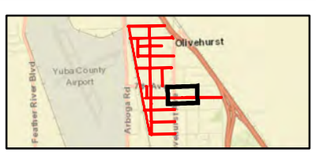
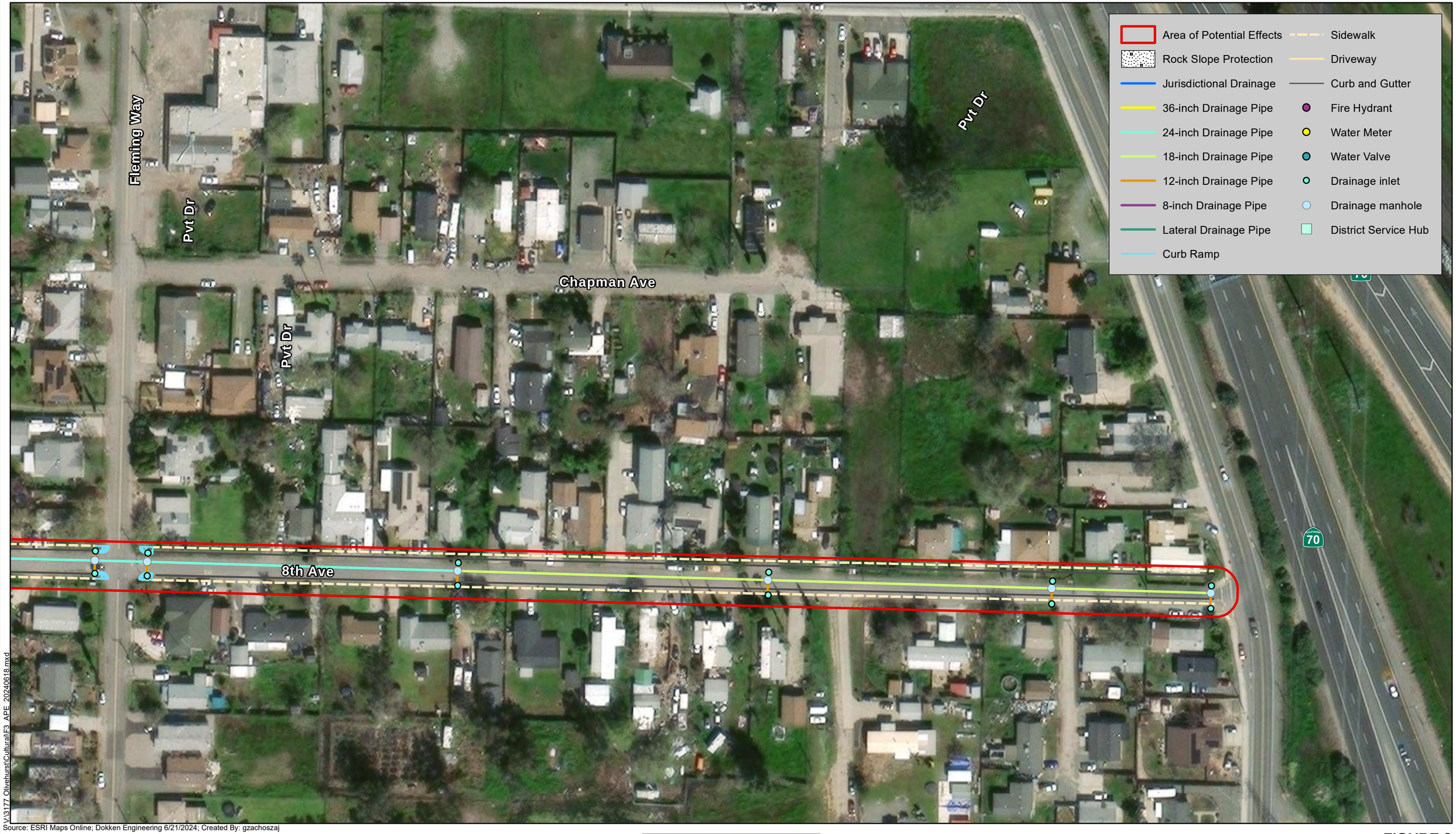



**FIGURE 3**
**Area of Potential Effect**
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Olivehurst Roadway Climate Resiliency Project
Yuba County, California




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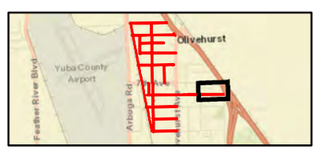



**FIGURE 3**
**Area of Potential Effect**

Olivehurst Roadway Climate Resiliency Project
Yuba County, California




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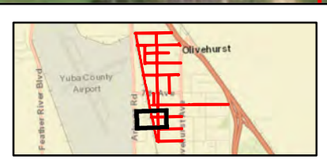



**FIGURE 3**
**Area of Potential Effect**
Page 12 of 14
Olivehurst Roadway Climate Resiliency Project
Yuba County, California




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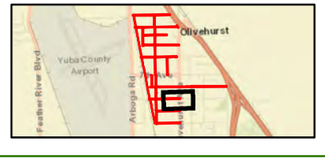
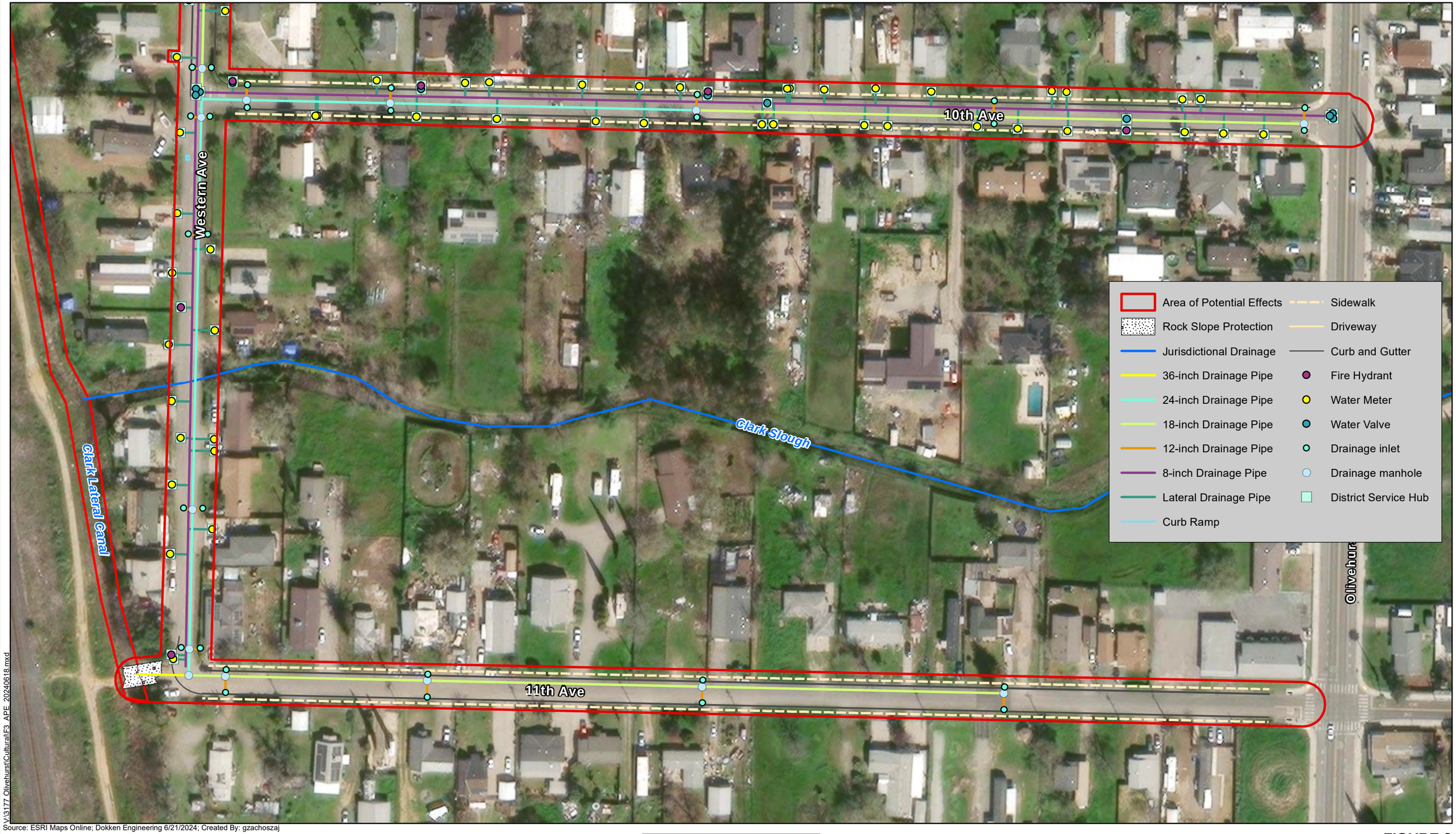



**FIGURE 3**
**Area of Potential Effect**
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Olivehurst Roadway Climate Resiliency Project
Yuba County, California




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Source: ESRI Maps Online; Dokken Engineering 6/21/2024; Created By: gzachoszaj

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**FIGURE 3**
**Area of Potential Effect**

Olivehurst Roadway Climate Resiliency Project
Yuba County, California

| VI. ENERGY<br><br>**Would the project:** | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation? | ☐ | ☐ | ☐ | ☒ |
| b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency? | ☐ | ☐ | ☐ | ☒ |

## DISCUSSION/CONCLUSION/MITIGATION:

a) The proposed project will have no impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation nor will it conflict with or obstruct a state or local plan for renewable energy or energy efficiency. There are no unusual project characteristics or construction processes that will require the use of equipment that will be more energy intensive than is used for comparable activities or use of equipment that will not conform to current emissions standards and related fuel efficiencies. Compliance with Yuba County 2030 General Plan will ensure that all project energy efficiency requirements are net resulting in ***no impact***.

b) The project involves construction of shared sidewalks and bicycle lanes, which will give residents a safer and more economical route to get to important local destinations such as schools, health facilities and local commercial areas. This project is consistent with the Yuba County 2030 General Plan, Natural Resources Element for goals and policies addressing energy conservation and energy efficiency (Yuba County 2011). Specifically, this project will provide transportation infrastructure that will provide residents and businesses with more energy-efficient travel choices, as well as introduce a bicycle and pedestrian network that will connect neighborhood centers to each other. Since transportation is the largest user of energy in California, the strategies that Yuba County is using to reduce vehicular traffic demand concurrently increase local energy efficiency. Therefore, this project is consistent with local plans for energy efficiency and there will be ***no impact***.

| VII. GEOLOGY AND SOILS<br>**Would the project:** | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: | | | | |
| i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42. | ☐ | ☐ | ☒ | ☐ |
| ii) Strong seismic ground shaking? | ☐ | ☐ | ☒ | ☐ |
| iii) Seismic related ground failure, including liquefaction? | ☐ | ☐ | ☒ | ☐ |
| iv) Landslides? | ☐ | ☐ | ☒ | ☐ |
| b) Result in substantial soil erosion or the loss of topsoil? | ☐ | ☐ | ☒ | ☐ |
| c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse? | ☐ | ☐ | ☒ | ☐ |
| d) Be located on expansive soil, as defined in Section 1803.5.3 to 1808.6 of the 2010 California Building Code, creating substantial risks to life or property? | ☐ | ☐ | ☒ | ☐ |
| e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater? | ☐ | ☐ | ☐ | ☒ |

## Discussion/Conclusion/Mitigation:

a) i-iii) Yuba County is located within an area of relatively low seismic activity and is not located within a highly active fault zone. According to the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist, Division of Mines and Geology Special Publication 42, Yuba County is not one of the cities or counties affected by Earthquake Fault Zones, as of August 16, 2007. Therefore, strong seismic ground shaking and seismic-related ground failure, including liquefaction is not an anticipated side effect of development in the area. A ***less than significant impact*** from earthquakes is anticipated.

iv) In Yuba County, landslides would likely be limited to foothill and mountain areas, outside of the Project Area, where slopes are greater. The Yuba County 2030 General Plan identifies the area as one that has a low risk for landslides, and states that grading ordinances, adopted

by Yuba County and based on Appendix J of the 2013 California Building Code, serve as effective measures for dealing with landslide exposure (Yuba County 2011). Hazards associated with potential seismic, and landslide result in a ***less than significant impact***.

b) c) and d) According to Exhibit 4.6-4 Soil Erosion Hazard, of the 2030 General Plan EIR, the project site has a slight potential for soil erosion hazards. Exhibit 4.6-5 Shrink/Swell Potential indicates that the project site also contains expansive soils with a low shrink/swell potential. There are no structures associated with the proposed project, therefore, the project will result in a ***less than significant impact***.

e) No septic tanks or alternative wastewater disposal system will be installed as part of the proposed project. Therefore, there will be ***no impact***.

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

**Discussion/Conclusion/Mitigation:**

a) Climate change is a public health and environmental concern around the world. As global concentrations of atmospheric greenhouse gases increase, global temperatures increase, weather extremes increase, and air pollution concentrations increase. The predominant opinion within the scientific community is that global warming is currently occurring, and that it is being caused and/or accelerated by human activities, primarily the generation of "greenhouse gases" (GHG).

In 2006, the California State Legislature adopted AB32, the California Global Warming Solutions Act of 2006, which aims to reduce greenhouse gas emissions in California. Greenhouse gases, as defined under AB 32, include carbon dioxide, methane, nitrous oxide, hydro fluorocarbons, per fluorocarbons, and sulfur hexafluoride. AB 32 requires the California Air Resources Board (ARB), the State agency charged with regulating statewide air quality, to adopt rules and regulations that would achieve greenhouse gas emissions equivalent to statewide levels in 1990 by 2020.

In 2008, the California Air Resources Board (CARB) adopted the Scoping Plan for AB32. The Scoping Plan identifies specific measures to reduce GHG emissions to 1990 levels by 2020 and requires ARB and other state agencies to develop and enforce regulations and other initiatives for reducing GHGs. The Scoping Plan also recommends, but does not require, an emissions reduction goal for local governments of 15% below "current" emissions to be achieved by 2020 (per Scoping Plan current is a point in time between 2005 and 2008). The Scoping Plan also recognized that Senate Bill 375 Sustainable Communities and Climate Protection Act of 2008 (SB 375) is the main action required to obtain the necessary reductions from the land use and transportation sectors in order to achieve the 2020 emissions reduction goals of AB 32.

SB 375 complements AB 32 by reducing GHG emission reductions from the State's transportation sector through land use planning strategies with the goal of more economic and environmentally sustainable (i.e., fewer vehicle miles travelled) communities. SB 375 requires that the ARB establish GHG emission reduction targets for 2020 and 2035 for each of the state's 18 metropolitan planning organizations (MPO). Each MPO must then prepare a plan called a Sustainable Communities Strategy (SCS) that demonstrates how the region will

meet its SB 375 GHG reduction target through integrated land use, housing, and transportation planning.

The Sacramento Area Council of Governments (SACOG), the MPO for Yuba County, adopted an SCS for the entire SACOG region as part of the 2035 Metropolitan Transportation Plan (MTP) on April 19, 2012. The GHG reduction target for the SACOG area is 7 percent per capita by 2020 and 16 percent per capita by 2035 using 2055 levels as the baseline. Further information regarding SACOG's MTP/SCS and climate change can be found at http://www.sacog.org/2035/.

While AB32 and SB375 target specific types of emissions from specific sectors, and ARBs Scoping Plan outlines a set of actions designed to reduce overall GHG emissions, it does not provide a GHG significance threshold for individual projects. Air districts around the state have begun articulating region-specific emissions reduction targets to identify the level at which a project may have the potential to conflict with statewide efforts to reduce GHG emissions (establish thresholds). To date, the Feather River Air Quality Management District (FRAQMD) has not adopted a significance threshold for analyzing project generated emissions from plans or development projects or a methodology for analyzing impacts. Rather FRAQMD recommends that local agencies utilize information from the California Air Pollution Control Officers Association (CAPCOA), Attorney General's Office, Cool California, or the California Natural Resource Agency websites when developing GHG evaluations through CEQA.

Transportation is the largest source of ozone in the region and the main source of GHGs in Yuba County and California. Therefore, transportation planning to reduce vehicular miles traveled is needed to achieve air quality goals. Safe and efficient bike lanes, pedestrian walkways and other active transportation facilities that are incorporated into a comprehensive transportation network can encourage travel by other means, reducing air pollution and GHG emissions (Yuba County 2011). Installation of 52,000 linear feet of sidewalks, 52,000 linear feet of Class III bike routes, 21 crosswalks, and 38 ADA-complaint ramps within the community of Olivehurst will increase the amount of pedestrian friendly infrastructure and encourage active transportation, which will reduce GHG emissions from vehicular travel. Construction work for the project will not create new sources of GHG outside of the small emission that would take place during project construction, which will remain within the limits allowed in the Yuba County 2030 General Plan.

Pedestrian, roadway and drainage improvements included in the project will not generate operational GHG emissions that would result in a cumulatively considerable contribution to climate change impacts. Therefore, impacts related to greenhouse gas emissions would be ***less than significant***.

b) The project is consistent with the Air Quality & Climate Change policies within the Public Health & Safety Section of the 2030 General Plan therefore, the project has ***no impact*** in regard to any applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

| **IX. HAZARDS AND HAZARDOUS MATERIALS**<br><br>**Would the project:** | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? | ☐ | ☐ | ☐ | ☒ |
| b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment? | ☐ | ☒ | ☐ | ☐ |
| c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? | ☐ | ☒ | ☐ | ☐ |
| d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment? | ☐ | ☐ | ☐ | ☒ |
| e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area? | ☐ | ☐ | ☐ | ☒ |
| f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area? | ☐ | ☐ | ☐ | ☒ |
| g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? | ☐ | ☐ | ☐ | ☒ |
| h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands? | ☐ | ☐ | ☒ | ☐ |

## Discussion/Conclusion/Mitigation:

a) There would be no routine transport, use, or disposal of hazardous materials or the release of hazardous materials into the environment related to this drainage and pedestrian facilities improvement project. Therefore, there would be ***no impact*** to the public or environment related to hazardous materials.

b) The proposed project will include installation of a new storm drain infrastructure, pavement rehabilitation, as well as roadway improvements such as installation of curbs, gutter,

sidewalks, ADA-compliant ramps, bike lines, striping and traffic control devices. Construction equipment typically uses only a minor amount of hazardous materials, primarily motor vehicle fuels and oils. Because of their limited quantity, these materials would present a minor hazard, and only if spillage occurs. Standard spill prevention and control measures will be maintained by the contractor. Use of these materials would cease once project construction is completed. This project would not produce or create significant hazardous materials with the following measure:

**HAZ-1:** Construction specifications shall include the following measures to reduce potential impacts in the Project Area associated with accidental spills of pollutants (e.g., fuel, oil, grease):

A site-specific prevention plan shall be implemented for potentially hazardous materials. The plan shall include the proper handling and storage of all potentially hazardous materials, as well as the proper procedures for cleaning up and reporting any spills. If necessary, containment berms shall be constructed to prevent spilled materials from reaching surface water features.

Equipment and hazardous materials shall be stored a minimum of 50 feet away from surface water features.

Vehicles and equipment used during construction shall receive proper and timely maintenance to reduce the potential for mechanical breakdowns leading to a spill of materials. Maintenance and fueling shall be conducted within an adequate fueling containment area.

Therefore, impacts would be ***less than significant with mitigation incorporated.***

c) The closest school site is Ella Elementary School, which is approximately 0.10 mile north from 8th Avenue within the Project Area. With implementation of measure HAZ-1, impacts to the nearby school would be considered ***less than significant with mitigation incorporated.***

d) The project site is not located on a site included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. The site has historically been used for residential development and is currently zoned for residential and commercial development. Therefore, the project would not create a significant hazard to the public or the environment and there would be ***no impact*** to the environment from hazardous materials.

e) and f) The project is located within Safety Zone 6 of the Yuba County Airport which has a Land Use Compatibility Plan that was adopted on March 17, 2011. The project is primarily on County owned roadways and does not have a land-use element that is inconsistent with the Yuba County Airport Land Use Compatibility Plan. The project would not result in a safety hazard for people residing or working in the Project Area due to proximity to an airport. Therefore, the project would have ***no impact*** on public or private airstrips, or safety of residents and/or workers in the project vicinity.

g) The County of Yuba Office of Emergency Services adopted an Emergency Operations Plan in August 2015 (Yuba County 2015). The project is consistent with the policies and procedures within the Emergency Operations plan and will not interfere with implementation

of the plan. There may be temporary physical interference to the existing road system within the community of Olivehurst during construction, however emergency evacuation routes will remain open throughout project implementation. Therefore, there will be ***no impact*** on the County's adopted emergency response plan.

h) The project is not located in a high wildlife fire hazard severity zone as reported by the Cal Fire 2008 Fire Hazard Severity Zones map. The property is within the jurisdiction of the Olivehurst Public Utility District Fire Department, who will respond to fire emergencies within the project site. For this reason, the impact would be ***less than significant***.

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

## Discussion/Conclusion/Mitigation:

a) This project will not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality. Since two jurisdictional waters are present within the Project Area, a 401 Water Quality Certification (WQC) from the Central Valley Regional Water Board will be obtained prior to in-water work. Compliance with applicable requirements and water quality standards within the WQC will minimize the project's impact to water quality. Furthermore, Yuba County's Phase II Municipal Separate Storm Sewer Systems (MS4) NPDES General Permit issued by the State Water Board to the County requires the County to develop and maintain a program to ensure that sediment and other pollutants from construction activities do not flow into the County's storm water drainage system and impact local receiving waters. All construction projects

with a soil disturbance greater than 1 acre are required to comply with the State Water Board's Construction General Permit (CGP), which requires the development of a Storm Water Pollution Prevention Plan (SWPPP). A SWPPP will be prepared and implemented during project construction to ensure that impacts to water quality will remain ***less than significant***.

b) The Clark Lateral Canal, located at the western edge of the Project Area, will serve as the outfall point for stormwater runoff generated by the proposed drainage improvements. Approximately 26,000 linear feet of storm drain will be constructed for the Project, which will be sized to accommodate projected runoff from heavy precipitation events. The project will add a small amount of impervious cover in the form of sidewalks and the existing unlined roadside drainage ditches will be converted to an closed underground stormwater system. This change may result in a decrease in ground water infiltration within the project area. This stormwater would be conveyed to the Clark Lateral Canal which in turn flow into a large wetland complex approximately 2.5 miles downstream. As a result, the project will not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin. Therefore, the impact would be ***less than significant***.

c) i) The project site is very flat which will reduce the potential for erosion during construction. Mitigation Measure **HYD-1** shall be incorporated to further reduce siltation or erosion during construction of the proposed project.

**HYD-1:** Best Management Practices (BMPs) will be incorporated into Project design and Project management to minimize impacts on the environment including erosion and the release of pollutants (e.g., oils, fuels):

- Exposed soils and material stockpiles would be stabilized, through watering or other measures, to prevent the movement of dust at the Project site caused by wind and construction activities such as traffic and grading activities;
- All vehicle and equipment fueling/maintenance would be conducted outside of any surface waters;
- Equipment used in and around jurisdictional waters must be in good working order and free of dripping or leaking contaminants;
- Raw cement, concrete or concrete washings, asphalt, paint or other coating material, oil or other petroleum products, or any other substances that could be hazardous to aquatic life shall be prevented from contaminating the soil or entering jurisdictional waters;
- All erosion control measures, and storm water control measures would be properly maintained until the site has returned to a pre-construction state;
- All construction materials would be hauled off-site after completion of construction.

Therefore, there would be a ***less than significant impact with mitigation incorporated***.

ii-iv) The project will install upgraded drainage facilities within the entire Project Area. Currently, the existing open drainage ditches within the community are insufficient to accommodate flows generated by heavy precipitation events. The proposed drainage improvements will be sized to accommodate heavy flows generated by climate change which will decrease the amount of surface runoff and reduce the risk of flooding within the community of Olivehurst. The upgraded storm drain system will redirect surface runoff from the existing, inadequately sized roadside drainage ditches into Clark Lateral Canal, located at the western edge of the Project Area. Clark Lateral Canal is adequately sized to handle the capacity of the planned stormwater drainage system. Mitigation Measure **HYD-1** will be incorporated into the project to ensure that sources of polluted runoff will not flow into jurisdictional drainages. Therefore, there would be a ***less than significant impact with mitigation incorporated***.

d) The Feather River Setback Levee protects the areas east of the Feather River, including the community of Olivehurst, from flood events. According to the Federal Emergency Management Agency (FEMA) maps, the proposed project location is within an area designated as Zone X, which is outside of the floodway. Furthermore, Yuba County is within an inland area not subject to seiche or tsunami, and mudflow is not an identified issue at this location. Therefore, there would be ***no impact*** from flooding, mudflow, seiche, or tsunami.

e) The project will not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan because Yuba County has not adopted a water quality control plan or sustainable groundwater management plan. There would be a ***less than significant impact.***

| XI. LAND USE AND PLANNING<br><br>**Would the project:** | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| a) Physically divide an established community? | ☐ | ☐ | ☐ | ☒ |
| 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? | ☐ | ☐ | ☐ | ☒ |

## Discussion/Conclusion/Mitigation

a) The project site is within an area of residential and urban development within the Olivehurst Community of Yuba County. The proposed project will not create any physical division of an established community as it consists of adding underground infrastructure and a pedestrian and bicycle lane network which would improve active transportation circulation within the community. Therefore, the development would result in ***no impact*** or division of an established community.

b) The Yuba County General Plan designates the project site as site as Valley Neighborhood. The Project Area is zoned as "RS" Single Family Residential, "RM" Medium Density Residential, "RH" High Density Residential, "NMX" Neighborhood Mixed Use, "DC" Downtown Core District (Yuba County 2011) and meets all the requirements and intents for these zones. No rezoning to accommodate the project is required. The project is consistent with the current General Plan policies and zoning designations. Land use impacts are anticipated to have ***no impact*** on habitat or conservation plans.

| XII. MINERAL RESOURCES<br><br>**Would the project:** | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state? | ☐ | ☐ | ☐ | ☒ |
| b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan? | ☐ | ☐ | ☐ | ☒ |

## Discussion/Conclusion/Mitigation:

a) and b) The Project Area is not known to contain any mineral resources that would be of value to the region or residents. Additionally, according to the Yuba County 2030 General Plan, the project site is not delineated in an area identified to have surface mining activities or contain mineral resources (Yuba County 2011). The project is expected to have ***no impact*** on mineral resources.

| XIII. NOISE<br><br>Would the project result in: | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| 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? | ☐ | ☐ | ☒ | ☐ |
| b) Generation of excessive groundborne vibration or groundborne noise levels? | ☐ | ☐ | ☒ | ☐ |
| c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels? | ☐ | ☐ | ☒ | ☐ |

**Discussion/Conclusion/Mitigation:**

a) The project would create temporary or periodic increases in ambient noise levels in the vicinity during construction. However, Article 3 of Chapter 8.20 of the Yuba County Code of Ordinances governs construction related noise. It states, "It shall be unlawful for any person within a residential zone, or within the radius of 500 feet therefrom, to operate equipment or perform any outside construction or repair work on buildings, structures or projects or to operate any pile driver, power shovel, pneumatic hammer, derrick, power hoist, or any other construction type device between the hours of 10:00 p.m. of one day and 7:00 a.m. of the following day in such a manner that a reasonable person of normal sensitiveness residing in the area is caused discomfort or annoyance unless a permit has been duly obtained beforehand from the Director of the Community Development Department as set forth in Section 8.20.710 of this chapter. No permit shall be required to perform emergency work as defined in article 1 of this chapter."

   Construction activities associated with the project will cause a temporary increase in noise levels in the vicinity. However, these noise levels would be temporary, conform to the hours required by County Ordinance, and would cease once construction activities end. With the incorporated standard requirements, impacts related to construction noise shall be ***less than significant.***

b) Temporary increases in ground borne vibrations and noise may occur during construction of the project due to the mobilization of heavy construction equipment on the roadways within the Project Area, as well as ground disturbance required to install the upgraded storm drainage system and pedestrian infrastructure improvements. However, increases in noise and vibrations in the project vicinity would be temporary and return to normal conditions once construction is complete. Furthermore, construction activities would conform to the ambient base noise levels set forth in the Yuba County Code of Ordinances Section 8.20.140.

Therefore, the project would not generate excessive ground borne vibrations or noise levels, and there would be a ***less than significant impact***.

c) As mentioned previously, the project site is located within Safety Zone 6 of the Yuba County Airport Compatibility Plan. The project is not anticipated to expose residents or workers to excessive noise levels due to its proximity to the Yuba County Airport. Therefore, impacts would be a ***less than significant***.

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

**Discussion/Conclusion/Mitigation:**

a) The project does not include the construction of homes or extensions of roads or other infrastructure that would be required to foster population growth near the Project Area; therefore, there would be no increase in population as a result of the proposed project and impacts would be ***less than significant***.

b) The proposed project does not involve the removal of housing and therefore would cause ***no impact*** to housing.

| XV. PUBLIC SERVICES<br><br>**Would the project result in:** | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| 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**:** | | | | |
| a) Fire protection? | ☐ | ☐ | ☐ | ☒ |
| b) Police protection? | ☐ | ☐ | ☐ | ☒ |
| c) Schools? | ☐ | ☐ | ☐ | ☒ |
| d) Parks? | ☐ | ☐ | ☐ | ☒ |
| e) Other public facilities? | ☐ | ☐ | ☐ | ☒ |

**Discussion/Conclusion/Mitigation:**

a) The proposed project does not include the construction of any housing or land uses that would require a change or increase in fire protection. With adherence to the requirements from the Yuba County Ordinance Code and Fire Codes, there would be ***no impact*** on fire protection services.

b) The Yuba County Sheriff's Department would continue to provide law enforcement services to the project site and the California Highway Patrol will respond in the event of a vehicle accident. The proposed project does not include the construction of any housing or land uses that would result in a change or increase in the demand for law enforcement. Therefore, there would be ***no impact*** related to police protection.

c) The proposed project does not include the construction of any housing and would not generate any students. The project would not increase the demand on school districts. Therefore, there would be ***no impact*** related to school services.

d) The proposed project does not include the construction of housing and would not generate an increased demand for parks. Therefore, there would be ***no impact*** to parks.

e) Other public facilities that are typically affected by development projects include the Yuba County Library and County roads. However, since there is no development proposed by the project, there would be no increased demand for these services. The temporary traffic generated by construction activities would not generate any additional roadway maintenance. Therefore, there would be ***no impact*** to other public facilities.

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

## Discussion/Conclusion/Mitigation:

a) and b) The proposed project does not include construction of new housing developments, and therefore would not increase the demand for parks and/or recreational facilities. The Project Area lacks recreational facilities and construction, or expansion of recreational facilities will not be required due to project activities which include installation of a new storm drain infrastructure, pavement rehabilitation, as well as roadway improvements such as installation of curbs, gutter, sidewalks, ADA-compliant ramps, bike lines, striping and traffic control devices. Therefore, there would be ***no impact*** to parks or recreational facilities.

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

**Discussion/Conclusion/Mitigation:**

a) As part of the Yuba County 2030 General Plan, the Circulation Framework section of the Community Development Element describes the transportation services and facilities within the Plan area and provides transportation objectives to accommodate the County's development. Although the proposed project is not explicitly identified within the General Plan, the need for a contiguous bike and pedestrian network is identified within the community of Olivehurst (Yuba County 2011). Therefore, the project is consistent with County policies addressing transportation circulation and there will be ***no impact.***

b) The proposed project will improve existing roadway and drainage patterns along the various roadways in the Project Area and will not introduce any new vehicular trips to the area other than what is existing. The project will also construct 52,000 linear feet of sidewalks, 52,000 linear feet of Class III bike routes, and 21 crosswalks which will encourage the use of active transportation within the community of Olivehurst. For these reasons, impacts to VMT would be ***less than significant***.

c) Proposed roadway, drainage and pedestrian infrastructure improvements would not increase hazards due to geometric design or incompatible uses. Any road improvements will be required to meet Yuba County's road standards. Hazards due to a design feature of the project would not be substantially increased as a result of this project and there would be ***no impact***.

d) Emergency access to the project site would be via Olivehurst Avenue and Chestnut Road. There would be no change in emergency access as a result of the project. Therefore, the project will have ***no impact*** on emergency services.

| XVIII. TRIBAL CULTURAL RESOURCES | | | | |
|---|---|---|---|---|
| **Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:** | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
| a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or | ☐ | ☒ | ☐ | ☐ |
| b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe. | ☐ | ☒ | ☐ | ☐ |

**Discussion:**

Tribal groups of the area hold a deep spiritual, cultural, and physical ties to their ancestral land and are contemporary stewards of their culture and landscapes. The Tribal community represents a continuity and endurance of their ancestors by maintaining their connection to their history and culture. Tribal groups seek to ensure the preservation and continuance of their cultural heritage for current and future generations.

**Conclusion/Mitigation:**

a-b) Per Assembly Bill 52 (AB-52, Gatto 2014), as of July 1, 2015 Public Resources Code Sections 21080.3.1 and 21080.3 require public agencies to consult with the Native American Heritage Commission (NAHC) and Native American tribes for the purpose of mitigating impacts to tribal cultural resources; that consultation process is described in part below:

> Within 14 days of determining that an application for a project is complete or a decision by a public agency to undertake a project, the lead agency shall provide formal notification to the designated contact of, or a tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, which shall be accomplished by means of at least one written notification that includes a brief description of the proposed project and its location, the lead agency contact information, and a notification that the California Native American tribe has 30 days to request consultation pursuant to this section (Public Resources Code Section 21080.1 (d))

Consistent with Public Resources Code (PRC) Section 21080.3.1 (d), Yuba County provided formal notification of the project and the opportunity to consult on it to the designated contacts of the Estom Yumeka Maidu Tribe, Pakan'yani Maidu, Tsi Akim Maidu, United Auburn Indian Community, Wilton Rancheria, and Nevada City Rancheria Nisenan Tribe in a letter mailed to those organizations on March 27, 2024. As no responses or requests for consultation from Tribal

groups contacted for this Project were received, no Tribal background research was provided regarding potential Tribal Cultural Resources (TCR) present within the Project footprint.

While no TCRs were identified through consultation, **Mitigation Measure 18.1** should be implemented in case of accidental discovery or recognition of Tribal Cultural Resources in the Project Area. The impact upon Tribal Cultural Resources would be ***less than significant impact with mitigation incorporated.***

**Mitigation Measure 18.1 Unanticipated/Inadvertent Discoveries of TCRs**

If any suspected TCRs are discovered during ground disturbing construction activities, all work shall cease within 100 feet of the find, or an agreed upon distance based on the Project Area and nature of the find. A Tribal Representative from a California Native American tribe that is traditionally and culturally affiliated with a geographic area shall be immediately notified and shall determine if the find is a TCR (PRC §21074). The Tribal Representative will make recommendations for further evaluation and treatment as necessary.

When avoidance is infeasible, preservation in place is the preferred option for mitigation of TCRs under CEQA and Tribal protocols, and every effort shall be made to preserve the resources in place, including through project redesign, if feasible. Culturally appropriate treatment may be, but is not limited to, processing materials for reburial, minimizing handling of cultural objects, leaving objects in place within the landscape, or returning objects to a location within the Project Area where they will not be subject to future impacts. Permanent curation of TCRs will not take place unless approved in writing by the California Native American Tribe that is traditionally and culturally affiliated with the Project Area.

The contractor shall implement any measures deemed by the CEQA lead agency to be necessary and feasible to preserve in place, avoid, or minimize impacts to the resource, including, but not limited to, facilitating the appropriate tribal treatment of the find, as necessary. Treatment that preserves or restores the cultural character and integrity of a TCR may include Tribal Monitoring, culturally appropriate recovery of cultural objects, and reburial of cultural objects or cultural soil.

Work at the discovery location cannot resume until all necessary investigation and evaluation of the discovery under the requirements of the CEQA, including AB52, have been satisfied.

| XIX. UTILITIES AND SERVICE SYSTEMS<br><br>**Would the project:** | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects? | ☐ | ☐ | ☒ | ☐ |
| b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years? | ☐ | ☐ | ☒ | ☐ |
| 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? | ☐ | ☐ | ☒ | ☐ |
| 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? | ☐ | ☐ | ☒ | ☐ |
| e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste? | ☐ | ☐ | ☒ | ☐ |

**Discussion/Conclusion/Mitigation:**

a) The project will provide an expanded stormwater drainage infrastructure in order to provide adequate drainage and flood protection services to the community of Olivehurst. The proposed drainage pipes will be installed within the existing County ROW. Projects within the right-of ways that involve the operation, repair, maintenance, permitting, leasing, licensing, or minor alteration of existing public or private structures involving negligible or no expansion of use beyond that existing at the time of the lead agencies determination shall not have an impact on the environment. All required infrastructure expansions will be located in the existing right-of-ways and will therefore create a ***less than significant*** impact.

b) and c) The project does not require the use of any new wastewater treatment facilities because it is located within the jurisdiction of the OPUD which provides water and wastewater services to the community. No significant impacts related to the adequacy of the water supply for the project were identified during the course of the project review because the project does not require the use of any new water or wastewater facilities. Since no major concerns have been expressed, any impact related to water supply is expected to be ***less than significant.***

d) and e) The project will comply with federal, state and local regulations related to solid waste. The project is not anticipated to result in the generation of any solid waste and will only

generate waste during the construction phase. The Ostrom Road landfill has a capacity of 41,822,300 cubic yards and has adequate capacity to serve the project site. The project will have a minimal effect on this facility and the impact would be ***less than significant***.

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

## DISCUSSION/CONCLUSION/MITIGATION:

a) The County of Yuba Office of Emergency Services adopted an Emergency Operations Plan in August 2015 (Yuba County 2015). The project is consistent with the policies and procedures within the Emergency Operations plan and will not interfere with implementation of the plan. Access to the project site will not be impacted by construction activities, and emergency evacuation routes along Olivehurst Avenue and Chestnut Road will remain open throughout construction. Therefore, the project will have ***no effect*** on emergency response.

b) c) and d) The project is not located within a State Responsibility Area established by CalFire. There are also no factors which could exacerbate fire risk and expose project occupants to pollution from wildfires. No installation or maintenance of infrastructure that may exacerbate fire risk is proposed as part of the project. The project will have ***no impact*** related to wildfire risk.

## XXI. MANDATORY FINDINGS OF SIGNIFICANCE

NOTE: If there are significant environmental impacts which cannot be mitigated and no feasible project alternatives are available, then complete the mandatory findings of significance and attach to this initial study as an appendix. This is the first step for starting the environmental impact report (EIR) process.

| **Does the project:** | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| a) Have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory? | ☐ | ☒ | ☐ | ☐ |
| b) Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)? | ☐ | ☐ | ☒ | ☐ |
| c) Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly? | ☐ | ☒ | ☐ | ☐ |

### Discussion/Conclusion/Mitigation:

a) As discussed in the Biological Resources section, construction is anticipated to have impacts to special-status species, such as Swainson's hawk and white-tailed kite, as well as impacts to sensitive habitat communities including jurisdictional drainage and riparian habitat. Proposed mitigation measures **BIO-1** through **BIO-7**, would reduce impacts to biological resources to ***less than significant with mitigation***.

As discussed in the Cultural Resources and Tribal Cultural Resources section, construction could potentially impact cultural resources. Proposed mitigation measures in MM5.1, MM5.2, and MM18.1, would reduce the impact to ***less than significant with mitigation***.

b) The project is consistent with the Yuba County 2030 General Plan land use designation, as well as the zoning ordinance for the Project Area (Yuba County 2011). No cumulative impacts associated with this project have been identified. Therefore, the project's cumulative considerable impacts will be ***less than significant***.

c) Due to the nature of the proposed project, no substantial adverse effects on humans are expected. The project would not emit substantial amounts of air pollutants, including hazardous materials. The project would not expose residents to flooding. The one potential human health effects identified as a result of project implementation were minor construction-related impacts related to air quality, specifically dust, that could affect the residences near the project site. These effects are temporary in nature and subject to Feather River Air Quality Management District's Standard Mitigation Measures that would reduce these emissions to a level that would not be considered a significant impact. Therefore, the project is considered to have a ***less than significant impact with mitigation***.

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2. Yuba County Important Farmland Map 2012. California Department of Conservation.
3. Yuba County Community Development & Services Agency (Yuba County). 2011. Yuba County 2030 General Plan.
4. Yuba County Office of Emergency Service (Yuba County). 2015. Emergency Operations Plan All-Hazards.
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9. Feather River Air Quality Management District (FRAQMD). 2010. Indirect Source Review Guidelines – Thresholds of Significance.

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Appendix A. Biological Resources Technical Report
Appendix B. Cultural Resources Inventory Report
Appendix C. Road Construction Emissions Model
Appendix D. Mitigation Monitoring Plan

## Appendix A. Biological Resources Technical Report

## Biological Resources Technical Report

# Olivehurst Roadway Climate Resiliency Project

## Yuba County, California



**Prepared for:**
Yuba County Department of Public Works
915 8th Street, Suite 125
Marysville, CA 95901

**Prepared by:**
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110 Blue Ravine Road, Suite 200
Folsom, California 95630

**June 2024**

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Appendix D: NMFS Species List
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Appendix F: Representative Photographs

## List of Abbreviations

| | | |
|---|---|---|
| °F | | Fahrenheit |
| ADA | | American Disabilities Act |
| BMPs | | Best Management Practices |
| BSA | | Biological Study Area |
| Cal-IPC | | California Invasive Plant Council |
| Caltrans | | California Department of Transportation |
| CDFW | | California Department of Fish and Wildlife |
| CEQA | | California Environmental Quality Act |
| CESA | | California Endangered Species Act |
| CFG | | California Fish and Game |
| CFR | | Code of Federal Regulations |
| CNDDB | | California Natural Diversity Database |
| CNPS | | California Native Plant Society |
| County | | Yuba County |
| CWA | | Clean Water Act |
| DPS | | Distinct Population Segment |
| EFH | | Essential Fish Habitat |
| EO | | Executive Order |
| EPA | | Environmental Protection Agency |
| FESA<br>GGS | | Federal Endangered Species Act<br>Giant Garter Snake |
| GGS | | Giant Garter Snake |
| IPaC | | Information for Planning and Consultation |
| ITP | | Incidental Take Permit |
| LTCAP | | Local Transportation Climate Adaptation Program |
| MBTA | | Migratory Bird Treaty Act |
| NEPA | | National Environmental Policy Act |
| NMFS | | National Marine Fisheries Service |
| NRCS | | Natural Resource Conservation Service |
| Project | | Olivehurst Roadway Climate Resiliency Project |
| ROW | | Right-of-Way |
| RWQCB | | Regional Water Quality Control Board |
| SSC | | Species of Special Concern |
| TCE | | Temporary Construction Easement |
| U.S. | | United States |
| U.S.C. | | United States Code |
| USACE | | United States Army Corps of Engineers |
| USFWS | | United States Fish and Wildlife Service |
| USGS | | United States Geological Survey |

## Summary

Yuba County (County) proposes to construct drainage infrastructure and establish a multi-modal transportation network along 13 road segments in the community of Olivehurst, as part of the Olivehurst Roadway Climate Resiliency Project (Project). Work for the Project will include installation of a new storm drain infrastructure, pavement rehabilitation, as well as roadway improves such as installation of curbs, gutter, sidewalks, American Disabilities Act (ADA) compliant ramps, bike lines, striping and traffic control devices. The purpose of the proposed Project is to improve transportation efficiency within the community of Olivehurst, as well as install an upgraded storm drain system which can accommodate anticipated peak flows generated by climate change. This Project is needed to increase facility resilience to climate change, increase mobility and accessibility for local residents, improve transportation safety, as well as reduce greenhouse gas emissions and vehicle miles traveled.

Literature research, habitat assessments, and biological surveys were completed to determine the potential for special status species to occur within the Project area. Special status species include any plant or animal species listed by a state or federal agency or by one or more special interest groups, such as the California Native Plant Society (CNPS). Based on literature review, biological surveys, and habitat assessments, the following special status species have the potential to occur within the Project area: burrowing owl (*Athene cunicularia*), giant gartersnake (GGS; *Thamnophis gigas*), Swainson's hawk (*Buteo swainsoni*), and white-tailed kite (*Elanus leucerus*). Minor impacts to Swainson's hawk and white-tailed kite nesting habitat are anticipated to occur as a result of the proposed Project. Avoidance, minimization and mitigation measures have been incorporated into the Project design to ensure impacts to state-listed species and sensitive habitat communities would be avoided, minimized and/or mitigated to the greatest extent practicable. Portions of the Project area encompasses Clark Slough and Clark Lateral Canal, both jurisdictional waters pursuant to the Clean Water Act (CWA) and the California Department of Fish and Wildlife (CDFW). Minor temporary and permanent impacts to Clark Lateral Canal and its associated riparian corridor will result from the construction of the Project. Therefore, the following permits will be obtained for the proposed Project prior to construction: Section 404 Nationwide Permit #14 from the USACE, Section 401 Water Quality Certification from RWQCB, and Section 1602 Streambed Alteration Agreement from the CDFW.

The Project is state funded through the Local Transportation Climate Adaptation Program (LTCAP); as such, it requires compliance with the California Environmental Quality Act (CEQA). The lead agency for the CEQA compliance is the County. The Project will also be utilizing federal funds, and therefore requires compliance with the National Environmental Policy Act (NEPA). The lead agency for NEPA compliance is the California Department of Transportation (Caltrans). The Project is expected to begin construction in the fall of 2025 and be fully constructed by spring of 2028.

# 1. Introduction

The County proposes to construct drainage infrastructure and establish a multi-modal transportation network for cyclists and pedestrians in the community of Olivehurst. The Project is west of State Route 70 and east of the Feather River in Yuba County, California (Figure 1. Project Vicinity; Figure 2. Project Location). The Project is located within the Olivehurst 7.5-Minute United States Geological Survey (USGS) quadrangle (3912115).

## 1.1 Project Description

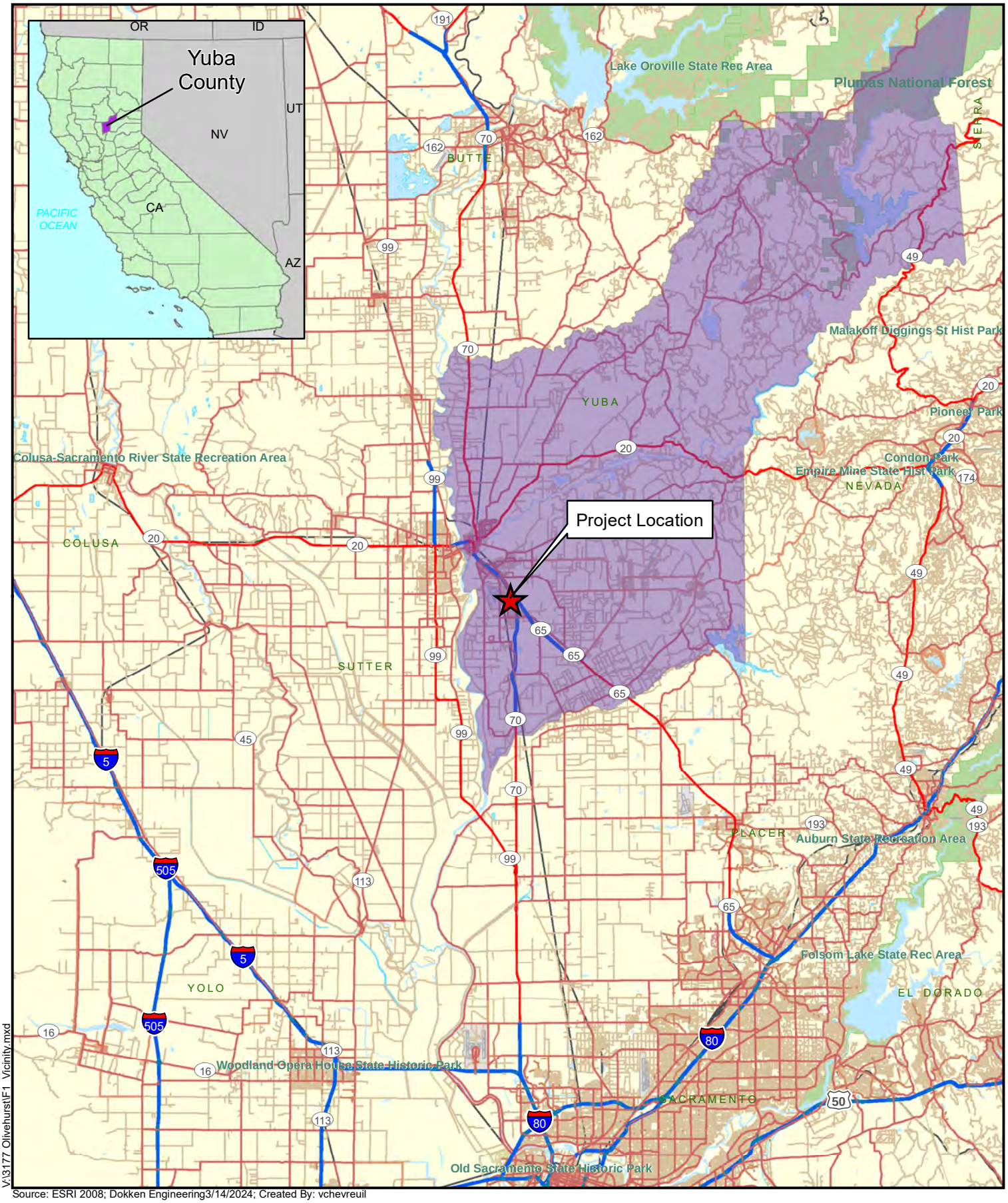
The County proposes to construct drainage infrastructure and establish a multi-modal transportation network along 13 road segments in the community of Olivehurst, Yuba County, California. Road segments within the Project area include:

| | | | |
|---|---|---|---|
| 2nd Avenue | 3rd Avenue | 4th Avenue | 5th Avenue |
| 6th Avenue | 8th Avenue | 9th Avenue | 10th Avenue |
| 11th Avenue | Western Avenue | Beaver Lane | Canal Street |
| Tulsa Avenue | | | |

Many of the roads within the community of Olivehurst lack drainage facilities, sidewalks and bicycle lanes or routes. In addition, the existing stormwater system relies on open roadside drainage ditches that are inadequate. This causes localized flooding during heavy rain events which disrupts transportation efficiency and presents a safety hazard during and immediately after rain events. The County proposes a widespread improvement throughout the community to upgrade drainage infrastructure, rehabilitate aged pavement, and install new pedestrian and bicycle facilities on both sides of the existing road network.

The proposed Project will replace the roadside drainage ditches with a comprehensive underground storm drain system sized to accommodate runoff from heavy precipitation events. Approximately 26,000 linear feet of storm drain will be constructed for the Project, as well as 52,000 linear feet of sidewalks, 52,000 linear feet of Class III bike routes, 21 crosswalks, 38 ADA complaint ramps, striping and curbs and gutters (Figure 3. Project Features). This Project will extend facilities throughout many of the remaining roads within the community of Olivehurst, creating a comprehensive drainage system while also improving multi-modal transportation connections within the community. The purpose of this Project is to establish a resilient transportation infrastructure which will not be vulnerable to extreme storm events, as well as create pedestrian facilities within the community to promote walking and bicycling.

Right-of-way (ROW) acquisition and utility relocations will be required. Temporary construction easements (TCEs) may be needed on a limited basis to accommodate the construction of the street improvements. The Project is funded through LTCAP therefore, it requires compliance with the CEQA. The lead agency for the CEQA compliance is the County.



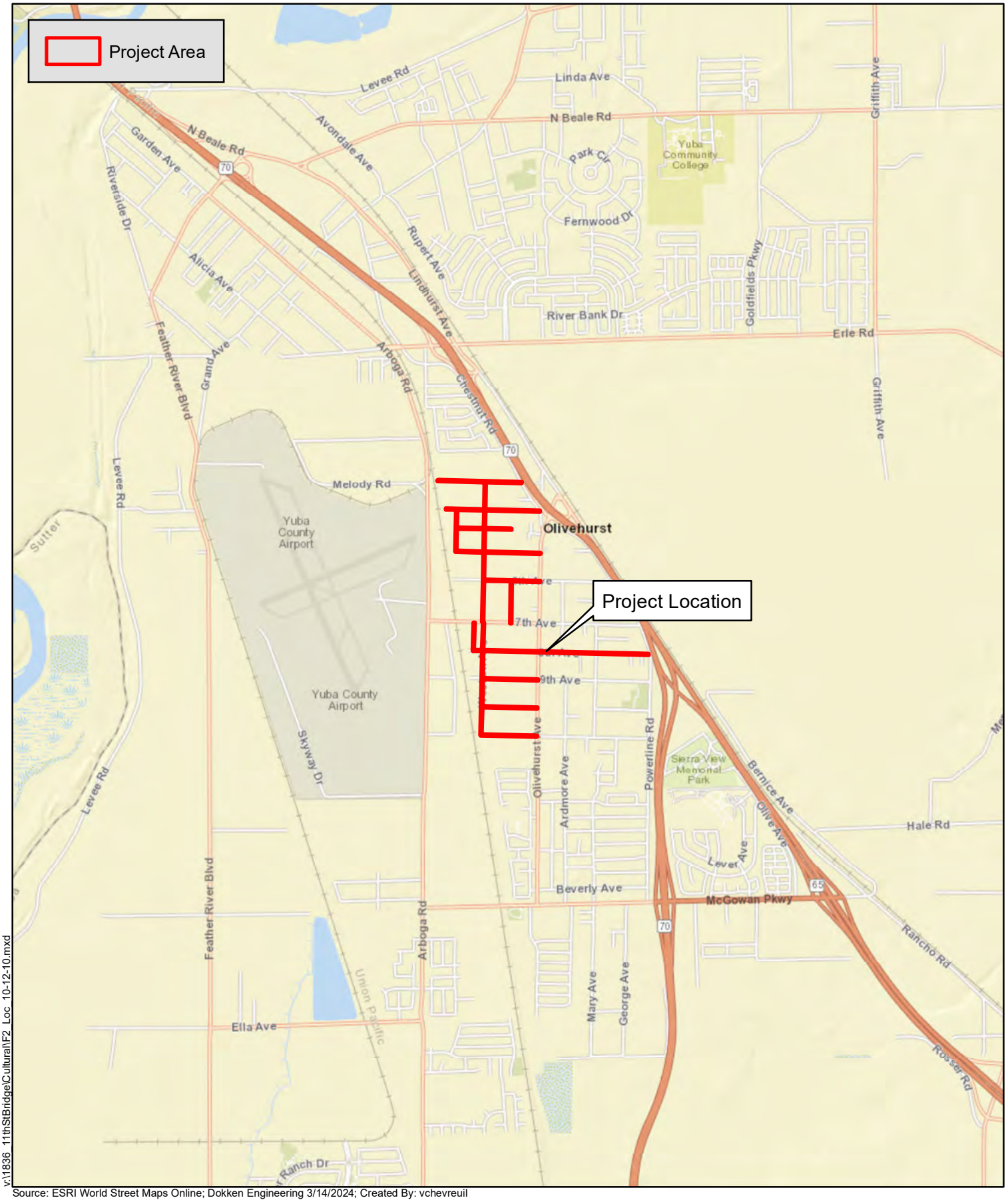

Source: ESRI 2008; Dokken Engineering3/14/2024; Created By: vchevreuil

V:\3177 Olivehurst\F1 Vicinity.mxd

0 5 10 15 Miles

**FIGURE 1**
**Project Vicinity**

Olivehurst Roadway Climate Resiliency Project
Yuba County, California




v:\1836_11thStBridge\Cultural\F2_Loc_10-12-10.mxd

Source: ESRI World Street Maps Online; Dokken Engineering 3/14/2024; Created By: vchevreuil

1 in = 3,000 ft

0 0.5 1 1.5 2 Mile

**FIGURE 2**
**Project Vicinity**

Olivehurst Roadway Climate Resiliency Project
Yuba County, California

Biological Study Area (54.72 acres)

Project Area (30.53 acres)

Jurisdictional Drainages within the BSA

Page 2

Page 3

Page 4

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Clark Lateral Canal

Arboga Rd

Olivehurst Ave

6th Ave

7th Ave

9th Ave

11th Ave

Clark Slough

70

65

V:\3177 Olivehurst\F3_Project Features 2024_03.mxd

Source: ESRI Maps Online; Dokken Engineering 4/18/2024; Created By: kjacobson

1 inch = 800 feet

0 800 1,600 2,400 3,200 4,000 Feet

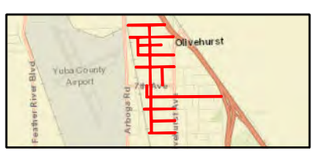



**FIGURE 3**
**Project Features**


Olivehurst Roadway Climate Resiliency Project
Yuba County, California

Biological Study Area (54.72 acres)
Project Area (30.53 acres)

**Roadway Features**
Sidewalk
Curb Ramp
Curb and Gutter

**Drainage Features**
Drainage Inlet
Drainage Manhole
OPUD Water Fire Hydrant
OPUD Water Meter
OPUD Water Valve
Proposed RSP

8-inch Drainage Pipe
12-inch Drainage Pipe
24-inch Drainage Pipe
18-inch Drainage Pipe
36-inch Drainage Pipe
Lateral Drainage Pipe
Outfall Location

2nd Ave

Clark Lateral Canal

V:\3177 Olivehurst\F3_Project Features 2024_03.mxd

Source: ESRI Maps Online; Dokken Engineering 5/31/2024; Created By: kjacobson

1 inch = 50 feet

0 50 100 150 200 250 Feet

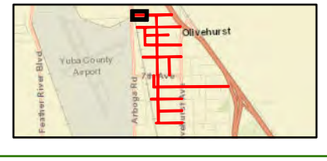



**FIGURE 3**
**Project Features**

Biological Study Area (54.72 acres)
Project Area (30.53 acres)

**Roadway Features**
Sidewalk
Curb Ramp
Curb and Gutter

**Drainage Features**
Drainage Inlet
Drainage Manhole
OPUD Water Fire Hydrant
OPUD Water Meter
OPUD Water Valve
Proposed RSP

8-inch Drainage Pipe
12-inch Drainage Pipe
24-inch Drainage Pipe
18-inch Drainage Pipe
36-inch Drainage Pipe
Lateral Drainage Pipe
Outfall Location

3rd Ave
Canal St
Clark Lateral Canal

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Source: ESRI Maps Online; Dokken Engineering 5/31/2024; Created By: kjacobson

1 inch = 50 feet

0 50 100 150 200 250 Feet




**FIGURE 3**
**Project Features**

Biological Study Area (54.72 acres)
Project Area (30.53 acres)

**Roadway Features**
- Sidewalk
- Curb Ramp
- Curb and Gutter

**Drainage Features**
- Drainage Inlet
- Drainage Manhole
- OPUD Water Fire Hydrant
- OPUD Water Meter
- OPUD Water Valve
- Proposed RSP
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- 12-inch Drainage Pipe
- 24-inch Drainage Pipe
- 18-inch Drainage Pipe
- 36-inch Drainage Pipe
- Lateral Drainage Pipe
- Outfall Location




V:\3177 Olivehurst\F3_Project Features 2024_03.mxd

Source: ESRI Maps Online; Dokken Engineering 5/31/2024; Created By: kjacobson

1 inch = 50 feet

0 50 100 150 200 250 Feet




**FIGURE 3**
**Project Features**

Biological Study Area (54.72 acres)
Project Area (30.53 acres)

**Roadway Features**
Sidewalk
Curb Ramp
Curb and Gutter

**Drainage Features**
Drainage Inlet
Drainage Manhole
OPUD Water Fire Hydrant
OPUD Water Meter
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Proposed RSP

8-inch Drainage Pipe
12-inch Drainage Pipe
24-inch Drainage Pipe
18-inch Drainage Pipe
36-inch Drainage Pipe
Lateral Drainage Pipe
Outfall Location

9th Ave
Western Ave
Clark Lateral Canal

V:\3177 Olivehurst\F3_Project Features 2024_03.mxd

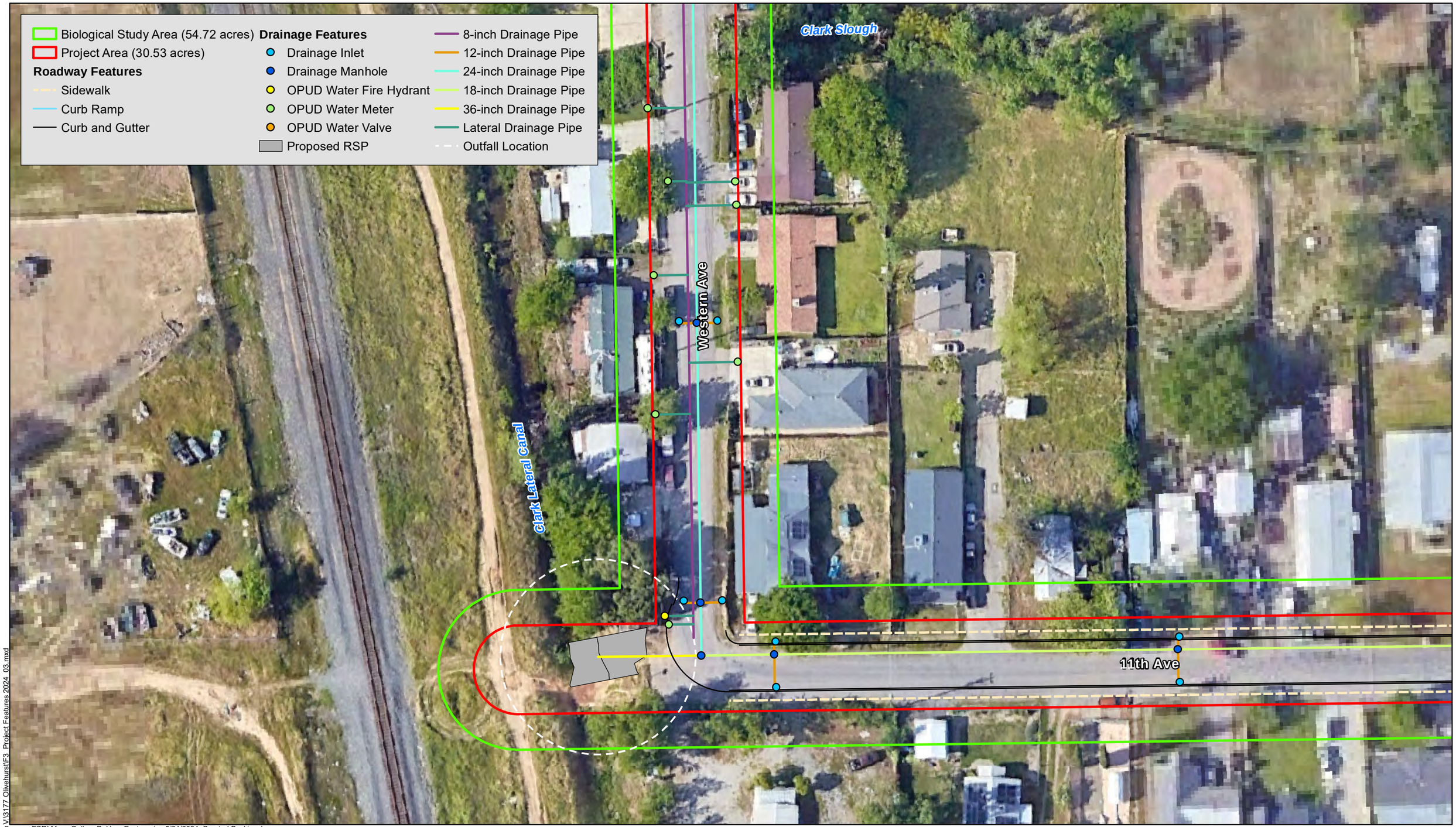
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1 inch = 50 feet

0 50 100 150 200 250 Feet




**FIGURE 3**
**Project Features**




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Source: ESRI Maps Online; Dokken Engineering 5/31/2024; Created By: kjacobson

1 inch = 50 feet

0 50 100 150 200 250 Feet




**FIGURE 3**
**Project Features**

Biological Study Area (54.72 acres)
Project Area (30.53 acres)

**Roadway Features**
Sidewalk
Curb Ramp
Curb and Gutter

**Drainage Features**
Drainage Inlet
Drainage Manhole
OPUD Water Fire Hydrant
OPUD Water Meter
OPUD Water Valve
Proposed RSP

8-inch Drainage Pipe
12-inch Drainage Pipe
24-inch Drainage Pipe
18-inch Drainage Pipe
36-inch Drainage Pipe
Lateral Drainage Pipe
Outfall Location

Clark Slough
Pvt Dr
8th Ave
Pvt Dr

V:\3177 Olivehurst\F3_Project Features 2024_03.mxd

Source: ESRI Maps Online; Dokken Engineering 5/31/2024; Created By: kjacobson

1 inch = 50 feet

0 50 100 150 200 250 Feet




**FIGURE 3**
**Project Features**


Olivehurst Roadway Climate Resiliency Project
Yuba County, California

# 2. Study Methods

## 2.1 Regulatory Requirements

This section describes the general federal, state, and local plans, policies, and laws that are relevant to biological resources within the Project area. Applicable approvals that could be required before construction of the Project are provided in Chapter 5.

### 2.1.1 Federal Regulations

Federal Endangered Species Act

The Federal Endangered Species Act (FESA) of 1973 [16 United States Code (U.S.C.) section 1531 et seq.] provides for the conservation of endangered and threatened species listed pursuant to Section 4 of the Act (16 U.S.C. section 1533) and the ecosystems upon which they depend. These species and resources have been identified by the United States (U.S.) Fish and Wildlife Service (USFWS).

Clean Water Act

The CWA was enacted as an amendment to the Federal Water Pollutant Control Act of 1972, which outlined the basic structure for regulating discharges of pollutants to Waters of the U.S. The CWA serves as the primary federal law protecting the quality of the nation's surface waters, including lakes, rivers, and coastal wetlands. The CWA empowers the U.S. Environmental Protection Agency (EPA) to set national water quality standards and effluent limitations and includes programs addressing both point-source and non-point-source pollution for all Waters of the United States.

On May 25, 2023 the U.S. Supreme Court issued its ruling on the Sackett v. EPA case redefining Waters of the United States (WOUS). The ruling limits the scope of WOUS to only those "wetlands with a continuous surface connection to bodies that are WOUS in their own right." In addition, the Court's decision also holds that "only those relatively permanent, standing or continuously flowing bodies of water forming geographic features that are described in ordinary parlance as streams, oceans, river, and lakes" are considered WOUS.

The CWA was enacted as an amendment to the Federal Water Pollutant Control Act of 1972, which outlined the basic structure for regulating discharges of pollutants to Waters of the U.S. The CWA serves as the primary federal law protecting the quality of the nation's surface waters, including lakes, rivers, and coastal wetlands. The CWA empowers the U.S. Environmental Protection Agency (EPA) to set national water quality standards and effluent limitations and includes programs addressing both point-source and non-point-source pollution. Point-source pollution originates or enters surface waters at a single, discrete location, such as an outfall structure or an excavation or routine maintenance site. Non-point-source pollution originates over a broader area and includes urban contaminants in storm water runoff and sediment loading from upstream areas. The CWA operates on the principle that all discharges into the nation's waters are unlawful unless they are specifically authorized by a permit; permit review is CWA's primary regulatory tool.

The Regional Water Quality Control Board (RWQCB) has jurisdiction under Section 401 of CWA and regulates any activity which may result in a discharge to surface waters. Typically, the areas subject to jurisdiction of the RWQCB coincide with those of U.S. Army Corps of Engineers (USACE) (i.e., waters of the U.S. including any wetlands). The RWQCB also asserts authority over “Waters of the State” under waste discharge requirements pursuant to the Porter-Cologne Water Quality Control Act.

*Section 401*

The Regional Water Quality Control Board (RWQCB) has jurisdiction under §401 of CWA and regulates any activity which may result in a discharge to surface waters. Typically, the areas subject to jurisdiction of the RWQCB coincide with those of the USACE (i.e., waters of the U.S. including any wetlands). The RWQCB also asserts authority over “waters of the State” under waste discharge requirements pursuant to the Porter-Cologne Water Quality Control Act.

*Section 402*

The State Water Resources Control Board (SWRCB) regulates construction projects that involve ground disturbance of 1 acre or greater. These projects must obtain coverage under the SWRCB General Permit for Storm Water Discharges Associated with Construction Activity (General Construction Permit). Operators of regulated construction sites are required to develop a SWPPP; to implement sediment, erosion, and pollution prevention control measures; and to obtain coverage under the General Construction Permit.

*Section 404*

The United States Army Corps of Engineers (USACE) regulates discharges of dredged or fill material into waters of the U. S. These waters include wetlands and non-wetland bodies of water that meet specific criteria, including a direct or indirect connection to interstate commerce. USACE regulatory jurisdiction pursuant to Section 404 of the CWA is founded on a connection, or nexus, between the water body in question and interstate commerce. This connection may be direct (through a tributary system linking a stream channel with traditional navigable waters used in interstate or foreign commerce) or may be indirect (through a nexus identified in USACE regulations). The Clark Lateral Canal and Clark Slough that occur within the Project's BSA are expected to be regulated under Section 404 due to their direct downstream connection to the Bear River.

Executive Order 13112: Prevention and Control of Invasive Species

Executive Order (EO) 13112 (signed February 3, 1999) directs all federal agencies to prevent and control introductions of invasive species in a cost-effective and environmentally sound manner. The EO requires consideration of invasive species in the National Environmental Policy Act (NEPA) analyses, including their identification and distribution, their potential impacts, and measures to prevent or eradicate them.

Executive Order 13186: Migratory Bird Treaty Act

EO 13186 (signed January 10, 2001) directs each federal agency taking actions that could adversely affect migratory bird populations, to work with USFWS to develop a Memorandum of Understanding that will promote the conservation of migratory bird populations. Protocols developed under the Memorandum of Understanding will include the following agency responsibilities:

- Avoid and minimize, to the maximum extent practicable, adverse impacts on migratory bird resources when conducting agency actions;
- Restore and enhance habitat of migratory birds, as practicable; and
- Prevent or abate the pollution or detrimental alteration of the environment for the benefit of migratory birds, as practicable.

The EO is designed to assist federal agencies in their efforts to comply with the Migratory Bird Treaty Act (MBTA) [50 Code of Federal Regulations (CFR) 10 and 21] and does not constitute any legal authorization to take migratory birds. Take is defined under the MBTA as "the action of

or attempt to pursue, hunt, shoot, capture, collect, or kill" (50 CFR 10.12) and includes intentional take (i.e., take that is the purpose of the activity in question) and unintentional take (i.e., take that results from, but is not the purpose of, the activity in question).

### 2.1.2 State Regulations

California Environmental Quality Act

The CEQA is a state law created to inform governmental decision-makers and the public about the potential, significant environmental effects of proposed activities and to work to reduce these negative environmental impacts. The County is the CEQA lead agency for this Project.

California Endangered Species Act

The California Endangered Species Act (CESA) [California Fish and Game (CFG) Code Section 2050 et seq.] requires the CDFW to establish a list of endangered and threatened species (Section 2070) and to prohibit the incidental taking of any such listed species except as allowed by the Act (Sections 2080-2089). In addition, CESA prohibits take of candidate species (under consideration for listing).

CESA also requires CDFW to comply with CEQA (Pub. Resources Code Section 21000 et seq.) when evaluating Incidental Take Permit (ITP) applications [CFG Code Section 2081(b) and California Code Regulations, Title 14, section 783.0 et seq.], and the potential impacts the project or activity, for which the application was submitted, may have on the environment. CDFW's CEQA obligations include consultation with other public agencies which have jurisdiction over the project or activity [California Code Regulations, Title 14, Section 783.5(d)(3)]. CDFW cannot issue an ITP if issuance would jeopardize the continued existence of the species [CFG Code Section 2081(c); California Code Regulations, Title 14, Section 783.4(b)].

Section 3503 and 3503.5: Bird and Raptors

CFG Code Section 3503 prohibits the destruction of bird nests and Section 3503.5 prohibits the killing of raptor species and destruction of raptor nests.

Section 3513: Migratory Birds

CFG Code Section 3513 prohibits the take or possession of any migratory non-game bird as designated in the MBTA or any part of such migratory non-game bird except as provided by rules and regulations adopted by the Secretary of the Interior under provisions of the MBTA.

Porter-Cologne Water Quality Control Act

California's Porter-Cologne Act, enacted in 1969, provides the legal basis for water quality regulation within California. The act requires a "Report of Waste Discharge" for any discharge of waste (liquid, solid, or gaseous) to land or surface waters that may impair beneficial uses for surface and/or groundwater of the state. It predates the CWA and regulates discharges to waters of the state. Waters of the state include more than just waters of the U.S., such as groundwater and surface waters that were recently precluded from the definition of WOUS by the Sackett ruling. Additionally, it prohibits discharges of "waste" as defined and this definition is broader than

the CWA definition of "pollutant". Discharges under the Porter-Cologne Act are permitted by WDRs and may be required even when the discharge is already permitted or exempt under the CWA.

The RWQCBs are responsible for establishing the water quality standards (objectives and beneficial uses) required by the CWA and regulating discharges to ensure compliance with the water quality standards. Details regarding water quality standards in a project area are contained in the applicable RWQCB Basin Plan. In California, Regional Boards designate beneficial uses for all water body segments in their jurisdictions, and then set criteria necessary to protect these uses. Consequently, the water quality standards developed for particular water segments are based on the designated use and vary depending on such use. In addition, the SWRCB identifies waters failing to meet standards for specific pollutants, which are then state-listed in accordance with CWA Section 303(d). If a state determines that waters are impaired, and the standards cannot be met through point source or non-source point controls (NPDES permits or Waste Discharge Requirements), the CWA requires the establishment of Total Maximum Daily Loads (TMDLs) which specify allowable pollutant loads from all sources (point, non-point, and natural) for a given watershed.

### 2.1.3 Local Regulations

Yuba County General Plan

The Yuba County General Plan (General Plan) is a comprehensive, long term development plan outlining the goals and policies that inform the future development of the County. As part of the County's General Plan, the Circulation Framework section of the Community Development Element describes the transportation services and facilities within the Plan area and provides transportation objectives to accommodate the County's development. Although the Project is not explicitly identified within the General Plan, the need for a contiguous bike and pedestrian network is identified within the community of Olivehurst. The Project must remain consistent with the applicable policies and procedures outlined in the General Plan (Yuba County 2011).

The General Plan also outlines policies related to the preservation of natural resources such as stream channels and associated riparian habitats.

Policy NR5.15 –

> Roads, water lines, sewer lines, drainage facilities and other public facilities constructed to serve unincorporated County development shall be located and designed to avoid substantial impacts to stream courses, associated riparian areas, and wetlands, to the greatest extent feasible.

Policy HS3.6 –

> New developments shall comply with streambed alteration standards and shall be designed to avoid harmful discharge that would substantially affect wetlands and riparian areas.

## 2.2 Studies Required

### 2.2.1 Literature Search

Prior to field work, literature research was conducted through the USFWS Information for Planning and Consultation (IPaC) official species list generator (Appendix A. USFWS Species List), the CDFW California Natural Diversity Database (CNDDB) (Appendix B. CNDDB Species List), the CNPS Electronic Inventory of Rare and Endangered Plants (Appendix C. CNPS Species List), and the National Marine Fisheries Service (NMFS) West Coast Region Species List (Appendix D. NMFS Species List) to identify habitats and special-status species having the potential to occur within the Project area. Section 3.2 of this report provides a comprehensive list of the species generated from the online database searches and presents specific characteristics, habitat requirements, and potential for occurrence for each species.

### 2.2.2 Survey Methods

Prior to field surveys, the Biological Study Area (BSA) was defined as the Project impact area with an approximate 20-foot buffer to facilitate construction access and capture potential biological resources adjacent to Project limits. Habitat assessment and analysis of historic occurrences were conducted to determine the potential for each of these species to occur within the BSA.

Biological surveys and habitat assessment methods included walking meandering transects through the entire BSA, observing vegetation communities, compiling notes on observed flora and fauna, and assessing the potential for existing habitat to support sensitive plants and wildlife. All plant and wildlife observations were recorded and are discussed in Chapter 3.

### 2.2.3 Personnel and Survey Dates

A biological field survey was conducted on April 17, 2024, by Dokken Engineering (Dokken) biologists Katie Jacobson and Vincent Chevreuil. Habitat assessments were conducted within the BSA to assess the vegetative communities present, identify biological resources which may be impacted by the Project, and evaluate the potential for special status species to occur on-site.

## 2.3 Agency Coordination and Professional Contacts

### 2.3.1 United States Fish and Wildlife Service

On March 12, 2024, an official species list was obtained from USFWS of federally listed species that could occur in the vicinity of the Project (Appendix A).

### 2.3.2 California Department of Fish and Wildlife

On March 12, 2024, a six-quadrangle list of species with potential to occur in the Project vicinity was obtained from CDFW's CNDDB (Appendix B).

### 2.3.3 California Native Plant Society

On March 12, 2024, a six-quadrangle list of plant species with potential to occur in the Project vicinity was obtained from the CNPS Inventory of Rare and Endangered Plants of California (Appendix C).

## 2.4 Limitations That May Influence Results

Sensitive wildlife species with the potential to occur in the BSA may be cryptic (difficult to detect) or transient, migratory species. The population size and locations of sensitive species may fluctuate through time. Because of this, the data collected for this biological resource technical report represents a "snapshot" in time and may not reflect actual future conditions.

The collection of biological field data is normally subject to environmental factors that cannot be controlled or reliably predicted. Consequently, the interpretation of field data must be conservative and consider the uncertainties and limitations imposed by the environment. Biological surveys were conducted in April, which is within the typical plant blooming period. No limitations were present that could influence the results of this document. All surveys were conducted during appropriate weather and temperature conditions.

# 3. Results: Environmental Setting

## 3.1 Description of the Existing Biological and Physical Conditions Study Area

### 3.1.1 Study Area

Prior to field surveys, the BSA was defined as the Project impact area with an approximate 20-foot buffer to capture potential biological resources adjacent to Project limits and accommodate for any potential changes in Project design. The BSA spans from 2nd Avenue south to 11th Avenue and encompasses the residential roadways between Olivehurst Avenue and the Clark Lateral Canal, as well as the entire length of 8th Avenue. The total acreage of the Project area is approximately 30.53 acres and the total acreage of the BSA is approximately 54.72 acres (Figure 3. Project Features).

### 3.1.2 Physical Conditions

Regionally, the Project is located east of the Feather River and west of State Route 70 in southern Yuba County, California. This Project is located within the Sacramento Valley Floristic Province (Jepson 2024). Yuba County experiences Mediterranean conditions including warm, dry summers and cool, wet winters. The community of Olivehurst experiences an average annual high temperature of approximately 75 degrees Fahrenheit (°F), an average annual low temperature of approximately 48°F, and an average of 22.75 inches of precipitation annually (U.S. Climate Data 2024). The elevation of the Project area is approximately 60 to 70 feet above mean sea level. The soil type within the Project area is comprised of Oakdale-Urban land complex, 0 to 1 percent slopes (12%) and Urban land-San Joaquin complex, 0 to 1 percent slopes (88%) (Natural Resource Conservation Service [NRCS] 2024; Appendix E. NRCS Soil Report).

### 3.1.3 Biological Conditions in the Study Area

Plant and wildlife species observed within the BSA during the April 2024 biological survey efforts were used to define land cover types based on composition, abundance, and cover (Table 1. Species Observed). A vast majority of the BSA is comprised of residential land use and paved roadways; however, the Clark Slough and Clark Lateral Canal provide thin corridors of riparian and jurisdictional drainage habitat throughout the BSA (Figure 4. Vegetation Communities; Appendix F. Representative Photographs). Each land cover type is described below.

<u>Developed</u>

The BSA is primarily comprised of various paved roadways that are devoid of vegetation and regularly disturbed by both vehicular and foot traffic. In addition, residential properties border the roadways throughout the BSA. These residential developments typically include decorative plantings that provide limited habitat opportunities for local wildlife. Developed land cover comprises approximately 53.75 acres (97%) of the BSA.

<u>Riparian</u>

The riparian land cover type is defined as the transition area between a water feature and uplands that is mainly inhabited by larger canopy trees. Within the BSA, marginal riparian habitat was observed within the corridors of the Clark Lateral Canal and Clark Slough. These areas are sparsely vegetated with interior live oak (*Quercus wislizeni*), valley oak (*Quercus lobata*), and Fremont cottonwood (*Populus fremontii*) trees, with an understory of Himalayan blackberry (*Rubus armeniacus*) and various grass species. This habitat community provides suitable nesting

and foraging opportunities for a diverse array of local bird species. Riparian habitat comprises approximately 0.10 acres (<1%) of the BSA.

Ruderal Vegetation

The ruderal land cover type is defined as areas that have been subject to previous or ongoing disturbances such as along roadsides, trails, and parking lots, and are inhabited by weedy plant species. These ruderal plant species colonize disturbed land first and are typically outcompeted by the species that come after. Within the BSA, ruderal vegetation exists on the road shoulders, on the banks of Clark Lateral Canal, and in an open field at the western edge of 6th Avenue. This vegetation is regularly disturbed and dominated by invasive species such as foxtail barley (*Hordeum murinum*), Italian rye grass (*Festuca perennis*), wild radish (*Raphanus sativus*), and red-stemmed filaree (*Erodium cicutarium*). Ruderal habitat comprises approximately 0.74 acres (1%) of the BSA.

Jurisdictional Drainage

The BSA encompasses portions of both Clark Slough and the Clark Lateral Canal, both jurisdictional waters of the U.S. and State. Clark Slough runs north to southwest through the BSA and crosses under the roadway at 8th Avenue, east of Olivehurst Avenue, and at the southern portion of Western Avenue, north of 11th Avenue. Clark Lateral Canal runs north to south through the BSA at the eastern edges of 2nd Avenue, 3rd Avenue, 6th Avenue, 9th Avenue and 11th Avenue. At the time of the surveys, no water was present in Clark Slough within the BSA, and only some water was present in Clark Lateral Canal. Water was present in Clark Lateral Canal at 9th Avenue and isolated pools of water were present in Clark Lateral Canal at 11th Avenue. Jurisdictional drainages encompass approximately 0.13 acres (<1%) of the BSA, with Clark Lateral Canal comprising 0.11 acres, and Clark Slough comprising 0.02 acres.

**Table 1. Species Observed**

| Common Name | Scientific Name | Native (N) / Non-Native (X)[1] |
|---|---|---|
| **Plant Species** | | |
| Black locust | *Robinia pseudoacacia* | X [Limited] |
| Bur clover | *Medicago polymorpha* | X [Limited] |
| California poppy | *Eschscholzia californica* | N |
| Chicory | *Cichorium intybus* | X |
| Chinese elm | *Ulmus parvifolia* | X |
| Common bedstraw | *Galium aparine* | N |
| Common fiddleneck | *Amsinckia intermedia* | N |
| Common periwinkle | *Vinca minor* | X |
| Curly dock | *Rumex crispus* | X [Limited] |
| Cutleaf geranium | *Geranium dissectum* | X [Limited] |
| English plantain | *Plantago lanceolata* | X [Limited] |
| Field mustard | *Brassica rapa* | [Limited] |
| Foxtail barley | *Hordeum murinum* | X [Moderate] |
| Fremont cottonwood | *Populus fremontii* | N |
| Hairy vetch | *Vicia villosa* | X |
| Hawk bit | *Leontodon saxatilis* | X |
| Himalayan blackberry | *Rubus armeniacus* | X [High] |
| Interior live oak | *Quercus wislizeni* | N |
| Italian rye grass | *Festuca perennis* | X [Moderate] |

| | | |
|---|---|---|
| Italian thistle | *Carduus tenuiflorus* | X [Limited] |
| Pineapple weed | *Matricaria discoidea* | N |
| Prickly lettuce | *Lactuca serriola* | X |
| Purple salsify | *Tragopogon porrifolius* | X |
| Red-stemmed filaree | *Erodium cicutarium* | X [Limited] |
| Ripgut brome | *Bromus diandrus* | X [Moderate] |
| Rose clover | *Trifolium hirtum* | X [Limited] |
| Soft brome | *Bromus hordeaceus* | X [Limited] |
| Sow thistle | *Sonchus oleraceus* | X |
| Spreading rush | *Juncus patens* | N |
| Tree of heaven | *Ailanthus altissima* | X [Moderate] |
| Valley oak | *Quercus lobata* | N |
| Western ragweed | *Ambrosia psilostachya* | N |
| Wild oat | *Avena fatua* | X [Moderate] |
| Wild radish | *Raphanus sativus* | X [Limited] |
| **Wildlife Species** | | |
| American crow | *Corvus brachyrhynchos* | N |
| American kestrel | *Falco sparverius* | N |
| Anna's hummingbird | *Calypte anna* | N |
| Black phoebe | *Sayornis nigricans* | N |
| Eurasian collared dove | *Streptopelia decaocto* | X |
| European starling | *Sturnus vulgaris* | N |
| Killdeer | *Charadrius vociferus* | N |
| Northern mockingbird | *Mimus polyglottos* | N |
| Red-winged blackbird | *Agelaius phoeniceus* | N |
| Western scrub-jay | *Aphelocoma californica* | N |
| Yellow-billed magpie | *Pica nuttalli* | N |

[1]California Invasive Plant Council (Cal-IPC) Rating

Biological Study Area (54.72 acres)

Project Area (30.53 acres)

Jurisdictional Drainages within the BSA

Page 2

Page 3

Page 4

Page 5

Page 6

Page 7

Clark Lateral Canal

Arboga Rd

Olivehurst Ave

6th Ave

7th Ave

9th Ave

11th Ave

Clark Slough

70

65

V:\3177 Olivehurst\Biology\F4_Veg Comm.mxd

Source: ESRI Maps Online; Dokken Engineering 4/18/2024; Created By: kjacobson

1 inch = 800 feet

0 800 1,600 2,400 3,200 4,000 Feet




**FIGURE 4**
**Vegetation Communities**


Olivehurst Roadway Climate Resiliency Project
Yuba County, California

Biological Study Area (54.72 acres)

Project Area (30.53 acres)

**Vegetation Communities**

Developed (53.75 acres)

Riparian (0.10 acres)

Ruderal Vegetation (0.74 acres)

Jurisdictional Drainage (0.13 acres)

2nd Avenue

Clark Lateral Canal

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Source: ESRI Maps Online; Dokken Engineering 4/18/2024; Created By: kjacobson

1 inch = 50 feet

0 50 100 150 200 250 Feet




**FIGURE 4**
**Vegetation Communities**




V:\3177 Olivehurst\Biology\F4 Veg Comm.mxd

Source: ESRI Maps Online; Dokken Engineering 4/18/2024; Created By: kjacobson

1 inch = 50 feet

0 50 100 150 200 250 Feet




**FIGURE 4**
**Vegetation Communities**




V:\3177 Olivehurst\Biology\F4_Veg Comm.mxd

Source: ESRI Maps Online; Dokken Engineering 4/18/2024; Created By: kjacobson

1 inch = 50 feet

0 50 100 150 200 250 Feet




**FIGURE 4**
**Vegetation Communities**

Biological Study Area (54.72 acres)

Project Area (30.53 acres)

**Vegetation Communities**

Developed (53.75 acres)

Riparian (0.10 acres)

Ruderal Vegetation (0.74 acres)

Jurisdictional Drainage (0.13 acres)

9th Avenue

Clark Lateral Canal

Western Avenue

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Source: ESRI Maps Online; Dokken Engineering 4/18/2024; Created By: kjacobson

1 inch = 50 feet

0 50 100 150 200 250 Feet




**FIGURE 4**
**Vegetation Communities**

Biological Study Area (54.72 acres)

Project Area (30.53 acres)

**Vegetation Communities**

Developed (53.75 acres)

Riparian (0.10 acres)

Ruderal Vegetation (0.74 acres)

Jurisdictional Drainage (0.13 acres)

Clark Lateral Canal

Western Avenue

11th Avenue

Clark Slough

V:\3177 Olivehurst\Biology\F4_Veg Comm.mxd

Source: ESRI Maps Online; Dokken Engineering 4/18/2024; Created By: kjacobson

1 inch = 50 feet

0 50 100 150 200 250 Feet




**FIGURE 4**
**Vegetation Communities**

Biological Study Area (54.72 acres)

Project Area (30.53 acres)

**Vegetation Communities**

Developed (53.75 acres)

Riparian (0.10 acres)

Ruderal Vegetation (0.74 acres)

Jurisdictional Drainage (0.13 acres)

Clark Slough

8th Avenue

v:\V3177 Olivehurst\Biology\F4_Veg Comm.mxd

Source: ESRI Maps Online; Dokken Engineering 4/18/2024; Created By: kjacobson

1 inch = 50 feet

0 50 100 150 200 250 Feet

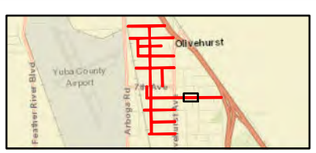



**FIGURE 4**
**Vegetation Communities**

Wildlife

Wildlife observations within the BSA consisted of local bird species such as American crow (*Corvus brachyrhynchos*), western scrub-jay (*Aphelocoma californica*), and northern mockingbird (*Mimus polyglottos*). No other wildlife species were observed during the biological survey conducted on April 17, 2024.

Habitat Connectivity

The CDFW Biogeographic Information & Observation System (CDFW 2024a) was reviewed to determine if the BSA is located within an Essential Connectivity Area. The BSA is within an area of Terrestrial Connectivity Rank 1 – Limited Connectivity Opportunity. This ranking indicates that local land development may limit opportunities for connectivity and no connectivity importance has been identified within the BSA. Due to the low local terrestrial connectivity ranking as well as the scope of the Project, the Project itself would not permanently impact natural habitats in a way that would impair terrestrial movement by wildlife.

## 3.2 Regional Species and Habitats and Natural Communities of Concern

Plant and animal species have special status if they have been listed as such by federal or state agencies or by one or more special interest groups, such as CNPS.

Prior to the field survey, literature searches were conducted using USFWS IPaC, CDFW CNDDB, CNPS, and NMFS databases to identify regionally sensitive species with potential to occur within the BSA. Table 2. Special Status Species Potential Table provides an updated list of regional special status species returned by the database searches, describes the habitat requirements for each species, and states if the species has potential to occur within the BSA. Nine special status plant species and 22 special status wildlife species occur within the Project vicinity and were returned by the database searches. The following four special status species have the potential to occur within the BSA:

- Burrowing owl (*Athene cunicularia*)
- Giant gartersnake (*Thamnophis gigas*)
- Swainson's hawk (*Buteo swainsoni*)
- White-tailed kite (*Elanus leucerus*)

**Table 2. Special Status Species Potential Table**

| Common Name | Species Name | Status | | General Habitat Description | Habitat Present | Potential for Occurrence and Rationale |
|---|---|---|---|---|---|---|
| ***Amphibian Species*** | | | | | | |
| Western spadefoot | *Spea hammondii* | Fed:<br>State:<br>CDFW: | PT<br>--<br>SSC | Inhabits open areas with sandy or gravelly soils within mixed woodlands, grasslands, coastal sage scrub, chaparral, sandy washes, lowlands, river floodplains, alluvial fans, playas, alkali flats, foothills, and mountains. Burrows underground for most of the year and is active above ground during rainfall. Requires vernal, shallow, temporary pools formed by heavy winter rains for reproduction. These pools must be free of bullfrogs, fish, and crayfish. Breeds from late winter to March. | A | **Presumed Absent:**<br>This species is closely associated with vernal pool habitat, which does not occur within the vicinity of the BSA. The species is presumed absent due to a lack of locally suitable breeding habitat. |
| ***Bird Species*** | | | | | | |
| Bank swallow | *Riparia riparia* | Fed:<br>State:<br>CDFW: | --<br>T<br>-- | A migratory colonial nester inhabiting lowland and riparian habitats west of the deserts during spring through fall. Majority of current breeding populations occur along the Sacramento and Feather Rivers in the north Central Valley. Forages in grassland, brushland, wetlands, and cropland during migration. Requires vertical banks or cliffs with fine textured/sandy soils for nesting (tunnel and burrow excavations). Nests exclusively near streams, rivers, lakes, or the ocean. Breeds from May through July. | A | **Presumed Absent:**<br>The BSA lacks the sandy vertical banks necessary for nesting individuals of this species. In addition, the Project does not occur adjacent to a river, lake, or ocean. The species is presumed absent due to a lack of necessary habitat features. |
| Burrowing owl | *Athene cunicularia* | Fed:<br>State:<br>CDFW: | --<br>--<br>SSC | The species inhabits arid, open areas with sparse vegetation cover such as deserts, abandoned agricultural areas, grasslands, and | HP | **Low Potential:**<br>There are recent (2017+) eBird observations of this species identified within the suitable open grassland |

| Common Name | Species Name | Status | | General Habitat Description | Habitat Present | Potential for Occurrence and Rationale |
|---|---|---|---|---|---|---|
| | | | | disturbed open habitats. Can be associated with open shrub stages of pinyon-juniper and ponderosa pine habitats. Nests in old small mammal burrows but may dig own burrow in soft soil. Nests are lined with excrement, pellets, debris, grass, and feathers. The species may use pipes, culverts, and nest boxes, and even buildings where burrows are scarce. Breeding occurs March through August (below 5,300 feet). | | habitat located east of State Route 65. Although the BSA occurs within a residential area, there are open lots of disturbed grassland that may provide marginally suitable habitat for this species. The species has a low potential to occur within the BSA due to the recent local occurrences as well as the presence of marginally suitable habitat. |
| Cackling (Aleutian Canada) goose | *Branta hutchinsii leucopareia* | Fed: State: CDFW: | DL -- WL | Preferred habitats include lacustrine, fresh emergent wetlands, and moist grasslands, croplands, pastures, and meadows. This species occurs mainly in these habitats during winter in Del Norte County, the San Francisco bay-delta, and southern Central Valley. Nest-site highly variable, but usually on a firm, dry, slightly elevated site, near water and feeding areas, relatively isolated, with good visibility from nest. Nests especially on islands but may nest in marshes on mats of bulrushes or on muskrat houses; on old raptor or heron nests in trees or snags; on gravel bars, dikes, rock ledges, or haystacks. Prefers to nest near water and suitable feeding areas. In winter, prefers to feed in fields near safe roosting areas on open water of lakes and ponds. | A | **Presumed Absent:** The BSA lacks lacustrine emergent wetlands, agricultural lands, or grasslands that would support nesting or migratory individuals of this species. The species is presumed absent due to the lack of locally suitable habitat features. |

| Common Name | Species Name | Status | | General Habitat Description | Habitat Present | Potential for Occurrence and Rationale |
|---|---|---|---|---|---|---|
| | | | | | | |
| California black rail | *Laterallus jamaicensis coturniculus* | Fed:<br>State:<br>CDFW: | --<br>T<br>FP | A rare, yearlong California resident of brackish and freshwater emergent wetlands in delta and coastal locations including the San Francisco Bay area, Sacramento-San Joaquin Delta, Morro Bay, the Salton Sea, and lower Colorado River. More than 90% of the species are found in the tidal salt marshes of the northern San Francisco Bay region, predominantly in San Pablo and Suisun Bays. Smaller populations occur in the San Francisco Bay, the Outer Coast of Marin County, and freshwater marshes in the foothills of the Sierra Nevada. The species is extirpated from San Diego County and the majority of coastal southern California. Occurs in tidal emergent wetlands dominated by pickleweed, in brackish marshes dominated by bulrushes with pickleweed, and in freshwater wetlands dominated by bulrushes, cattails, and salt grass. Species prefers high wetland areas, away from areas experiencing fluctuating water levels. | A | **Presumed Absent:**<br>There is a metapopulation of this species that occur in the Sierra Nevada foothills of Yuba and Nevada County, east of State Route 65. However, the BSA occurs within a residential community and lacks brackish or freshwater emergent wetland habitat that would support nesting individuals of this species. The species is presumed absent due to a lack of locally suitable habitat features. |
| Least Bell's vireo | *Vireo bellii pusillus* | Fed:<br>State:<br>CDFW: | E<br>E<br>-- | Summer resident of southern California inhabiting low elevation riparian habitats in the vicinity of water and dry river bottoms. Prefers willows, baccharis, mesquite and other low, dense vegetation as nesting site. Forages in dense brush and occasionally treetops. The species is known to occur in all four | A | **Presumed Absent:**<br>This species is only known in Yuba County from a historic (1878) CNDDB occurrence. In California, the current range of this species is limited to the southern California coastline and along the Colorado River Corridor. The species is presumed absent due to its pattern of occurrence. |

| Common Name | Species Name | Status | | General Habitat Description | Habitat Present | Potential for Occurrence and Rationale |
|---|---|---|---|---|---|---|
| | | | | southern California national forests, with the largest population in the Los Padres National Forest (below 2,000 feet). | | |
| Northern harrier | *Circus hudsonius* | Fed: State: CDFW: | -- -- SSC | Species occurs in flat, or hummocky, open areas of tall, dense grasses and moist or dry shrubs. Inhabits meadows, grasslands, open rangelands, desert sinks, and fresh or saltwater emergent wetland communities. Nesting occurs on the ground within grasslands, grain fields, sagebrush or other shrubby vegetation. Nest sites are often chosen at marsh edges or in proximity to water. Breeds April through September (0-5,700 feet). | A | **Presumed Absent:** The BSA occurs within a residential community and does not encompass suitable open habitat or emergent wetland habitat that would support this species. There are recent eBird observations of this species directly east and west of Olivehurst; however, these observations occur within the open agricultural lands east of State Route 65 and in proximity to the Feather River. The species is presumed absent from the BSA due to the lack of locally suitable habitat |
| Song sparrow (“Modesto” population) | *Melospiza melodia pop. 1* | Fed: State: CDFW: | -- -- SSC | An endemic bird found exclusively in the north-central portion of the Central Valley, with highest densities in the Butte Sink and Sacramento-San Joaquin River Delta. The species is usually found in open brushy habitats, along the borders of ponds or streams, abandoned pastures, desert washes, thickets, or woodland edges. In addition, there is a strong affinity for emergent freshwater marshes dominated by tules and cattails, riparian willow thickets, and valley oak forests with a blackberry understory. Nests found in base of shrubs or clumps of grass, requiring low, dense vegetation for cover, usually near water. Breeds from March through August. | A | **Presumed Absent:** The BSA does not occur within the Sacrament-San Joaquin River Delta or the Butte Sink, where this species is primarily known to occur. Furthermore, the BSA lacks open, brushy habitat, marshes, or dense thickets that would support nesting colonies of this species. There are two recent (2023) eBird observations of this species located approximately 1.7 miles west of the BSA; however, the species was identified within the dense riparian corridor along the Feather River. The species is presumed absent from the BSA due to the lack of suitable nesting habitat. |

| Common Name | Species Name | Status | | General Habitat Description | Habitat Present | Potential for Occurrence and Rationale |
|---|---|---|---|---|---|---|
| Swainson's hawk | *Buteo swainsoni* | Fed:<br>State:<br>CDFW: | --<br>T<br>-- | Inhabits grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, and agricultural or ranch lands with groves or lines of trees. Requires adjacent suitable foraging areas such as grasslands, alfalfa or grain fields that support a stable rodent prey base. Breeds March to late August. | HP | **Low to Moderate Potential:**<br>There are numerous CNDDB and eBird observation of this species located within 5 miles of the BSA. In addition, there are large riparian trees suitable for nesting within 0.25 miles of the BSA. Due to the presence of locally suitable habitat as well as the recent local occurrences of this species, Swainson's hawk has a low to moderate potential to occur within the BSA. |
| Tricolored blackbird | *Agelaius tricolor* | Fed:<br>State:<br>CDFW: | --<br>T<br>SSC | Inhabits freshwater marsh, swamp and wetland communities, but may utilize agricultural or upland habitats that can support large colonies, often in the Central Valley area. Requires dense nesting habitat that is protected from predators, is within 3-5 miles from a suitable foraging area containing insect prey and is within 0.3 miles of open water. Suitable foraging includes wetland, pastureland, rangeland, at dairy farms, and some irrigated croplands (silage, alfalfa, etc.). Nests in dense cattails, tules, willow, blackberry, wild rose, or tall herbs. Nests mid-March to early August, but may extend until October or November in the Sacramento Valley region. | A | **Presumed Absent:**<br>There is a recent (2015) CNDDB occurrence of this species located within a marsh approximately 2.25 miles southeast of the BSA. However, the BSA does not encompass suitable freshwater marsh, swamp, or wetland habitat with dense riparian vegetation that would support large colonies of this species. In addition, the BSA lacks pastures, grasslands, or cropland that would serve as suitable foraging habitat for this species. The species is presumed absent from the BSA due to the absence of locally suitable habitat features. |
| Western yellow-billed cuckoo | *Coccyzus americanus occidentalis* | Fed:<br>State:<br>CDFW: | T<br>E<br>-- | Species inhabits riparian forests, along broad, lower flood bottoms of larger river systems. Nests in large blocks of riparian jungles often mixed with cottonwoods. Nesting appears to be preferred in riparian forest habitats with a dense | A | **Presumed Absent:**<br>Local CNDDB occurrences of this species are limited to the dense riparian corridor along the Feather River. The BSA lacks dense riparian forest habitat near water that is necessary for nesting individuals of this species. The species |

| Common Name | Species Name | Status | | General Habitat Description | Habitat Present | Potential for Occurrence and Rationale |
|---|---|---|---|---|---|---|
| | | | | understory; requires water near nesting site. Breeds June to August. | | is presumed absent due to the lack of necessary habitat features. |
| White-tailed kite | *Elanus leucerus* | Fed:<br>State:<br>CDFW: | --<br>--<br>FP | Inhabits rolling foothills and valley margins with scattered oaks and river bottomlands or marshes next to deciduous woodland. Prefers open grasslands, meadows or marshes for foraging close to isolated, dense-topped trees for nesting and perching. In southern California, will roost in saltgrass and Bermuda grass. Often found near agricultural lands. Nests are placed near the tops of dense oak, willow, or other tree stands. Breeds February through October. | HP | **Low to Moderate Potential:**<br>There are numerous recent (2020-2022) eBird observations of this species along State Route 65 and 70, directly east of Olivehurst. In addition, the BSA encompasses tree stands that may provide marginally suitable nesting habitat for this species. The species may have a low to moderate potential to occur due to the recent local occurrences and presence of marginally suitable nesting habitat. |
| ***Fish Species*** | | | | | | |
| Chinook salmon – Central Valley spring-run ESU | *Oncorhynchus tshawytscha pop. 11* | Fed:<br>State:<br>CDFW: | T<br>T<br>-- | Spring-run Chinook enter the Sacramento-San Joaquin River system to spawn, requiring larger gravel particle size and more water flow through their redds than other salmonids. Remaining runs occur in Butte, Mill, Deer, Antelope, and Beegum Creeks, tributaries to the Sacramento River. Known to occur in Siskiyou and Trinity counties. | A | **Presumed Absent:**<br>This species is known to occur within the Feather River, which is located approximately 2 miles west of the BSA. The Clark Lateral Canal and Clark Slough have eventual connectivity to the Bear River, which is tributary to the Feather River; however, the ditches present within the BSA primarily convey stormwater and irrigation runoff and are dry for most of the year. The species is presumed absent due to the lack of necessary aquatic habitat features within the BSA. |
| Chinook salmon – Sacramento River winter-run ESU | *Oncorhynchus tshawytscha pop. 7* | Fed:<br>State:<br>CDFW: | E<br>E<br>-- | Winter-run Chinook are currently restricted within the Sacramento River below Keswick dam; species does not spawn in tributaries. Species requires cold water over gravel beds to spawn. | A | **Presumed Absent:**<br>This species is restricted to the Sacramento River below Keswick Dam. The species is presumed absent due to the species' pattern of occurrence. |

| Common Name | Species Name | Status | | General Habitat Description | Habitat Present | Potential for Occurrence and Rationale |
|---|---|---|---|---|---|---|
| Green sturgeon – Southern DPS | *Acipenser medirostris pop. 1* | Fed:<br>State:<br>CDFW: | T<br>--<br>-- | Most marine of the sturgeon species. Predominately spawns in the upper Sacramento River, with some recorded in the Rogue River, Klamath and Trinity Rivers (Klamath River basin). In the Sacramento River, green sturgeon spawn above Hamilton City up to Keswick Dam. Known to occupy other river bodies including the lower Feather River; spawning not recorded; no green sturgeon has ever been documented in the San Joaquin River or its tributaries. Large cobbles preferred for spawning, but may utilize a range of substrates from bedrock to sand. Spawning occurs March-July. | A | **Presumed Absent:**<br>This species is known to occur within the Feather River, which is located approximately 2 miles west of the BSA. The Clark Lateral Canal and Clark Slough have eventual connectivity to the Bear River, which is tributary to the Feather River; however, the ditches present within the BSA primarily convey stormwater and irrigation runoff and are dry for most of the year. The species is presumed absent due to the lack of necessary aquatic habitat features within the BSA. |
| Steelhead – Central Valley DPS | *Oncorhynchus mykiss irideus pop. 11* | Fed:<br>State:<br>CDFW: | T<br>--<br>-- | This DPS includes naturally spawned anadromous O. mykiss (steelhead) originating below natural and manmade impassable barriers from the Sacramento and San Joaquin Rivers and their tributaries; excludes such fish originating from San Francisco and San Pablo Bays and their tributaries. Spawning occurs in watersheds while rearing occurs in freshwater or estuary habitats prior to emigrating to the ocean in the winter and spring. Preferred spawning sites contain gravel substrate with sufficient water flow and riverine cover. Rearing habitat contains sufficient feeding with associated riparian forest containing willow and cottonwoods. Migration upstream for reproduction | A | **Presumed Absent:**<br>This species is known to occur within the Feather River, which is located approximately 2 miles west of the BSA. The Clark Lateral Canal and Clark Slough have eventual connectivity to the Bear River, which is tributary to the Feather River; however, the ditches present within the BSA primarily convey stormwater and irrigation runoff and are dry for most of the year. The species is presumed absent due to the lack of necessary aquatic habitat features within the BSA. |

| Common Name | Species Name | Status | | General Habitat Description | Habitat Present | Potential for Occurrence and Rationale |
|---|---|---|---|---|---|---|
| | | | | occurs from October to May with spawning occurring January to April. | | |
| ***Invertebrate Species*** | | | | | | |
| Conservancy fairy shrimp | *Branchinecta conservation* | Fed:<br>State:<br>CDFW: | E<br>--<br>-- | Inhabits relatively large and turbid clay bottomed playa vernal pools. Species requires pools to continuously hold water for a minimum of 19 days and must remain inundated into the summer months. Occupied playa pools typically are 1 to 88 acres in size, but species may utilize smaller, less turbid pools. Juveniles are most abundant where there are deep (0.5 to 1+ m), well-shaded pools with plenty of overhead cover. | A | **Presumed Absent:**<br>The BSA lacks vernal pool habitat that is necessary to support individuals of this species. The species is presumed absent due to a lack of locally suitable habitat. |
| Valley elderberry longhorn beetle | *Desmocerus californicus dimorphus* | Fed:<br>State:<br>CDFW: | T<br>--<br>-- | Species requires red or blue elderberry (*Sambucus sp.*) as host plants. Typically occurs in moist valley oak woodlands associated with riparian corridors in the lower Sacramento River and upper San Joaquin River drainages. Adults are active, feeding, and breeding from March until June (sea level-3,000 feet). | A | **Presumed Absent:**<br>The BSA encompasses sparse riparian corridors that may provide marginally suitable habitat for this species. In addition, the Project falls within the anticipated range of this species and there are numerous CNDDB occurrences throughout Sutter and Yuba Counties. However, no elderberry shrubs, the obligate host plant for this species, were identified within the BSA during the biological survey conducted on April 17, 2024. Valley elderberry longhorn beetles are presumed absent from the BSA due to the lack of necessary habitat features. |
| Vernal pool fairy shrimp | *Branchinecta lynchi* | Fed:<br>State:<br>CDFW: | T<br>--<br>-- | In California, species inhabits portions of Tehama County, south through the Central Valley, and scattered locations in Riverside County and the Coast Ranges. Species is associated with smaller | A | **Presumed Absent:**<br>The BSA lacks vernal pool habitat that is necessary to support individuals of this species. The species is presumed absent due to a lack of locally suitable habitat. |

| Common Name | Species Name | Status | | General Habitat Description | Habitat Present | Potential for Occurrence and Rationale |
|---|---|---|---|---|---|---|
| | | | | and shallower cool-water vernal pools approximately 6 inches deep and short periods of inundation. In the southernmost extremes of the range, the species occurs in large, deep cool-water pools. Inhabited pools have low to moderate levels of alkalinity and total dissolved solids. The shrimp are temperature sensitive, requiring pools below 50 F to hatch and dying within pools reaching 75 F. Young emerge during cold-weather winter storms. | | |
| Vernal pool tadpole shrimp | *Lepidurus packardi* | Fed:<br>State:<br>CDFW: | E<br>--<br>-- | Inhabits vernal pools and swales containing clear to highly turbid waters such as pools located in grass bottomed swales of unplowed grasslands, old alluvial soils underlain by hardpan, and mud-bottomed pools with highly turbid water. | A | **Presumed Absent:**<br>The BSA lacks vernal pool habitat that is necessary to support individuals of this species. The species is presumed absent due to a lack of locally suitable habitat. |
| ***Reptile Species*** | | | | | | |
| Giant gartersnake | *Thamnophis gigas* | Fed:<br>State:<br>CDFW: | T<br>T<br>-- | A highly aquatic species that inhabits marsh, swamp, wetland (including agricultural wetlands), sloughs, ponds, rice fields, low gradient streams and irrigation/drainage canals adjacent to uplands. Ideal habitat contains both shallow and deep water with variations in topography. Species requires adequate water during the active season (April-November), emergent, herbaceous wetland vegetation, such as cattails and bulrushes, for escape cover and foraging habitat and mammal burrows estivation. Requires grassy | HP | **Low to Moderate Potential:**<br><br>The BSA falls within the range of this species. In addition, there are recent CNDDB occurrences within 10 miles of the BSA, concentrated within the Sutter Bypass and nearby agricultural areas. The rice fields located east of Olivehurst provide potentially suitable habitat for giant gartersnake. In addition, the Clark Slough may provide marginally suitable dispersal habitat. Due to the presence of marginally suitable dispersal habitat as well as the species' pattern of occurrence, giant gartersnake has a low |

| Common Name | Species Name | Status | | General Habitat Description | Habitat Present | Potential for Occurrence and Rationale |
|---|---|---|---|---|---|---|
| | | | | banks and openings in waterside vegetation for basking and higher elevation uplands for cover and refuge from flood waters during winter dormant season. Mating occurs in the spring and females bear live young. | | to moderate potential to occur within the BSA. |
| Western pond turtle | *Emys marmorata* | Fed:<br>State:<br>CDFW: | PT<br>--<br>SSC | A fully aquatic turtle of ponds, lakes, rivers, streams, creeks, marshes, and irrigation ditches with aquatic vegetation. Suitable habitat includes woodland, forests, and grasslands. Requires logs, rocks, cattail mats, and exposed banks for basking. Suitable upland habitat (sandy banks or grassy open field) is required for reproduction, which begins in April and ends with egg laying as late as August (sea level to 4,700 feet). | A | **Presumed Absent:**<br>The BSA lacks permanent or semi-permanent water features that are necessary to support this fully aquatic species. In addition, the nearest CNDDB observation of this species is historic (1998) and occurs adjacent to Dry Creek. The species is presumed absent due to a lack of locally suitable habitat. |
| ***Plant Species*** | | | | | | |
| Baker's navarretia | *Navarretia leucocephala ssp. bakeri* | Fed:<br>State:<br>CNPS: | --<br>--<br>1B.1 | An annual herb inhabiting mesic soils of vernal pools and swales within cismontane woodland, lower montane coniferous forest, meadows and seeps, and valley and foothill grassland communities. Flowers April-July (15-5,700 feet). | A | **Presumed Absent:**<br>The BSA lacks vernal pool habitat that is necessary to support individuals of this species. The species is presumed absent due to a lack of locally suitable habitat. |
| Dwarf downingia | *Downingia pusilla* | Fed:<br>State:<br>CNPS: | --<br>--<br>2B.2 | An annual herb inhabiting vernal pools and mesic soils in valley and foothill grassland communities. Flowers March-May (0-1,500 feet). | A | **Presumed Absent:**<br>The BSA lacks vernal pool habitat that is necessary to support individuals of this species. The species is presumed absent due to a lack of locally suitable habitat. |
| Ferris' milk-vetch | *Astralagus tener var. ferrisiae* | Fed:<br>State:<br>CNPS: | --<br>--<br>1B.1 | An annual herb inhabiting vernally mesic meadows and seeps and subalkaline flats within valley and foothill grassland communities. | A | **Presumed Absent:**<br>The BSA lacks vernally mesic wetlands or subalkaline flats that are necessary to support individuals of this species. The |

| Common Name | Species Name | Status | | General Habitat Description | Habitat Present | Potential for Occurrence and Rationale |
|---|---|---|---|---|---|---|
| | | | | Known only from six extant occurrences. Flowers April-May (0-250 feet). | | species is presumed absent due to a lack of locally suitable habitat. |
| Hartweg's golden sunburst | *Pseudobahia bahiifolia* | Fed:<br>State:<br>CNPS: | E<br>E<br>1B.1 | An annual herb inhabiting clay, often acidic soils of cismontane woodland and valley and foothill grassland communities. Flowers March-April (50-660 feet). | A | **Presumed Absent:**<br>The BSA does not encompass clay soils within cismontane woodland or grassland habitat. The species is presumed absent due to the lack of locally suitable habitat. |
| Legenere | *Legenere limosa* | Fed:<br>State:<br>CNPS: | --<br>--<br>1B.1 | An annual herb inhabiting wet areas, vernal pools, and ponds. Flowers April-June (0-2,900 feet). | A | **Presumed Absent:**<br>The BSA lacks vernal pool habitat or other suitable wet areas that are necessary to support individuals of this species. The species is presumed absent due to a lack of locally suitable habitat. |
| Recurved larkspur | *Delphinium recurvatum* | Fed:<br>State:<br>CNPS: | --<br>--<br>1B.2 | A perennial herb inhabiting poorly drained, fine, alkaline soils in chenopod scrub, Atriplex scrub, cismontane woodland, and valley and foothill grassland communities. Flowers March-June (10-2,600 feet). | A | **Presumed Absent:**<br>The BSA lacks the poorly drained, fin, alkaline soils necessary to support individuals of this species. The species is presumed absent due to a lack of locally suitable habitat. |
| Sanford's arrowhead | *Sagittaria sanfordii* | Fed:<br>State:<br>CNPS: | --<br>--<br>1B.2 | A perennial rhizomatous herb inhabiting freshwater marshes, swamps, ponds, and ditches. Flowers May-October (0-2,130 feet). | HP | **Presumed Absent:**<br>The BSA encompasses a drainage ditch that may provide marginally suitable habitat for this species. However, there are no recent CNDDB occurrences within 10 miles of the BSA. In addition, no Sanford's arrowhead was observed during the biological survey conducted on April 17, 2024. |
| Veiny monardella | *Monardella venosa* | Fed:<br>State:<br>CNPS: | --<br>--<br>1B.1 | An annual herb inhabiting heavy clay soils in cismontane woodlands, valley grasslands, and foothill grasslands. Flowers May-July (195-1,350 feet). | A | **Presumed Absent:**<br>The BSA does not encompass clay soils within cismontane woodland or grassland habitat. The species is presumed absent due to the lack of locally suitable habitat. |

| Common Name | Species Name | Status | | General Habitat Description | Habitat Present | Potential for Occurrence and Rationale |
|---|---|---|---|---|---|---|
| Woolly rose-mallow | *Hibiscus lasiocarpos var. occidentalis* | Fed:<br>State:<br>CNPS: | --<br>--<br>1B.2 | A perennial rhizomatous herb inhabiting freshwater wetlands, wet banks, and marsh communities. Often found in-between riprap on levees. Flowers June-September (0-400 feet). | A | **Presumed Absent:** The BSA lacks freshwater wetland habitat that is necessary to support individuals of this species. The species is presumed absent due to a lack of locally suitable habitat. |

**Federal Designations (Fed):**
(FESA, USFWS)
**E:** Federally listed, endangered
**T:** Federally listed, threatened
**DL**: Federally listed, delisted

**State Designations (CA):**
(CESA, CDFW)
**E:** State-listed, endangered
**T:** State-listed, threatened

**Other Designations**
CDFW_SSC: CDFW Species of Special Concern
CDFW_FP: CDFW Fully Protected

**California Native Plant Society (CNPS) Designations:**
***Note: according to CNPS (Skinner and Pavlik 1994), plants on Lists 1B and 2 meet definitions for listing as threatened or endangered under Section 1901, Chapter 10 of the California Fish and Game Code. This interpretation is inconsistent with other definitions.***
**1A:** Plants presumed extinct in California.
**1B:** Plants rare and endangered in California and throughout their range.
**2:** Plants rare, threatened, or endangered in California but more common elsewhere in their range.
**3:** Plants about which need more information; a review list.

**Plants 1B, 2, and 4 extension meanings:**
_**.1 Seriously** endangered in California (over 80% of occurrences threatened / high degree and immediacy of threat)
_**.2 Fairly** endangered in California (20-80% occurrences threatened)
_**.3** Not very endangered in California (<20% of occurrences threatened, or no current threats known)

**Habitat Potential**
Absent [A] - No habitat present and no further work needed.
Habitat Present [HP] - Habitat is or may be present. The species may be present.
Critical Habitat [CH] – Project is within designated Critical Habitat.

**Potential for Occurrence Criteria:**
**Present**: Species was observed on site during a site visit or focused survey.
**High**: Habitat (including soils and elevation factors) for the species occurs on site and a known occurrence has been recorded within 5 miles of the site.
**Low**: Low quality habitat (may include soils and elevation factors) for the species occurs on site and a known occurrence exists within 5 miles of the site
**Moderate**: Suitable habitat strongly associated with the species occurs on site, but no records were found within the database search.
**Presumed Absent**: Focused surveys were conducted, and the species was not found, or species was found within the database search, but habitat (including soils and elevation factors) do not exist on site, or the known geographic range of the species does not include the survey area.

**Source:** (CDFW 2024b), (CNPS 2024), (Calflora 2024), (Jepson 2024), (USFWS 2024), (NMFS 2024).

# 4. Results: Biological Resources, Discussion of Impacts, and Mitigation

## 4.1 Habitats and Natural Communities of Special Concern

Habitats are considered to be of special concern based on federal, state, or local laws regulating their development; limited distributions; and/or the habitat requirements of special-status plants or animals occurring on site. Wetlands and waters of the U.S are also considered sensitive by both federal and state agencies. Within the BSA, Clark Slough, Clark Lateral Canal and their associated riparian habitat have been identified as natural communities of special concern and are discussed in this section. Minor permanent and temporary impacts are anticipated to occur within Clark Lateral Canal and its associated riparian habitat as a result from the construction of the Project. Avoidance and minimization measures regarding these sensitive habitat communities are discussed in detail in their respective sections.

### 4.1.1 Discussion of Jurisdictional Drainages

Clark Lateral Canal is a perennial stream which has been channelized to collect storm water runoff from the surrounding communities of Olivehurst and Linda. Drainage from the East Linda area flows west to south into Olivehurst to the Clark Lateral Canal, then to Reeds Creek, then to the Western Pacific Interceptor Canal, and ultimately flows into the Bear River. Within the BSA, Clark Lateral Canal runs north to south is confined to the eastern edges of 2nd Avenue, 3rd Avenue, 6th Avenue, 9th Avenue and 11th Avenue. Minimal surface water was present during the biological surveys conducted on April 17, 2024. Isolated pools of water were present in Clark Lateral Canal at 11th Avenue and water was also present in the canal at 9th Avenue.

Clark Slough is a manmade stream channel and a tributary of Algodon Slough, which passes through Plumas Lake and flows into the Bear River. Within the BSA, Clark Slough flows underneath the roadway at two locations, 8th Avenue east of Olivehurst Avenue and Western Avenue, north of 11th Avenue. No surface water was present in the channel during the biological survey conducted on April 17, 2024. Both of these jurisdictional drainages provide suitable habitat for a diverse array of wildlife, including reptiles, amphibians, mammals and birds.

Project Impacts to Jurisdictional Drainages

The upgraded drainage system proposed by the Project has five separate outfall locations within Clark Lateral Canal at 2nd Avenue, 3rd Avenue, 6th Avenue, 9th Avenue and 11th Avenue. Rock slope protection (RSP) will be placed around the new 36-inch drainage outfall pipes at these five locations (Figure 3. Project Features). Permanent impacts of approximately 0.014 acres (~640 square feet [sq.ft.]) to jurisdictional drainage habitat will occur due to the placement of RSP within the bed and banks of the Clark Lateral Canal. Additionally, approximately 0.05 acres of temporary impacts are anticipated within the Clark Lateral Canal to facilitate access during construction (Figure 5. Project Impacts). All temporary impacts will be restored to pre-construction conditions at the completion of construction.

Avoidance and Minimization Efforts for Jurisdictional Drainages

The following avoidance, minimization, and mitigation measures will be incorporated into the Project design and Project construction to reduce potential impacts to the jurisdictional drainage habitat within the BSA.

**BIO-1:** Every individual working on the Project must attend a biological awareness training session delivered by a biologist. This training program shall include information regarding the sensitive habitats and special-status species occurring or potentially occurring within the Project area, and the importance of avoiding impacts to these species and their habitat.

**BIO-2:** Prior to the start of construction activities, the Project limits adjacent to Clark Lateral Canal and Clark Slough will be marked with high visibility Environmentally Sensitive Area (ESA) fencing or staking to ensure construction will not further encroach into sensitive resources.

**BIO-3:** Best Management Practices (BMPs) will be incorporated into Project design and Project management to minimize impacts on the environment including erosion and the release of pollutants (e.g., oils, fuels):

- Exposed soils and material stockpiles would be stabilized, through watering or other measures, to prevent the movement of dust at the Project site caused by wind and construction activities such as traffic and grading activities;
- All vehicle and equipment fueling/maintenance would be conducted outside of any surface waters;
- Equipment used in and around jurisdictional waters must be in good working order and free of dripping or leaking contaminants;
- Raw cement, concrete or concrete washings, asphalt, paint or other coating material, oil or other petroleum products, or any other substances that could be hazardous to aquatic life shall be prevented from contaminating the soil or entering jurisdictional waters;
- All erosion control measures, and storm water control measures would be properly maintained until the site has returned to a pre-construction state;
- All construction materials would be hauled off-site after completion of construction.

**BIO-4:** Vehicle maintenance, staging and storing equipment, materials, fuels, lubricants, solvents, and other possible contaminants must remain outside of sensitive habitat marked with high-visibility fencing. Any necessary equipment washing must occur where the water cannot flow into sensitive habitat communities.

**BIO-5:** A chemical spill kit must be kept onsite and available for use in the event of a spill.

### 4.1.2 Discussion of Riparian Habitat

The riparian corridor within the BSA is considered a natural community of special concern through the CDFW. Riparian communities are associated with floodplains and occur as a transitional habitat between wetted areas and upland habitat types. In the Central Valley, mature riparian woodland canopies include species such as cottonwoods, sycamores, and oaks, and the understory is dominated by shrubs like willows, wild grape, and elderberry. These habitats are of ecological importance as they provide food, water, and shelter for many wildlife species. Within

the BSA, marginal riparian habitat is present within the corridors of the Clark Lateral Canal and Clark Slough. These areas are sparsely vegetated with interior live oak (*Quercus wislizeni*), valley oak (*Quercus lobata*), and Fremont cottonwood (*Populus fremontii*) trees, with an understory of Himalayan blackberry (*Rubus armeniacus*) and various grass species.

Project Impacts to Riparian Habitat

Riparian habitat occurs on the banks of Clark Lateral Canal at 3rd Avenue and 9th Avenue. Rock slope protection (RSP) will be placed around the new 36-inch drainage outfall pipes at these two locations. Permanent impacts of approximately 0.01 acres (~450 sq. ft.) to riparian habitat will occur due to the placement of RSP on the banks of the Clark Lateral Canal. Due to the placement of RSP, several riparian trees are anticipated for removal, including six interior live oak trees at 3rd Avenue and one valley oak tree at 9th Avenue (Figure 3. Project Features). Temporary impacts of approximately 0.014 acres are also anticipated within riparian habitat to facilitate access into the channel during construction (Figure 5. Project Impacts). All temporary impacts will be restored to pre-construction conditions at the completion of construction.

Avoidance and Minimization Efforts for Riparian Habitat

With the implementation of avoidance and minimization measures BIO-1 through BIO-6, no impacts to riparian habitat are anticipated to result from this Project.

**BIO-6:** Vegetation removal will not exceed what is shown on the plans without prior approval from the project biologist. If trees will be trimmed rather than removed, trimming must comply with ANSI A300 pruning standards and must not:

- leave branch stubs
- make unnecessary heading cuts
- cut off the branch collar (not make a flush cut)
- top or lion's tail trees (stripping a branch from the inside leaving foliage just at the ends)
- remove more than 25 percent of the foliage of a single branch
- remove more than 25 percent of the total tree foliage in a single year
- damage other parts of the tree during pruning
- use wound paint
- climb the tree with climbing spikes

Biological Study Area (54.72 acres)

Project Area (30.53 acres)

Jurisdictional Drainages within the BSA

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Clark Lateral Canal

Arboga Rd

Olivehurst Ave

6th Ave

7th Ave

9th Ave

11th Ave

Clark Slough

70

65

V:\3177 Olivehurst\Biology\F4_Veg Comm.mxd

Source: ESRI Maps Online; Dokken Engineering 4/18/2024; Created By: kjacobson

1 inch = 800 feet

0 800 1,600 2,400 3,200 4,000 Feet




**FIGURE 5**
**Project Impacts**


Olivehurst Roadway Climate Resiliency Project
Yuba County, California

Biological Study Area (54.72 acres)

Project Area (30.53 acres)

**Vegetation Communities**

Riparian (0.10 acres)

Jurisdictional Drainage (0.13 acres)

**Project Features**

Proposed RSP

**Permanent Impacts**

Jurisdictional Drainage (0.014 acres)

Riparian (0.01 acres)

Anticipated Tree Removals

**Temporary Impacts**

Jurisdictional Drainage (0.05 acres)

Riparian (0.014 acres)

V:\3177 Olivehurst\Biology\F5_Project Impacts.mxd

Source: ESRI Maps Online; Dokken Engineering 5/31/2024; Created By: kjacobson

1 inch = 50 feet

0 50 100 150 200 250 Feet




**FIGURE 5**
**Project Impacts**


Olivehurst Roadway Climate Resiliency Project
Yuba County, California

Biological Study Area (54.72 acres)

Project Area (30.53 acres)

**Vegetation Communities**

Riparian (0.10 acres)

Jurisdictional Drainage (0.13 acres)

**Project Features**

Proposed RSP

**Permanent Impacts**

Jurisdictional Drainage (0.014 acres)

Riparian (0.01 acres)

Anticipated Tree Removals

**Temporary Impacts**

Jurisdictional Drainage (0.05 acres)

Riparian (0.014 acres)




V:\3177 Olivehurst\Biology\F5_Project Impacts.mxd

Source: ESRI Maps Online; Dokken Engineering 5/31/2024; Created By: kjacobson

1 inch = 50 feet

0 50 100 150 200 250 Feet

**FIGURE 5**
**Project Impacts**

Biological Study Area (54.72 acres)

Project Area (30.53 acres)

**Vegetation Communities**

Riparian (0.10 acres)

Jurisdictional Drainage (0.13 acres)

**Project Features**

Proposed RSP

**Permanent Impacts**

Jurisdictional Drainage (0.014 acres)

Riparian (0.01 acres)

Anticipated Tree Removals

**Temporary Impacts**

Jurisdictional Drainage (0.05 acres)

Riparian (0.014 acres)

V:\3177 Olivehurst\Biology\F5_Project Impacts.mxd

Source: ESRI Maps Online; Dokken Engineering 5/31/2024; Created By: kjacobson

1 inch = 50 feet

0 50 100 150 200 250 Feet




**FIGURE 5**
**Project Impacts**

Biological Study Area (54.72 acres)

Project Area (30.53 acres)

**Vegetation Communities**

Riparian (0.10 acres)

Jurisdictional Drainage (0.13 acres)

**Project Features**

Proposed RSP

**Permanent Impacts**

Jurisdictional Drainage (0.014 acres)

Riparian (0.01 acres)

Anticipated Tree Removals

**Temporary Impacts**

Jurisdictional Drainage (0.05 acres)

Riparian (0.014 acres)

V:\3177 Olivehurst\Biology\F5_Project Impacts.mxd

Source: ESRI Maps Online; Dokken Engineering 5/31/2024; Created By: kjacobson

1 inch = 50 feet

0 50 100 150 200 250 Feet




**FIGURE 5**
**Project Impacts**




V:\3177 Olivehurst\Biology\F5_Project Impacts.mxd

Source: ESRI Maps Online; Dokken Engineering 5/31/2024; Created By: kjacobson

1 inch = 50 feet

0 50 100 150 200 250 Feet

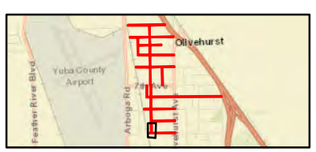



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**Project Impacts**

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V:\3177 Olivehurst\Biology\F5_Project Impacts.mxd

Source: ESRI Maps Online; Dokken Engineering 5/31/2024; Created By: kjacobson

1 inch = 50 feet

0 50 100 150 200 250 Feet




**FIGURE 5**
**Project Impacts**

## 4.2 Special-Status Plant Species

Prior to field surveys, a list of regional special status plant species with potential to occur within the Project vicinity was compiled from database searches. The potential for each species to occur within the BSA was determined by analyzing the habitat requirements of each species and comparing the habitat requirements to available habitat within the BSA. After a careful comparison between habitat requirements and the habitat available within the BSA, no special status plant species are anticipated to occur within the BSA.

## 4.3 Special-Status Wildlife Species

Prior to field surveys, a list of regional special-status wildlife species with potential to occur within the Project vicinity was compiled from database searches. The potential for each species to occur within the BSA was determined by analyzing the habitat requirements of each species and comparing the habitat requirements to available habitat within the BSA. After a careful comparison between habitat requirements and the habitat available within the BSA, the following special status wildlife species may occur within the BSA: burrowing owl, giant gartersnake, Swainson's hawk, and white-tailed kite.

### 4.3.1 Discussion of Burrowing Owl

The burrowing owl is not a state or federally listed species but is listed as a CDFW Species of Special Concern (SSC) and a USFWS Migratory Nongame Bird of Management Concern. Burrowing owls were historically common throughout much of California; however, due to habitat degradation and urbanization, populations have been drastically reduced. The owl is a migrant or yearlong resident occupying disturbed open, arid habitats, particularly grasslands, deserts, and abandoned agricultural areas. The species requires friable soils for burrow construction and an adequate prey base (Zeiner et al. 1988-1990). Burrowing owls rely on California ground squirrels and other fossorial mammals for burrow construction. Although active throughout the day, burrowing owls mainly forage nocturnally for small vertebrate and invertebrate prey including mammals, lizards, birds, and beetles (Shuford 2008). Burrowing owl nests can be identified by the presence of owl excrement, pellets, debris, grass, and feathers in the vicinity of a burrow. Human development threatens burrowing owl populations by reducing available nesting habitat and decreasing rodent populations, which serve as the owl's main food source.

There is one recent (2018) eBird occurrence located approximately 1.5 miles north of the BSA in West Linda. In addition, there are vacant grassland fields adjacent to the roadway that may provide suitable habitat for the species. However, during the April 2024 biological surveys, no burrows or other evidence of burrowing owl occupation was observed within the BSA. Due to the recent occurrences and potentially suitable habitat, this species has a low potential to occur within the BSA.

<u>Project Impacts to Burrowing Owl</u>

Project impacts will be limited to the roadway and shoulders of roadways within the Project area, as well as within Clark Lateral Canal and its associated riparian habitat. No impacts to suitable grassland habitat would result from construction of the Project (Figure 5. Project Impacts). Therefore, no impacts to burrowing owl or it's associated habitat are anticipated as a result of the proposed Project.

Avoidance and Minimization Efforts for Burrowing Owl

No impacts to burrowing owl or it's associated habitat are anticipated; therefore, no avoidance and minimization efforts are necessary or proposed at this time.

### 4.3.2 Discussion of Giant Gartersnake

GGS is a state and federally listed species associated with low-gradient streams, wetlands, and marshes of California's Central Valley. The conversion of Central Valley wetlands for agriculture and urban uses has resulted in the loss of as much as 95% of historical habitat for the GGS (Wylie et al. 1997). Due mainly to loss or degradation of aquatic habitat resulting from agricultural and urban development, the GGS has been either extirpated or else suffered serious declines throughout much of its former range.

Essential habitat components for GGS consist of (1) adequate water during the snake's active period (i.e., early spring through mid-fall) to provide a prey base and cover, (2) emergent, herbaceous wetland vegetation, such as cattails and bulrushes, for escape cover and foraging habitat; (3) upland habitat for basking, cover, and retreat sites; and (4) high elevation uplands for cover and refuge from flood waters. GGS are typically absent from larger rivers and other water bodies that support introduced populations of large, predatory fish, and from wetlands with sand, gravel, or rock substrates. Riparian woodlands do not provide suitable habitat because of excessive shade, lack of basking sites, and absence of prey populations (USFWS 1997).

The nearest documented CNDDB occurrence of GGS is approximately 8 miles northwest of the BSA (2012), which is outside of the maximum dispersal distance recorded for the species of 5 miles (Wylie et al. 1997). The BSA contains Clark Slough which may provide potentially suitable aquatic habitat for this species. During the April 2024 biological surveys, little to no water was present within these stream channels. However, Clark Slough may provide marginally suitable dispersal habitat. Therefore, this species has a low potential to disperse through the BSA.

Project Impacts to Giant Gartersnake

Clark Slough within the BSA may provide suitable habitat for GGS. However, Project impacts will be limited to the roadway and shoulders of roadways within the Project area, as well as within Clark Lateral Canal and its associated riparian habitat. No impacts to suitable aquatic habitat (Clark Slough) would result from construction of the Project (Figure 5. Project Impacts). Therefore, no impacts to GGS or it's associated habitat are anticipated as a result of the proposed Project.

Avoidance and Minimization Efforts for Giant Gartersnake

No impacts to GGS or it's associated habitat are anticipated; therefore, no avoidance and minimization efforts are necessary or proposed at this time.

### 4.3.3 Discussion of Swainson's Hawk

The Swainson's hawk is a raptor species that is state listed as threatened. Swainson's hawk migrates annually from wintering areas in South America to breeding locations in northwestern Canada, the western U.S., and Mexico. In California, Swainson's hawk nest throughout the

Sacramento and San Joaquin Valley in large trees in riparian habitats and in isolated trees in or adjacent to agricultural fields. The breeding season extends from late March through late August, with peak activity from late May through July (England et al. 1997). Swainson's hawks forage in large, open agricultural habitats, including alfalfa and hay fields. The breeding population in California has declined by an estimated 91% since 1900; this decline is attributed to the loss of riparian nesting habitats and the conversion of native grassland and woodland habitats to agriculture and urban development (CDFW 1994).

The BSA encompasses sparce riparian habitat that may provide suitable nesting habitat for this species. There are several recent and historical CNDDB occurrences of the species within 10 miles of the BSA, as well as a recent (2020) eBird occurrence of the species east of 6th Avenue near Clark Slough. However, the area surrounding the BSA is highly developed and lacks open foraging habitat that would be suitable for this species. There were also no individuals of the species observed during the April 2024 biological surveys. Due to the presence of marginally suitable nesting habitat as well as the recent eBird occurrences, this species has a low potential of occurring within the BSA.

Project Impacts to Swainson's Hawk

Project impacts will be limited to the roadway and shoulders of roadways within the Project area, as well as within Clark Lateral Canal and its associated riparian habitat. Several trees within the riparian habitat are anticipated for removal including one valley oak and six interior live oak trees. During the biological survey conducted on April 17, 2024, no nests or individuals of the species were observed within any of these trees the BSA. With the implementation of appropriate avoidance and minimization measures, impacts to Swainson's hawk will be avoided.

Avoidance and Minimization Efforts for Swainson's Hawk

With the implementation of avoidance and minimization measures BIO-6 and BIO-7, no impacts to Swainson's hawk are anticipated to result from the proposed Project:

**BIO-7:** Prior to vegetation removal or initial ground disturbance during the nesting bird season (February 1st – September 30th) a pre-construction nesting bird survey must be conducted by a Project biologist prior to the start of work. The nesting bird survey must include the Project area plus a 250-foot buffer. Within one week of the nesting bird survey, all vegetated areas surveyed, that are designated for removal, must be cleared.

If an active nest is discovered during construction, the contractor must immediately stop work until the appropriate no-work buffer is established, to be determined by a Project biologist. Other avoidance and minimization measures, such as visual and sound barriers, may be considered to avoid take of an active nest but must be approved by a Project biologist prior to implementation. A Project biologist must monitor the initial implementation of alternative avoidance strategies. If the Project biologist determines that avoidance strategies are insufficient to avoid take of active nests, all Project

activities shall cease, and work will not resume until the Project biologists determines that the young have fledged.

If a Swainson's hawk or white-tailed kite nest is observed during the pre-construction survey CDFW will be contacted for further guidance. The contractor is prohibited from conducting work that could result in take of an active nest.

### 4.3.4 Discussion of White-tailed Kite

White-tailed kite is a fully protected species under CFG Code Section 3511. The species has a restricted distribution in the U.S., occurring only in California and western Oregon and along the Texas coast (American Ornithologists' Union 1983). The species is fairly common in California's Central Valley margins with scattered oaks and river bottomlands. White-tailed kites nest in riparian and oak woodlands and forage in nearby grasslands, pastures, agricultural fields, and wetlands. They use nearby treetops for perching and nesting sites. Voles and mice are common prey species.

There are multiple recent (2020-2022) eBird occurrences within 0.5 miles of the BSA. There is also a historic (2003) CNDDB occurrence of the species in the southern portion of Shay Avenue, approximately 0.25 miles south of 11$^{th}$ Avenue within the BSA. The riparian habitat present within the BSA may provide suitable nesting habitat for this species. However, no individuals of the species were observed during the April 2024 biological surveys. Due to the presence of locally suitable habitat as well as the recent local occurrences, the species has a low to moderate potential to occur within the BSA.

Project Impacts to White-tailed Kite

Project impacts will be limited to the roadway and shoulders of roadways within the Project area, as well as within Clark Lateral Canal and its associated riparian habitat. Several trees within the riparian habitat are anticipated for removal including one valley oak and six interior live oak trees. During the biological survey conducted on April 17, 2024, no nests or individuals of the species were observed within any of these trees the BSA. With the implementation of appropriate avoidance and minimization measures, impacts to white-tailed kite will be avoided.

Avoidance and Minimization Efforts for White-tailed Kite

With the implementation of avoidance and minimization measures BIO-6 and BIO-7, no impacts to white-tailed kite are anticipated to result from this Project.

# 5. Conclusions and Regulatory Determinations

## 5.1 Federal Endangered Species Act Consultation Summary

Prior to field survey, a list of six federally threatened or endangered species were returned via database searches. The potential for each species to occur within the BSA was determined by analyzing the habitat requirements of each species and comparing the habitat requirements to available habitat within the BSA. Overall, one federally listed species, GGS, has a low potential to occur within the BSA. However, no work within Clark Slough or its associated riparian corridors is anticipated, therefore the Project would have a No Effect on the species. As such, consultation with USFWS is not required.

## 5.2 Essential Fish Habitat Consultation Summary

Essential fish habitat (EFH) means those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity (Magnuson-Stevens Fishery Conservation and Management Act (MSA) §3). According to the NOAA habitat conservation Essential Fish Habitat View Tool, the BSA is within the Honcut Headwaters-Lower Feather watershed which is considered Essential Fish Habitat (EFH) for Chinook salmon (*Oncorhynchus tshawytscha*) (NOAA 2024). The Project will result in minor impacts to the Clark Lateral, including permanent impacts of approximately 0.014 acres (~640 sq.ft.), and approximately 0.05 acres of temporary impacts. However, the Clark Lateral Canal lacks the specific Habitat Areas of Particular Concern (HAPC) to support Chinook salmon individuals. The HAPC's for the species include complex channels and floodplain habitats, thermal refugia, spawning habitat, estuaries and marine and estuarine submerged aquatic vegetation. The Clark Lateral Canal contains minor thermal refugia from the riparian trees on its banks, however, it lacks complex channel morphology, spawning habitat and estuarine habitat features. There have also been no individuals of the species ever recorded in the Clark Lateral Canal, as it lacks water most of the year. Due to lack of EFH features, there will be no impacts to Chinook salmon EFH, and consultation with NMFS is not required.

## 5.3 California Endangered Species Act Consultation Summary

Prior to field surveys, a list of regional special-status wildlife species with potential to occur within the Project vicinity was compiled from database searches. The potential for each species to occur within the BSA was determined by analyzing the habitat requirements of each species and comparing the habitat requirements to available habitat within the BSA. After a careful comparison between habitat requirements and the habitat available within the BSA, Swainson's hawk and GGS are the only state listed species with the potential to occur within the BSA. No impacts are anticipated to occur to GGS individuals or their associated habitat as a result of the proposed Project, so no avoidance and minimization measures are proposed at this time. Swainson's hawk has potential to nest in large trees within the riparian habitat in the BSA. With the implementation of avoidance and minimization measures BIO-6 and BIO-7, no impacts to Swainson's hawk individuals or associated habitat are anticipated to result from the construction of this Project. As such, consultation with CDFW regarding state listed species is not required.

## 5.4 Wetlands and Other Waters Coordination Summary

Under Section 401 and Section 404 of the CWA, certain surface waters are regulated by USACE and the RWQCB. CDFW also claims jurisdiction over the bed, bank and channel of waters and associated riparian vegetation. The BSA encompasses Clark Lateral Canal and Clark Slough,

stream channels that are jurisdictional water features pursuant to the CWA and CDFW. Approximately 0.014 acres of Clark Lateral Canal will be permanently impacted through the placement of RSP within the bed of the channel. In addition, approximately 0.01 acres of riparian habitat will be permanently impacted through the placement of RSP on the banks of the Clark Lateral Canal. Seven trees are also anticipated for removal, including six interior live oaks on the banks of Clark Lateral Canal on 3rd Avenue and one valley oak on the banks of Clark Lateral Canal on 9th Avenue. Additionally, the Project will result in approximately 0.05 acres of temporary impacts to the Clark Lateral Canal to facilitate access during construction. Approximately 0.014 acres of riparian habitat along Clark Lateral Canal will also be temporarily impacted to facilitate placement of the drainage pipe and RSP (Figure 5. Project Impacts). With the implementation of avoidance and minimization measures BIO-1 through BIO-6, the Project is not anticipated to have significant permanent impacts to sensitive habitats.

## 5.5 Invasive Species

In February 1999, EO 13112 was signed, requiring federal agencies to work on preventing and controlling the introduction and spread of invasive species. Measure BIO-8 will be incorporated into the Project plans to ensure that invasive species are not introduced or spread.

**BIO-8:** Prior to arrival at the Project site and prior to leaving the Project site, construction equipment that may contain invasive plants and/or seeds will be cleaned to reduce the spreading of noxious weeds.

## 5.6 Other

### 5.6.1 General Wildlife

To minimize and avoid potential effects to local wildlife, the following measures BIO-9 through BIO-11 have been incorporated into the Project design.

**BIO-9:** All food-related trash must be disposed into closed containers and must be removed from the Project area daily. Construction personnel must not feed or otherwise attract wildlife to the Project area.

**BIO-10:** The contractor must not apply rodenticide or herbicide within the Project area during construction.

**BIO-11:** If any wildlife is encountered during the course of construction, said wildlife shall be allowed to leave the construction area unharmed.

### 5.6.2 Migratory Birds

Native birds are protected by the MBTA and CFG Code Section 3513. The implementation of measure BIO-7 would avoid all potential impacts to migratory birds.

# 6. References


| | |
|---|---|
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## Appendix A: USFWS Species List

# United States Department of the Interior

FISH AND WILDLIFE SERVICE
Sacramento Fish And Wildlife Office
Federal Building
2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846
Phone: (916) 414-6600 Fax: (916) 414-6713

In Reply Refer To: 03/12/2024 19:35:15 UTC
Project Code: 2024-0061703
Project Name: Olivehurst Roadway Resiliency Project

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed, and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through IPaC by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)

(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at: https://www.fws.gov/sites/default/files/documents/endangered-species-consultation-handbook.pdf

**Migratory Birds**: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts, see Migratory Bird Permit | What We Do | U.S. Fish & Wildlife Service (fws.gov).

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures, see https://www.fws.gov/library/collections/threats-birds.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit https://www.fws.gov/partner/council-conservation-migratory-birds.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

# OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

**Sacramento Fish And Wildlife Office**
Federal Building
2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846
(916) 414-6600

# PROJECT SUMMARY

Project Code: 2024-0061703
Project Name: Olivehurst Roadway Resiliency Project
Project Type: Road/Hwy - Maintenance/Modification
Project Description: Roadway resiliency project in Olivehust, CA. Consists of roadway and storm drainage improvements.

Project Location:

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@39.096273100000005,-121.55623543080807,14z




Counties: Yuba County, California

# ENDANGERED SPECIES ACT SPECIES

There is a total of 10 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

## BIRDS

| NAME | STATUS |
|---|---|
| Yellow-billed Cuckoo *Coccyzus americanus*<br>Population: Western U.S. DPS<br>There is **final** critical habitat for this species. Your location does not overlap the critical habitat.<br>Species profile: https://ecos.fws.gov/ecp/species/3911 | Threatened |

## REPTILES

| NAME | STATUS |
|---|---|
| Giant Garter Snake *Thamnophis gigas*<br>No critical habitat has been designated for this species.<br>Species profile: https://ecos.fws.gov/ecp/species/4482 | Threatened |
| Northwestern Pond Turtle *Actinemys marmorata*<br>No critical habitat has been designated for this species.<br>Species profile: https://ecos.fws.gov/ecp/species/1111 | Proposed Threatened |

## AMPHIBIANS

| NAME | STATUS |
|---|---|
| Western Spadefoot *Spea hammondii*<br>No critical habitat has been designated for this species.<br>Species profile: https://ecos.fws.gov/ecp/species/5425 | Proposed Threatened |

## INSECTS

| NAME | STATUS |
|---|---|
| Monarch Butterfly *Danaus plexippus*<br>No critical habitat has been designated for this species.<br>Species profile: https://ecos.fws.gov/ecp/species/9743 | Candidate |
| Valley Elderberry Longhorn Beetle *Desmocerus californicus dimorphus*<br>There is **final** critical habitat for this species. Your location does not overlap the critical habitat.<br>Species profile: https://ecos.fws.gov/ecp/species/7850 | Threatened |

## CRUSTACEANS

| NAME | STATUS |
|---|---|
| Conservancy Fairy Shrimp *Branchinecta conservatio*<br>There is **final** critical habitat for this species. Your location does not overlap the critical habitat.<br>Species profile: https://ecos.fws.gov/ecp/species/8246 | Endangered |
| Vernal Pool Fairy Shrimp *Branchinecta lynchi*<br>There is **final** critical habitat for this species. Your location does not overlap the critical habitat.<br>Species profile: https://ecos.fws.gov/ecp/species/498 | Threatened |
| Vernal Pool Tadpole Shrimp *Lepidurus packardi* | Endangered |

| NAME | STATUS |
|---|---|

There is **final** critical habitat for this species. Your location does not overlap the critical habitat.
Species profile: https://ecos.fws.gov/ecp/species/2246

## FLOWERING PLANTS

| NAME | STATUS |
|---|---|
| Hartweg's Golden Sunburst *Pseudobahia bahiifolia* | Endangered |

No critical habitat has been designated for this species.
Species profile: https://ecos.fws.gov/ecp/species/1704

## CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

## IPAC USER CONTACT INFORMATION

Agency: Dokken Engineering
Name: Vincent Chevreuil
Address: 110 Blue Ravine Road #200
City: Folsom
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## LEAD AGENCY CONTACT INFORMATION

Lead Agency: Department of Transportation

## Appendix B: CNDDB Species List

# Selected Elements by Common Name

## California Department of Fish and Wildlife

## California Natural Diversity Database

**Query Criteria:** Quad IS (Olivehurst (3912115) OR Browns Valley (3912124) OR Yuba City (3912125) OR Sutter (3912126) OR Wheatland (3912114) OR Gilsizer Slough (3912116))

| Species | Element Code | Federal Status | State Status | Global Rank | State Rank | Rare Plant Rank/CDFW SSC or FP |
|---|---|---|---|---|---|---|
| **American bumble bee**<br>*Bombus pensylvanicus* | IIHYM24260 | None | None | G3G4 | S2 | |
| **Baker's navarretia**<br>*Navarretia leucocephala ssp. bakeri* | PDPLM0C0E1 | None | None | G4T2 | S2 | 1B.1 |
| **bank swallow**<br>*Riparia riparia* | ABPAU08010 | None | Threatened | G5 | S3 | |
| **burrowing owl**<br>*Athene cunicularia* | ABNSB10010 | None | None | G4 | S2 | SSC |
| **cackling (=Aleutian Canada) goose**<br>*Branta hutchinsii leucopareia* | ABNJB05035 | Delisted | None | G5T3 | S3 | WL |
| **California black rail**<br>*Laterallus jamaicensis coturniculus* | ABNME03041 | None | Threatened | G3T1 | S2 | FP |
| **California linderiella**<br>*Linderiella occidentalis* | ICBRA06010 | None | None | G2G3 | S2S3 | |
| **chinook salmon - Central Valley spring-run ESU**<br>*Oncorhynchus tshawytscha pop. 11* | AFCHA0205L | Threatened | Threatened | G5T2Q | S2 | |
| **Coastal and Valley Freshwater Marsh**<br>*Coastal and Valley Freshwater Marsh* | CTT52410CA | None | None | G3 | S2.1 | |
| **dwarf downingia**<br>*Downingia pusilla* | PDCAM060C0 | None | None | GU | S2 | 2B.2 |
| **Ferris' milk-vetch**<br>*Astragalus tener var. ferrisiae* | PDFAB0F8R3 | None | None | G2T1 | S1 | 1B.1 |
| **giant gartersnake**<br>*Thamnophis gigas* | ARADB36150 | Threatened | Threatened | G2 | S2 | |
| **Great Valley Cottonwood Riparian Forest**<br>*Great Valley Cottonwood Riparian Forest* | CTT61410CA | None | None | G2 | S2.1 | |
| **Great Valley Mixed Riparian Forest**<br>*Great Valley Mixed Riparian Forest* | CTT61420CA | None | None | G2 | S2.2 | |
| **green sturgeon - southern DPS**<br>*Acipenser medirostris pop. 1* | AFCAA01031 | Threatened | None | G2T1 | S1 | |
| **Hartweg's golden sunburst**<br>*Pseudobahia bahiifolia* | PDAST7P010 | Endangered | Endangered | G1 | S1 | 1B.1 |
| **least Bell's vireo**<br>*Vireo bellii pusillus* | ABPBW01114 | Endangered | Endangered | G5T2 | S3 | |
| **legenere**<br>*Legenere limosa* | PDCAM0C010 | None | None | G2 | S2 | 1B.1 |
| **North American porcupine**<br>*Erethizon dorsatum* | AMAFJ01010 | None | None | G5 | S3 | |

# Selected Elements by Common Name

## California Department of Fish and Wildlife

## California Natural Diversity Database

| Species | Element Code | Federal Status | State Status | Global Rank | State Rank | Rare Plant Rank/CDFW SSC or FP |
|---|---|---|---|---|---|---|
| **Northern Hardpan Vernal Pool**<br>*Northern Hardpan Vernal Pool* | CTT44110CA | None | None | G3 | S3.1 | |
| **northern harrier**<br>*Circus hudsonius* | ABNKC11011 | None | None | G5 | S3 | SSC |
| **recurved larkspur**<br>*Delphinium recurvatum* | PDRAN0B1J0 | None | None | G2? | S2? | 1B.2 |
| **Sanford's arrowhead**<br>*Sagittaria sanfordii* | PMALI040Q0 | None | None | G3 | S3 | 1B.2 |
| **song sparrow ("Modesto" population)**<br>*Melospiza melodia pop. 1* | ABPBXA3013 | None | None | G5T3?Q | S3? | SSC |
| **steelhead - Central Valley DPS**<br>*Oncorhynchus mykiss irideus pop. 11* | AFCHA0209K | Threatened | None | G5T2Q | S2 | |
| **Swainson's hawk**<br>*Buteo swainsoni* | ABNKC19070 | None | Threatened | G5 | S4 | |
| **tricolored blackbird**<br>*Agelaius tricolor* | ABPBXB0020 | None | Threatened | G1G2 | S2 | SSC |
| **valley elderberry longhorn beetle**<br>*Desmocerus californicus dimorphus* | IICOL48011 | Threatened | None | G3T3 | S3 | |
| **veiny monardella**<br>*Monardella venosa* | PDLAM18082 | None | None | G1 | S1 | 1B.1 |
| **vernal pool fairy shrimp**<br>*Branchinecta lynchi* | ICBRA03030 | Threatened | None | G3 | S3 | |
| **vernal pool tadpole shrimp**<br>*Lepidurus packardi* | ICBRA10010 | Endangered | None | G3 | S3 | |
| **western pond turtle**<br>*Emys marmorata* | ARAAD02030 | Proposed Threatened | None | G3G4 | S3 | SSC |
| **western yellow-billed cuckoo**<br>*Coccyzus americanus occidentalis* | ABNRB02022 | Threatened | Endangered | G5T2T3 | S1 | |
| **white-tailed kite**<br>*Elanus leucurus* | ABNKC06010 | None | None | G5 | S3S4 | FP |
| **woolly rose-mallow**<br>*Hibiscus lasiocarpos var. occidentalis* | PDMAL0H0R3 | None | None | G5T3 | S3 | 1B.2 |

**Record Count: 35**

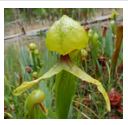
## Appendix C: CNPS Species List

CNPS Rare Plant Inventory

## Search Results

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

Search Criteria: Quad is one of [**3912115:3912114:3912124:3912125:3912126:3912116**]

| ▲ COMMON NAME | SCIENTIFIC NAME | FAMILY | LIFEFORM | BLOOMING PERIOD | FED LIST | STATE LIST | GLOBAL RANK | STATE RANK | CA RARE PLANT RANK | CA ENDEMIC | DATE ADDED | PHOTO |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Baker's navarretia | *Navarretia leucocephala* ssp. *bakeri* | Polemoniaceae | annual herb | Apr-Jul | None | None | G4T2 | S2 | 1B.1 | Yes | 1994-01-01 |  © 2018 Barry Rice |
| California pitcherplant | *Darlingtonia californica* | Sarraceniaceae | perennial rhizomatous herb (carnivorous) | Apr-Aug | None | None | G4 | S4 | 4.2 | | 1980-01-01 |  © 2021 Scot Loring |
| dwarf downingia | *Downingia pusilla* | Campanulaceae | annual herb | Mar-May | None | None | GU | S2 | 2B.2 | | 1980-01-01 |  © 2013 Aaron Arthur |
| Ferris' milk-vetch | *Astragalus tener* var. *ferrisiae* | Fabaceae | annual herb | Apr-May | None | None | G2T1 | S1 | 1B.1 | Yes | 1994-01-01 | No Photo Available |
| Hartweg's golden sunburst | *Pseudobahia bahiifolia* | Asteraceae | annual herb | Mar-Apr | FE | CE | G1 | S1 | 1B.1 | Yes | 1974-01-01 | No Photo Available |
| hogwallow starfish | *Hesperevax caulescens* | Asteraceae | annual herb | Mar-Jun | None | None | G3 | S3 | 4.2 | Yes | 2001-01-01 |  © 2017 John Doyen |
| legenere | *Legenere limosa* | Campanulaceae | annual herb | Apr-Jun | None | None | G2 | S2 | 1B.1 | Yes | 1974-01-01 |  ©2000 John Game |
| recurved larkspur | *Delphinium recurvatum* | Ranunculaceae | perennial herb | Mar-Jun | None | None | G2? | S2? | 1B.2 | Yes | 1988-01-01 | No Photo Available |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| red-stemmed cryptantha | *Cryptantha rostellata* | Boraginaceae | annual herb | Apr-Jun | None | None | G4 | S3 | 4.2 | | 2018-06-26 | No Photo Available |
| Sanford's arrowhead | *Sagittaria sanfordii* | Alismataceae | perennial rhizomatous herb (emergent) | May-Oct(Nov) | None | None | G3 | S3 | 1B.2 | Yes | 1984-01-01 |  ©2013 Debra L. Cook |
| veiny monardella | *Monardella venosa* | Lamiaceae | annual herb | May-Jul | None | None | G1 | S1 | 1B.1 | Yes | 1984-01-01 |  © 2007 George W. Hartwell |
| woolly rose-mallow | *Hibiscus lasiocarpos* var. *occidentalis* | Malvaceae | perennial rhizomatous herb (emergent) | Jun-Sep | None | None | G5T3 | S3 | 1B.2 | Yes | 1974-01-01 |  © 2020 Steven Perry |

Showing 1 to 12 of 12 entries

**Suggested Citation:**

California Native Plant Society, Rare Plant Program. 2024. Rare Plant Inventory (online edition, v9.5). Website https://www.rareplants.cnps.org [accessed 12 March 2024].

## Appendix D: NMFS Species List

**From:** Vincent Chevreuil
**To:** nmfswcrca.specieslist@noaa.gov
**Subject:** Olivehurst Climate Resiliency Project
**Date:** Tuesday, March 12, 2024 12:24:00 PM
**Attachments:** image001.png

---

Quad Name **Olivehurst**

Quad Number **39121-A5**

## 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 -

NC Steelhead Critical Habitat -

CCC Steelhead Critical Habitat -

SCCC Steelhead Critical Habitat -

SC Steelhead Critical Habitat -

CCV Steelhead Critical Habitat - **X**

Eulachon Critical Habitat -

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 -

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 -

Thank you,

**Vincent Chevreuil**
Biologist/Environmental Planner |
Dokken Engineering
**Phone**: 916.858.0642
**Email**: vchevreuil@dokkenengineering.com
110 Blue Ravine Road, Suite 200 | Folsom, CA 95630

## Appendix E: NRCS Soil Report List

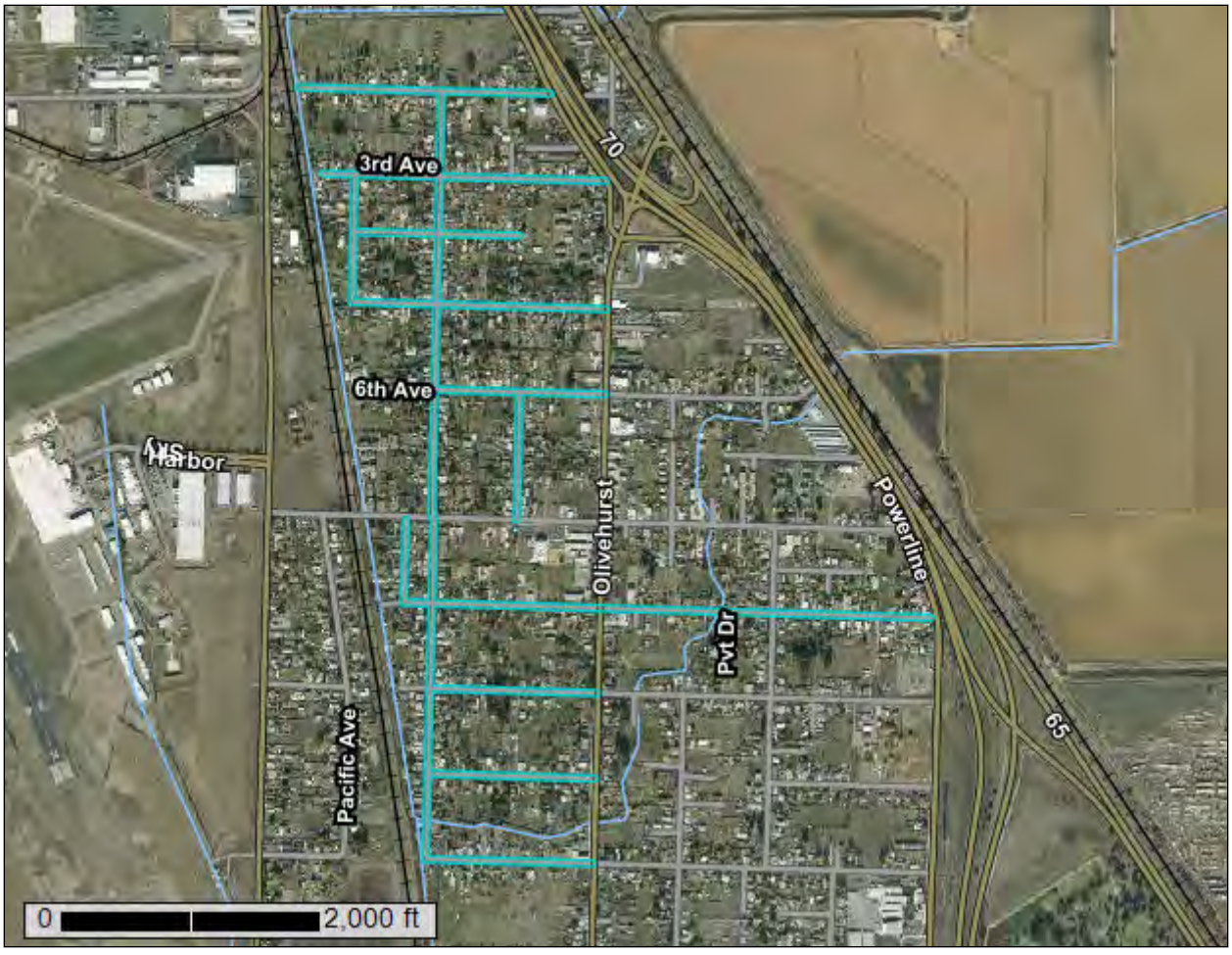
United States Department of Agriculture

NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

# Custom Soil Resource Report for Yuba County, California




March 13, 2024

# Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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# Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

# Custom Soil Resource Report
## Soil Map




Map Scale: 1:11,700 if printed on A portrait (8.5" x 11") sheet.

N

Meters: 0 150 300 600 900

Feet: 0 500 1000 2000 3000

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 10N WGS84

## MAP LEGEND

**Area of Interest (AOI)**
- Area of Interest (AOI)

**Soils**
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

**Special Point Features**
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

**Water Features**
- Streams and Canals

**Transportation**
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

**Background**
- Aerial Photography

## MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Yuba County, California
Survey Area Data: Version 18, Aug 28, 2023

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Dec 6, 2018—Dec 12, 2018

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

# Map Unit Legend

| Map Unit Symbol | Map Unit Name | Acres in AOI | Percent of AOI |
|---|---|---|---|
| 198 | Oakdale-Urban land complex, 0 to 1 percent slopes | 3.4 | 11.9% |
| 217 | Urban land-San Joaquin complex, 0 to 1 percent slopes | 25.4 | 88.1% |
| **Totals for Area of Interest** | | **28.8** | **100.0%** |

# Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the

development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

# Yuba County, California

## 198—Oakdale-Urban land complex, 0 to 1 percent slopes

### Map Unit Setting

*National map unit symbol:* hg60
*Elevation:* 50 to 150 feet
*Mean annual precipitation:* 18 to 22 inches
*Mean annual air temperature:* 61 to 63 degrees F
*Frost-free period:* 270 to 290 days
*Farmland classification:* Not prime farmland

### Map Unit Composition

*Oakdale, sandy loam, and similar soils:* 45 percent
*Urban land:* 40 percent
*Minor components:* 15 percent
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Oakdale, Sandy Loam

#### Setting

*Landform:* Stream terraces
*Landform position (two-dimensional):* Toeslope
*Landform position (three-dimensional):* Tread
*Down-slope shape:* Linear
*Across-slope shape:* Linear
*Parent material:* Mixed alluvium

#### Typical profile

*H1 - 0 to 9 inches:* sandy loam
*H2 - 9 to 53 inches:* sandy loam
*H3 - 53 to 70 inches:* loamy sand

#### Properties and qualities

*Slope:* 0 to 1 percent
*Depth to restrictive feature:* More than 80 inches
*Drainage class:* Well drained
*Runoff class:* Very low
*Capacity of the most limiting layer to transmit water (Ksat):* High (1.98 to 5.95 in/hr)
*Depth to water table:* More than 80 inches
*Frequency of flooding:* None
*Frequency of ponding:* None
*Available water supply, 0 to 60 inches:* Moderate (about 7.9 inches)

#### Interpretive groups

*Land capability classification (irrigated):* 1
*Land capability classification (nonirrigated):* 3c
*Hydrologic Soil Group:* A
*Ecological site:* R017XY904CA - Subirrigated Deep Alluvial Fans
*Hydric soil rating:* No

### Description of Urban Land

#### Typical profile

*H1 - 0 to 60 inches:* variable

**Interpretive groups**

*Land capability classification (irrigated):* None specified
*Land capability classification (nonirrigated):* 8s
*Hydric soil rating:* No

**Minor Components**

**San joaquin**

*Percent of map unit:* 10 percent
*Hydric soil rating:* No

**Unnamed**

*Percent of map unit:* 5 percent
*Hydric soil rating:* No

## 217—Urban land-San Joaquin complex, 0 to 1 percent slopes

**Map Unit Setting**

*National map unit symbol:* hg6m
*Elevation:* 20 to 500 feet
*Mean annual precipitation:* 18 to 22 inches
*Mean annual air temperature:* 61 to 63 degrees F
*Frost-free period:* 270 to 290 days
*Farmland classification:* Not prime farmland

**Map Unit Composition**

*Urban land:* 50 percent
*San joaquin, loam, and similar soils:* 40 percent
*Minor components:* 10 percent
*Estimates are based on observations, descriptions, and transects of the mapunit.*

**Description of Urban Land**

**Typical profile**

*H1 - 0 to 60 inches:* variable

**Properties and qualities**

*Slope:* 0 to 1 percent
*Frequency of flooding:* Rare

**Interpretive groups**

*Land capability classification (irrigated):* None specified
*Land capability classification (nonirrigated):* 8s
*Hydric soil rating:* No

**Description of San Joaquin, Loam**

**Setting**

*Landform:* Fan terraces
*Landform position (two-dimensional):* Toeslope

*Landform position (three-dimensional):* Tread
*Down-slope shape:* Linear
*Across-slope shape:* Linear
*Parent material:* Mixed alluvium

**Typical profile**

*H1 - 0 to 16 inches:* loam
*H2 - 16 to 25 inches:* clay
*H4 - 25 to 35 inches:* duripan

**Properties and qualities**

*Slope:* 0 to 1 percent
*Depth to restrictive feature:* More than 80 inches; 20 to 40 inches to duripan
*Drainage class:* Moderately well drained
*Runoff class:* Very low
*Capacity of the most limiting layer to transmit water (Ksat):* Very low to moderately low (0.00 to 0.06 in/hr)
*Depth to water table:* More than 80 inches
*Frequency of flooding:* Rare
*Frequency of ponding:* None
*Calcium carbonate, maximum content:* 1 percent
*Available water supply, 0 to 60 inches:* Very low (about 2.4 inches)

**Interpretive groups**

*Land capability classification (irrigated):* 4s
*Land capability classification (nonirrigated):* 4s
*Hydrologic Soil Group:* D
*Ecological site:* R017XY902CA - Duripan Vernal Pools
*Hydric soil rating:* No

**Minor Components**

**Unnamed**

*Percent of map unit:* 4 percent
*Landform:* Depressions
*Hydric soil rating:* Yes

**Kilaga**

*Percent of map unit:* 3 percent
*Hydric soil rating:* No

**Perkins**

*Percent of map unit:* 3 percent
*Hydric soil rating:* No

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## Appendix F: Representative Photographs



**Photo 1.** Representative photograph of the existing roadway along 2nd Avenue within the BSA. Taken facing east (April 2024).



**Photo 2.** Representative photograph of Clark Lateral Canal and its riparian corridor at the eastern edge of 2nd Avenue. Taken facing south (April 2024).



**Photo 3.** Representative photograph of the existing roadway along 3rd Avenue within the BSA. Taken facing east (April 2024).



**Photo 4.** Representative photograph of an existing roadside drainage feature along 3rd Avenue within the BSA. Taken facing northeast (April 2024).



**Photo 5.** Representative photograph of Clark Lateral Canal and its riparian corridor at the eastern edge of 3rd Avenue. Taken facing north (April 2024).



**Photo 6.** Representative photograph of the existing roadway along 6th Avenue within the BSA. Taken facing east (April 2024).



**Photo 7.** Representative photograph of Clark Lateral Canal and its riparian corridor at the eastern edge of 6th Avenue. Taken facing north (April 2024).



**Photo 8.** Representative photograph of the ruderal habitat at the western edge of 6th Avenue. Taken facing south (April 2024).



**Photo 9.** Representative photograph of the existing roadway along 9th Avenue within the BSA. Taken facing east (April 2024).



**Photo 10.** Representative photograph of Clark Lateral Canal and its riparian corridor at the eastern edge of 9th Avenue. Taken facing south (April 2024).




**Photo 11.** Representative photograph of the existing roadway along 11th Avenue within the BSA. Taken facing east (April 2024).



**Photo 12.** Representative photograph of Clark Lateral Canal and its riparian corridor at the eastern edge of 11th Avenue. Taken facing east (April 2024).



**Photo 13.** Representative photograph of the existing roadway along Western Avenue within the BSA. Taken facing north (April 2024).



**Photo 14.** Representative photograph of the eastern side of Clark Slough and its riparian corridor along Western Avenue. This portion of the channel is overgrown with Himalayan blackberry. Taken facing northeast (April 2024).



**Photo 15.** Representative photograph of the western side of Clark Slough and its riparian corridor along Western Avenue. Taken facing northeast (April 2024).



**Photo 16.** Representative photograph of the existing roadway along 8th Avenue within the BSA. Taken facing west (April 2024).



**Photo 17.** Representative photograph of the northern side of Clark Slough and its riparian corridor along 8th Avenue. Taken facing north (April 2024).



**Photo 18.** Representative photograph of the southern side of Clark Slough along 8th Avenue, which has been covered by a metal sheet. Taken facing south (April 2024).

## Appendix B. Cultural Resources Inventory Report

# Olivehurst Roadway Climate Resiliency Project

# Cultural Resources Inventory Report

## Yuba County, California



**Prepared for:**
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**June 2024**

Archaeological and other cultural resources can be damaged or destroyed through uncontrolled public disclosure of information regarding their location. This document contains sensitive information regarding the nature and location of archaeological sites which should not be disclosed to unauthorized persons.

Information regarding the location, character, or ownership of a historic resource is exempt from the Freedom of Information Act pursuant to 16 U.S.C 470w-3 (National Historic Preservation Act) and 16 U.S.C. §470hh (Archaeological Resources Protection Act). In addition, access to such information is restricted by law, pursuant to Section 6254.10 of the California State Government Code.

# MANAGEMENT SUMMARY

Yuba County (County) proposes to construct drainage infrastructure and establish a multi-modal transportation network along 13 road segments in the community of Olivehurst, as part of the Olivehurst Roadway Climate Resiliency Project (Project). The Project is located east of Pleasants Valley Road and south of Putah Creek, near the northern border of Solano County, California. The Project is state funded through the Local Transportation Climate Adaptation Program (LTCAP); as such, it requires compliance with the California Environmental Quality Act (CEQA). The lead agency for the CEQA compliance is the County. As the Project will impact waters of the United States which are under jurisdiction of the United States Army Corps of Engineers (USACE), permitting through Clean Water Act may be required. Jurisdictional areas of the USACE include the Clark Slough crossings at Western Avenue between 10th and 11th Avenues and at 8th Avenue between Olivehurst Avenue and Fleming Way. Federal permitting constitutes a federal undertaking, therefore, the USACE will serve as the lead agency responsible for compliance with the National Environmental Policy Act (NEPA) and the National Historic Preservation Act (NHPA).

This document was prepared to assist in addressing potential impacts to cultural resources resulting from the proposed undertaking. Efforts to identify cultural resources in the Area of Potential Effects (APE) are detailed in this report and include background archival research, a search of site records and inventory reports on file at the North Central Information Center of the California Historical Resources Information System (NCIC), and a pedestrian surface survey. The NCIC records search yielded no cultural resources within the APE and identified nine resources within ¾-mile.

The pedestrian survey identified one built environment resource within the APE: the Clark Lateral Canal. No indigenous or historic-era resources were identified. The potential for the Project to impact cultural resources which would qualify as either a historical resource under CEQA or a historic property under NHPA, is *low*.

The Clark Lateral Canal was evaluated for listing eligibility in the National Register of Historic Places (NRHP) and the California Register of Historical Resources (CRHR). It is recommended that Clark Lateral Canal is not eligible for listing on the NRHP or CRHR. A finding of no historic properties affected is recommended for this undertaking, pursuant to 36 CFR § 800.4(d) and no significant impact to historical resources under CEQA.

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# 1.0 INTRODUCTION

Yuba County (County) proposes to construct drainage infrastructure and establish a multi-modal transportation network along 13 road segments in the community of Olivehurst, as part of the Olivehurst Roadway Climate Resiliency Project (Project), Yuba County, California. As the Project proponent, the County will serve as lead agency under the California Environmental Quality Act (CEQA).

As the Project will impact waters of the United States which are under jurisdiction of the United States Army Corps of Engineers (USACE), permitting through Clean Water Act may be required. Federal permitting constitutes a federal undertaking, therefore, the USACE will serve as the lead agency responsible for compliance with the National Environmental Policy Act (NEPA) and the National Historic Preservation Act (NHPA).

## 1.1 Project Location

The Project is located in the community of Olivehurst, which is situated west of State Route 70 and east of the Feather River in Yuba County, California (**Appendix A, Figures 1-3**). The Project is located within the Olivehurst 7.5-Minute United States Geological Survey (USGS) quadrangle.

## 1.2 Project Description

The County proposes to construct drainage infrastructure and establish a multi-modal transportation network along 13 road segments in the community of Olivehurst, Yuba County, California. Road segments within the Project area include:

- 2nd Avenue
- 3rd Avenue
- 4th Avenue
- 5th Avenue
- 6th Avenue
- 8th Avenue
- 9th Avenue
- 10th Avenue
- 11th Avenue
- Western Avenue
- Beaver Lane
- Canal Street
- Tulsa Avenue

Many of the roads within the community of Olivehurst lack drainage facilities, sidewalks and bicycle lanes or routes. Furthermore, the existing open drainage ditches within the community are insufficient to accommodate anticipated peak flows generated by heavy precipitation events. Due to this inadequate drainage infrastructure, the community has been experiencing localized flooding during precipitation events, which disrupts transportation efficiency and presents a safety hazard. Based on this lack of infrastructure, the County proposes a widespread improvement throughout the community to provide upgraded drainage infrastructure, pavement rehabilitation, and installation of pedestrian and bicycle facilities.

The proposed Project will eliminate the existing roadside ditches and install a comprehensive storm drain system sized to accommodate projected runoff from heavy precipitation events. Approximately 26,000 linear feet of storm drain will be constructed for the Project, including outfall connections to the Clark Lateral Canal at 2nd, 3rd, 6th, 9th, and 11th Avenues. Additionally, 52,000 linear feet of sidewalks, 52,000 linear feet of Class III bike routes, 21 crosswalks, 38 ADA complaint ramps, striping and curbs and gutters will be constructed (Figure 3. Project Features). This Project will extend facilities throughout many of the remaining roads within the community of Olivehurst, creating a comprehensive drainage system while also establishing a multi-modal transportation network. The purpose of this Project is to establish a resilient transportation infrastructure which will not be vulnerable to extreme storm events, as well as create pedestrian facilities within the community to promote walking and bicycling.

Right-of-way (ROW) acquisition and utility relocations will be required. Temporary construction easements (TCEs) may be needed on a limited basis to accommodate the construction of the street improvements.

## 1.3 Area of Potential Effects

The Area of Potential Effects (APE) for the Project includes all design elements and activities as outlined above in Section 1.2 sufficiently buffered to provide for adequate construction workspaces, access, and an equipment and/or material staging area (**Appendix A, Figure 3**). New right-of-way will be required as part of the Project as well as temporary construction easements. The horizontal APE encompasses approximately 32.17 acres to accommodate sidewalk construction, utility relocations, and construction staging and access. The vertical APE for ground disturbance for roadway work will have a maximum depth of up to 3 feet, up to 8 feet for storm drain construction, and up to 6 feet for utility relocations. Up to 3 feet of disturbance is anticipated for work associated with drainage outfall connections to the canal. Jurisdictional areas of the USACE within the APE include the Clark Slough crossings at Western Avenue between 10th and 11th Avenues and at 8th Avenue between Olivehurst Avenue and Fleming Way.

## 1.4 Regulatory Context

The County is the Project sponsor and lead agency responsible for CEQA compliance. Federal permitting will be required through the USACE, therefore the USACE will serve as lead agency under both NHPA and NEPA. As the Project involves both federal and state legal regimes, summaries of the relevant regulatory frameworks are presented in the following sections.

### 1.4.1 Federal Regulatory Framework

The NHPA of 1966 is the primary Federal legislation which outlines the Federal government's responsibility to cultural resources. More specifically, Section 106 of the NHPA and its implementing regulations located at 36 CFR Part 800, outline the Federal government's responsibility in identifying and evaluating cultural resources. Other applicable Federal cultural resources laws and regulations that could apply include, but are not limited to, the Native American Graves Protection and Repatriation Act (NAGPRA) and the Archaeological Resources Protection Act (ARPA).

Section 106 of the NHPA requires the Federal government to take into account the effects of an undertaking on cultural resources listed in and eligible for listing in the National Register of Historic Places (NRHP) and affords the Advisory Council on Historic Preservation a reasonable opportunity to comment. Those resources that are listed or eligible for inclusion in the NRHP are referred to as historic properties. The 36 CFR Part 800 regulations describe the Section 106 process. They outline the steps the Federal agency takes to identifying cultural resources and the level of effect that the proposed undertaking will have on historic properties. An undertaking is defined as any:

> "…project, activity, or program funded in whole or in part under the direct or indirect jurisdiction of a Federal agency", including:
>
> A. Those carried out by or on behalf of the agency;
>
> B. Those carried out with Federal assistance;
>
> C. Those requiring a Federal permit, license, or approval; and

D. Those subject to state or local regulation administered pursuant to a delegation or approval by a Federal agency [Section 301(7) 16 U.S.C. 470w(7)].

The initiation of an undertaking begins the Section 106 process. Once an undertaking is initiated, the Federal agency must first determine if the action is the type that has the potential to affect historic properties. If it is the type of action that has the potential to affect historic properties, the Federal agency must:

1. Identify the APE,
2. Determine if historic properties are present within the APE,
3. Determine the effect that the undertaking will have on historic properties, and
4. Consult with the appropriate State Historic Preservation Officer (SHPO) to seek concurrence on Federal agencies findings.

In addition, the Federal agency is required through the Section 106 process to consult with Native American Tribes concerning the identification of sites of religious or cultural significance, and to consult with individuals or groups who are entitled to be consulting parties or have requested to be consulting parties. If the undertaking would result in adverse effects to historic properties, these adverse effects must be resolved in consultation with the State Historic Preservation Officer and other parties identified during the Section 106 process before the undertaking can proceed to implementation.

### 1.4.2 California Regulatory Framework

CEQA established statutory requirements for establishing the significance of historical resources in PRC Section 21084.1. The CEQA Guidelines (Section 10564.5[c]) also require consideration of potential project impacts to "unique" archaeological sites that do not qualify as historical resources. The statutory requirements for unique archaeological sites that do not qualify as historical resources are established in PRC Section 21083.2. These two PRC sections operate independently to ensure that significant potential impacts on historical and archaeological resources are considered as part of a project's environmental analysis. Historical resources, as defined in Section 15064.5 as defined in the CEQA regulations, include 1) cultural resources listed in or eligible for listing in the California Register of Historical Resources (CRHR); 2) cultural resources included in a local register of historical resources; 3) any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in one of several historic themes important to California history and development.

Under CEQA, a project may have a significant effect on the environment if the project could result in a substantial adverse change in the significance of a historical resource, meaning the physical demolition, destruction, relocation, or alteration of the resource would be materially impaired. This would include any action that would demolish or adversely alter the physical characteristics of an historical resource that convey its historic significance and qualify it for inclusion in the California Register or in a local register or survey that meets the requirements of PRC Section 5020.1(l) and 5024.1(g). PRC Section 5024 also requires state agencies to identify and protect state-owned resources that meet NRHP listing criteria. Sections 5024(f) and 5024.5 require state agencies to provide notice to and consult with the SHPO before altering, transferring, relocation, or demolishing state-owned historical resources that are listed on or are eligible for inclusion in the NRHP or are registered or eligible for registration as California Historical Landmarks.

CEQA and the CEQA Guidelines also recommend provisions be made for the accidental discovery of archaeological sites, historical resources, or Native American human remains during construction (PRC Section 21083.2(i) CCR Section 15064.5[d and f]).

### *CEQA Assembly Bill 52 (AB 52) - PRC 21074 Native American Consultation*

Effective January 1, 2015, CEQA was revised to include early consultation between local agencies and California Native American tribes, and to include the consideration of Tribal Cultural Resources (TCR) in this consultation. Pursuant to AB 52 (PRC 21074[a]), a TCR means either of the following:

1. Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:
    i. Included or determined to be eligible for inclusion in the California Register of Historical Resources
    ii. Included in a local register of historical resources as defined in PRC Section 5020.1, subdivision (k)
2. A resource determined by a California lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in PRC 5024.1., subdivision (c).

PRC 21074(a) further relays that a cultural landscape that meets the criteria of subdivision (a) is a TCR to the extent that the landscape is geographically defined in terms of the size and scope of the landscape. PRC 21074(a) also states that a historical resource described in PRC 21084.1, a unique archaeological resource as defined in subdivision (g) of PRC 21083.2, or a “nonunique archaeological resource” as defined in subdivision (h) of PRC 21083.2 may also be a TCR if it conforms with the above criteria.

AB 52 requires formal consultation with California Native American Tribes concerning tribal cultural resources that may be impacted by a proposed project when a Negative Declaration, a Mitigated Negative Declaration or an Environmental Impact Report is being prepared. As this project is being processed under a CEQA Categorical Exemption, AB-52 does not apply.

# 2.0 NATURAL AND CULTURAL CONTEXT

The following sections present overviews of the natural and cultural setting for the Project. These narratives are developed to provide insight about the types of cultural resources that may be present in the APE and provide context for evaluating their significance.

## 2.1 Natural Environment

### *2.1.1 Geology and Morphology*

According to the Geologic Map of the Chico Quadrangle (Division of Mines and Geology 1992), the APE consists predominately of early Pleistocene age alluvium deposits from the Modesto and Riverbank Formations. The topography within the APE is relative flat, with slopes ranging from 0 to 1 percent and an elevation ranging from approximately 60 to 70 feet above mean sea level. The APE is located within the Reeds Creek watershed. Clark Slough and Clark Lateral Canal are the only two water features within the Project area. The soil type within the Project area is comprised of Oakdale-Urban land complex alluvial stream terrace, 0 to 1 percent slopes (12% of the APE) and Urban land-San Joaquin complex alluvial fan terrace, 0 to 1 percent slopes (88% of the APE) (Natural Resource Conservation Service [NRCS] 2024; Appendix E. NRCS Soil Report).

### *2.1.2 Climate*

Modern climate in Yuba County is characterized by hot, dry summers and cool, rainy winters. Summer conditions are typically characterized by high temperatures and low humidity, with prevailing winds from the south. The community of Olivehurst experiences an average annual high temperature of approximately 75 degrees Fahrenheit (°F), an average annual low temperature of approximately 48°F, and an average of 22.75 inches of precipitation annually (U.S. Climate Data 2024).

### *2.1.3 Vegetation*

Yuba County contains many different habitat types capable of supporting a wide variety of species and wildlife and plant communities. Habitat ranges from highly disturbed areas, such as those in agricultural production adjacent to urban development, to high- quality native habitats that have experienced little disturbance, such as in the remote mountainous areas of Yuba County. The Project is located in an area of residential use. A vast majority of the APE is comprised of residential land use and paved roadways; however, the Clark Slough and Clark Lateral Canal provide thin corridors of riparian and stream channel habitat throughout the APE.

Predominant vegetation prior to Euro-American settlement in this part of the Central Valley and elsewhere would have included Valley Grassland, Freshwater Marsh, and Riparian Woodland communities. Each would have contributed important resources to residents living in the area. Pristine Valley Grassland was made up predominantly of perennial bunchgrasses but also held substantial amounts of annual grasses and herbs (Schoenherr 1992). Freshwater Marsh areas, composed of rushes, bulrushes, sedges, and cattails, were certainly an important constituent in the area prior to historic reclamation efforts. This habitat would have provided important territory for many species of waterfowl and other migratory birds that were likely targeted by hunters (Wallace 1978). The Riparian Woodland, restricted to corridors along creeks and tributaries, hosts a variety of trees, including Sycamores, Cottonwoods, Willows, Alders, and Valley Oaks. This ecotone would have been important for providing both acorn and deer, two premier staples of the indigenous peoples economy (Baumhoff 1963). The woodland context also provided critical raw materials necessary for constructing fish weirs and domestic structures.

### *2.1.4 Archaeological Sensitivity*

To determine the surface and buried site potential within the APE, a review of geological deposits, soils, previously recorded sites, and evidence of landform modifications were reviewed. The Project vicinity would have been a targeted location of indigenous peoples activity along the waterways of the area. Although the APE is located within and adjacent to Clark Slough, the presence of Pleistocene aged soils which predate indigenous occupation of the area indicates the APE lies within an area determined to be of low sensitivity for buried deposits. For sensitivity of historic-era resources, the community of Olivehurst was established in the 1940s with residential structures fronting the APE. The potential for deposits associated with these homes, however, is low as the areas adjacent to the roadway would not have been locations for privies, trash deposits, or associated outbuildings which more likely occurred behind the main house structure in the back portions of the properties. Furthermore, Project activities will occur primarily within previously disturbed roadway construction areas. For this reason, the potential for the Project to impact intact cultural resource deposits in the APE is low.

## 2.2 Ethnography

Prior to the arrival of Euroamericans in the region, California was inhabited by groups of Native Americans speaking more than 100 different languages and occupying a variety of ecological settings. Kroeber (1925, 1936), and others, recognized the uniqueness of California Native Americans and classified them as belonging to the California culture area. Kroeber (1925, 1936) further subdivided California into four subculture areas, Northwestern, Northeastern, Southern, and Central. The Central area encompasses the current Project area and includes the Nisenan or Southern Maidu and Northern Sierra Miwok. (Yuba County 2011)

Nisenan are members of the Maiduan Family of the Penutian stock and are generally divided into three groups based on dialect differences: the Northern Hill Nisenan in the Yuba River drainage; the Valley Nisenan along the Sacramento River, and the Southern Hill Nisenan along the American River (Kroeber 1925; Beals 1933); (Wilson and Towne 1978). Northern Sierra Miwok are members of the Utian Family of the Penutian Stock and speak one of the seven Miwokan languages. All of the Miwokan languages are closely related.

The basic social and economic group of the Nisenan was the family or household unit, with the nuclear and/or extended family forming a corporate unit. Among the Nisenan these groups combined to form tribelets, which were their largest sociopolitical unit (Wilson and Towne 1978). Each tribelet had a chief or headman who exercised political control over all villages within it. Tribelet populations of Valley Nisenan were as large as 500 persons living in permanent villages that were usually located on raised areas to avoid flooding (Wilson and Towne 1982). Beals (1933) estimates that Nisenan tribelet territory averaged approximately 100 square miles. Within these areas, the Nisenan practiced seasonal transhumance, moving from one area or elevation to another to harvest plants, fish, and hunt game across contrasting ecological zones that are in relatively close proximity to each other. The Valley Nisenan, however, generally did not range beyond the valley and lower foothills.

Valley Nisenan used a variety of flaked and ground stone tools (Wilson and Towne 1978). Obsidian was a highly valued material for tool manufacture and was usually imported. Other tools and weapons were made of bone and wood, including stirring sticks, mush paddles, pipes, and hide preparation equipment. Cordage was made from plant material and used to construct fishing nets and braided and twined tumplines. Valley Nisenan also fostered trading relationships with surrounding groups for commodities such as salt, marine shells and basketry.

Fishing formed a large component of Valley Nisenan subsistence activity. Consequently, they used an extensive assemblage of fishing-related implements and facilities including: spears, cordage lines with bone fishhooks, harpoons with detachable points, dams for stream diversion, nets of cordage and basketry, weirs, and an array of fish traps (Wilson and Towne 1982). Tule lashed log and bark rafts were also used to acquire resources and facilitate travel. Other specialized food processing and cooking techniques primarily included grinding and leaching of ground acorn and buckeye meal. Acorns, buckeyes, pine nuts, seeds, berries, and meat were routinely processed using bedrock mortars and pestles. A soaproot brush was used to sweep meal into mortar cups and collect flour. Fist-sized, heated stones were used to cook and/or warm liquid-based foods such as acorn gruel. Whole acorns were stored in granaries. In addition to these plant resources, other plants may have been managed, primarily by controlled burning, for both food (e.g., edible grasses and seed producing plants) and the manufacture of baskets and other useful equipment (Blackburn and Anderson 1993).

## 2.3 Indigenous Peoples History

The earliest traces of the occupants of the Sierra Nevada foothills and the Central Valley belong to the Early Man period. This period is characterized by large spear points used to kill big game including mammoths and giant bison, large mammals which existed at the end of the last Ice Age approximately 10,000 years ago (Johnson 1967). Population was low and consisted of small mobile bands of people who left few traces of their passage through the Central Valley. (Fredrickson 1973)

Indigenous human populations in Sutter and Yuba Counties within the Sacramento Valley have evolved considerably since archaeologists first proposed a sequence of cultural change in the region in the 1930s. Although research has established that indigenous groups inhabited parts of California prior to 6,000 years ago, the Windmiller Pattern (roughly 3,000 BC – 500 BC) is the earliest recognized cultural pattern for the Sacramento Valley, which is the portion of the California Central Valley that lies to the north of the San Joaquin-Sacramento Delta (Fredrickson 1973). Archaeological deposits from this period contain a variety of flaked and ground stone artifacts, baked clay, and shell artifacts, suggesting that populations from this period exploited a diverse resource base. (Heizer 1949; Ragir 1972)

The Berkeley Pattern (roughly 500 BC – AD 500) suggests a shift in subsistence practices and technology. Mortar and pestle use increase indicated the types of technological changes during this time. The switch to mortar and pestle indicates the acorn became a diet staple (Ragir 1972). The addition of acorns, which were more time-consuming to process, implies greater diet breadth than that observed during Windmiller times. (Ragir 1972)

Material remnants from the Augustine Pattern (roughly AD 500- AD 1880) indicate an intensification of resource exploitation, increased sedentism (i.e., a transition from nomadic to permanent, year-round settlement), territoriality, and social complexity (Fredrickson 1973). Technological innovations, such as the bow and arrow, occurred during this period (Fredrickson 1973). Artifacts from this period include flaked and ground stone artifacts, shell beads and pendants, and bone tools (Johnson 1976). Bedrock milling features also are present, either in association with permanent settlements or as a component of smaller task-oriented locations (Johnson 1976).

## 2.4 History

*Development of Marysville*
The closest major city to the APE is Marysville, located approximately 3 miles north of the APE. The following context is taken from the *Archaeological Survey Report for the 5th Street Bridge Replacement Project, Yuba City, California* (Dokken Engineering 2011).

Marysville is situated in Northern California in Yuba County, which is bordered by Plumas, Nevada, Sierra, Placer, Butte, and Sutter Counties. It is the largest city in Yuba. Yuba County and Yuba City get their names from the Yuban Native American tribe that lived on the banks of the Feather River (Sullivan, 1974). Marysville is at the western portion of the county, east of the Feather River and north of the Yuba River. The land was part of the original Mexican land grant given to John Sutter. Theodore Cordua leased the land from Sutter in 1842, intending to transform the land into a cattle ranch; he named the area New Mecklenburg. However, gold was discovered on several locations on the Yuba River in the summer of 1848, resulting in miners surging into the area. During the height of the Gold Rush, over 2,000 men were prospecting at this location. As a result of the large mining population, Yuba County was established in 1850 and originally included what are now Nevada and Sierra Counties (Clark 1970). During the gold rush, as hundreds of thousands of new immigrants flooded into California, hostilities between these new immigrants and the Native Americans rapidly accelerated (Jenkins 1948). The new immigrant miners, ranchers and farmers came to see the Native Americans as threats to their prosperity and security. In 1863, some 461 Native Americans, mostly Maidu, were force-marched 125 miles to the Round Valley Reservation during which many were killed or died. (Sutter County 2010; Yuba County 2011)

Throughout the gold rush era Cordua went into business with Charles Covillaud, to whom he later sold a portion of his land. Cordua sold his remaining land to Michael Nye and William Foster, who with Covillaud established Nye's Ranch (Ramey, 1936). The location of the ranch was ideal. It was located at the confluence of the Yuba and Feather Rivers, which were navigable by ship to and from Sacramento. During the Gold Rush, the ranch became a point of debarkation for riverboats from San Francisco and Sacramento filled with miners on their way to the dig sites. The steamer the Linda began taking trips up the river in 1849; by the next year, the Linda and the Lawrence were taking trips between Marysville and Sacramento twice a week bearing both freight and passengers (Ramey, 1936). Anticipating that their land was in an ideal location on the path of the steamers and with the advent of mining operations nearby, Cordua and Covillaud commissioned surveyor Auguste LePlongeon to lay out a town on the site of Nye's Ranch in 1849 (Ellis, 1939). The town's layout was modeled on that of a European city; it had a broad street—what became E Street—running the length of the town, beginning at a plaza at the edge of the Yuba River, and numerous squares and parks. Covillaud named the new town after his wife Mary Murphy Covillaud, who was a surviving member of the Donner Party that had arrived in California in 1847.

Marysville was preferred over its sister city, Yuba City, located across the Feather River because it was also accessible from the Yuba River, whereas Yuba City was not. Yuba City, founded in 1908, possessed the larger population of the two for a time, but Marysville eventually outgrew its sister city due to the abundance of ships stopping on its side of the Feather River (Ellis, 1939).

Marysville prospered during the Gold Rush era, becoming one of the largest cities in California. Marysville became a center of mining, including quartz mining, and trade. The new city was ideally located along the routes taken by vessels traveling up the Yuba River from Sacramento and San Francisco towards the mines (Ramey, 1936). Four stage lines ran in and out of the city in 1850.

Yuba County was founded in February of that year. It was incorporated as a city in February 1851. Advertisements began appearing in the Sacramento and San Francisco newspapers, inviting people to Marysville. Steam ships were making regular trips past Marysville and lots were being sold. Most of the people that settled in Marysville came to cater to the miners nearby. The city began to develop rapidly (Sullivan, 1974).

Despite Marysville's ideal location along the confluence of two rivers, it faced isolation from trade when hydraulic mining filled the Feather River with debris and made navigation impossible during the dry season. This remained a problem until the coming of the railroad to Marysville (Gordon, 1988). This raising of the riverbeds also made Marysville vulnerable to flooding during winter storms and spring run-off causing the city to build a levee system. During the 1870s and 1880s, valuable farmland in Sutter County and the Gold mining settlements established in Yuba County were lost to the silting up of the rivers due to hydraulic gold mining in the Sierra (Clark 1970). Local farmers formed the Anti-Debris Association, and in 1884, they won a landmark suit halting the practice of hydraulic mining. After 1884, once land was cleared, river bottom land claimed and hydraulic mining stopped, agriculture developed rapidly (Clark 1970). Several famous agricultural varieties were developed in Sutter County, including Proper Wheat 1868, which opened up the wheat exporting market in Sutter County; the Thompson Seedless Grape in 1870s, which led to a thriving raisin industry; and the Phillips Cling Peach in the 1880s, which paved the way for a surge in the canning industry, with three local canneries established. (Sutter County 2003; Yuba County 1994). With the raising riverbeds and the levee system construction, Marysville's growth has been limited. The population has not increased much since the days of the Gold Rush (Yuba County, 1994).

The first railroad to provide access through Marysville was the Central Pacific Railroad, which arrived in 1864. This railroad provided north-south access across the Yuba River along A Street in Marysville. Transportation within the urban center of Marysville advanced as well. In 1889, David E. Knight founded the Marysville and Yuba City Railroad providing 3.2 miles of horse-drawn street car access throughout the Cities. By 1890, the Northern California Railroad constructed an additional route through Marysville providing east-west access across the Feather River to Yuba City. This route ran along 9th Street, through Washington Square and continued north along E Street. As the turn of the century approached, additional railroad routes were constructed including the Southern Pacific in 1887, the Northern Electric Railroad in 1906 (which took over the Marysville and Yuba City Railroad line), and Western Pacific in 1909 (Sanborn, 1885-1948).

Following the establishment of a strong railroad transit system throughout Marysville, industrial opportunities began to flourish. Agriculture became a prime industry within City. Citrus, grapes, peaches, pears, prunes, pomegranates, rice, beans, barley and wheat began to be produced on a commercial level and shipped by freight throughout the country. The most dominate industries in Marysville during the late 1800s and into the beginning of the 1900s consisted of the Aetna Steam Boiler Works, the Empire Foundry, the Union Lumber Company, the Buckeye Flour Mill of the Sperry Company, the Marysville Woolen Mill and the Marysville Winery.

Marysville continued to grow in the 1920s, in 1923 it had an estimated population of 6,643, and in 1927, Marysville had a population of approximately 7,450 residents. During this period major businesses within the city consisted of the Pacific Gas and Electric Company, Yuba Manufacturing Company, Marysville Brick Company, the National Ice and Storage Company, and four sand and gravel plants.

During the Great Depression the population of Marysville dropped considerably to 5,970 residents. Growth following the great depression was slow up until the end of World War II. In the 1950s following war, Marysville received an economic boost with the construction of the Beale Air Force Base. In 1958, the Air Force funded the construction of 570 homes to accommodate military families in the area. Today Marysville continues to be a strong agricultural producer in Yuba County.

*Agriculture and Flood Control*
The following is taken from the *Yuba County General Plan Final EIR* (AECOM 2011).

Agriculture and ranching became the primary industries of the Yuba County region during the early historic period. Regional ranching originated on the New Helvetia and Johnson's ranchos in the early 1840s. The Gold Rush of 1848 precipitated growth in agriculture and ranching as ranchers and farmers realized handsome returns from supplying food and other goods to local miners (Fryman 1996). Frequent floods, however, plagued the residents of the Yuba-Feather-Bear River floodplain and posed a significant threat to the viability of agricultural interests and further settlement of Yuba County.

Initial efforts at flood control were usually uncoordinated and consisted of small levees and drains constructed by individual landowners. These features proved insufficient to protect cultivated land. and much land east of the Feather River remained marshland that was unsuitable for agriculture (U.S. Geological Survey 1910, 1911). In 1861, the California Legislature created the State Board of Swampland Commissioners to affect reclamation of swamp and overflow lands. The State Board of Swampland Commissioners established 32 districts that attempted to enclose large areas prone to flooding with natural levees. Lack of cooperation among the landowners in the districts led to chronic financial crises. When the California Legislature terminated the State Board of Swampland Commissioners in 1866, responsibility for swamps and overflowed land fell to the individual counties. Many counties offered incentives to landowners for reclaiming agriculturally unproductive land. If a landowner could certify that he or she had spent at least 2 dollars per acre in reclamation, the county would refund the purchase price of the property to the owner. Speculators took advantage of this program and a period of opportunistic and often irrational levee building followed (McGowan 1961; Thompson 1958).

In response to the flood of 1907, citizens of Yuba County formed Reclamation District 784 (RD 784). At the time of its formation, RD 784 encompassed 22,762 acres of land, much of which was owned by the Farm Land Investment Company. RD 784 built substantial levee and drainage systems to restrain floodwaters from the Bear and Feather Rivers and incorporated levees built by the Farm Land Investment Company and other landowners.

In 1911, the California Legislature established the State of California Reclamation Board to exercise jurisdiction over reclamation districts and levee plans. That year, the state approved and began implementation of the Sacramento River Flood Control Project. The ambitious project included the construction of levees, weirs, and bypasses along the river to channel floodwaters away from population centers. Under the Sacramento River Flood Control Project, new reclamation districts were created and existing districts, such as RD 784, were placed under the jurisdiction of the Reclamation Board.

In 1920, RD 784 voters approved a plan to improve levees along the Yuba, Bear, and Feather Rivers and to improve drainage near Messick lake, Plumas Lake, and other backwater marshes along the Feather River. The U.S. Anny Corps of Engineers assisted RD 784 with the construction

of a levee system at the eastern boundary of the district. Reclamation efforts in RD 784 promoted settlement and development of the land between Rio Oso and Marysville.

*Clark Lateral Canal*

As part of RD 784, the Calrk Lateral Canal was most likely constructed when the Yuba County Airport was built to intercept the westwardly moving Clark Slough (historically referred to as Olivehurst Drain), at the southern end of the Project, and the Linda Drain (Horsemen's Ditch), at the northern end of the Project. The canal directed floodwaters south to the Western Pacific Intercept Canal (WPIC). The airport was constructed in the early 1940's and, at presumably the same time, the canal was constructed, most likely, by the USACE but it may have been constructed by Yuba County and City of Marysville. (Yuba County, personal communication, May 28, 2024)

While the Clark Lateral Canal was never formally utilized for irrigation, an exception was use of the canal by a local farmer just south of Olivehurst that would block the Canal and use a lift pump to irrigate rice fields just south of Olivehurst. Rice production occurred at this location from the 1950s through the 2010s. Overall, RD 784 has never provided irrigation services to the region but some of their drainage ditches/canals have been used by local farmers for irrigation, which continues to this day. Additionally, RD 784 at one time provided maintenance on a southern portion of the Clark Lateral Canal and its extent to the WPIC, however, more recent development projects have redirected water from residential developments to other district infrastructure and maintenance is no longer active on the Clark Lateral Canal. (Yuba County, personal communication, May 28, 2024)

# 3.0 INVENTORY METHODS AND RESULTS

Efforts to identify cultural resources in the APE include a search of site records and inventory reports on file at the North Central Information Center (NCIC), background archival research including reviews of historic plats, imagery, etc., an intensive archaeological surface survey, and Native American consultation.

## 3.1 Records Search

The NCIC provided records search results for the APE and a ¾-mile radius on March 12, 2024 (File No. YUB-24-13). This search included a review of all recorded indigenous and historic archaeological sites, historic architectural resources, and previous cultural resource surveys/investigations reports. The results of the NCIC search are included in **Appendix B** and are summarized below

### 3.1.1 Prior Investigations

The NCIC search did not identify any previous cultural resource investigations conducted within the APE but did identify 29 (33 total, including addendums) investigations conducted within ¾-mile of the Project. Please see **Table 1** below for more information.

**Table 1. Previous Cultural Resource Investigations within the Search Area**

| Report # | Author | Year | Document Title |
|---|---|---|---|
| 000942 | Eleanor H. Derr | 1991 | A Cultural Resources Study for US Postal Service Facility, Yuba County, California. |
| 002501 | Donald J. Storm | 1978 | Cultural Resource Investigations Involving the Pasado Road Underpass Project, Linda, Yuba County, California. |
| 002961 | Lorna Billat | 2001 | Nextel Site Number: CA-0455A Olivehurst |
| 003853 | Wendy Nelson, Maureen Carpenter, and Kimberly L. Holanda | 2000 | Cultural Resources Survey for the Level (3) Communications Long Haul Fiber Optics Project, Segment WP04: Sacramento to Redding |
| 003853A | Ann Munns, Rhonda R. Turner, and Dustin Kay | 2000 | Cultural Resources Record Search and Literature Review Report, Level (3) Communications Long Haul Fiber Optics Project, Segment WP04: Sacramento to Redding |
| 003853B | Denise Furlong and Kim Tremaine | 2001 | Archaeological Monitoring for WS04 Long Haul Fiber Optic Segment Between Sacramento and Bakersfield, California |
| 006683 | Peter Jensen | 2004 | Archaeological Survey for Qualifying “Screened Undertakings,” 18 Culvert Replacement and Improvement Locations, Yuba County, CA |
| 007921 | Janis Offerman, Tina Biorn, Dana McGowan, Daryl Noble, Linda Rogers, Micaehl Rondeau, and Larry Wiegel | 1992 | Negative Archaeological Survey Report 03-YUB/SUT-65 03205-297300 |
| 008234 | Melinda Peak | 2005 | Determination of Eligibility and Effect for the Montrose @ Edgewater Project Area, Yuba County, CA |
| 008251 | Judith Marvin | 2007 | Cultural Resources Inventory and Historical Architecture Study and Evaluation for the Proposed Yuba County Airport Master Plan, Yuba County, California |
| 008366 | Sandra Amaglio | 2004 | County of Yuba, Olivehurst Intercepter, FEMA-DR-1044-CA, HMGP #11044-0014 |
| 008367 | Jeff Haney | 2002 | Historical Resource Compliance Report, Marysville Maintenance Station EA 03-4A8900 |

| Report # | Author | Year | Document Title |
|---|---|---|---|
| 008368 | Scott Williams | 2002 | Negative Historic Property Survey Report 03-Yuba-70 (P.M. 7.5/7.7) Sound Wall McGowan Parkway Overcrossing |
| 008369 | Scott Williams | 2002 | Addendum to Negative Historic Property Survey Report 03-Yuba-70 (P.M. 7.5-7.7), Sound Wall McGowan Parkway Overcrossing |
| 008370 | Scott Williams, Amy Huberland, Lissa Westwood, Jarith Kraft, Denise Thomas, Erin Dwyer, and Andrew Hope | 2002 | Positive Archaeological Survey Report, Marysville to Oroville Freeway Project, Yuba and Butte Counties and Historic Properties Survey Report for the Marysville to Oroville Freeway Project, Yuba and Butte Counties, CA |
| 008370B | Scott A. Williams and Andrew Hope | 2002 | Historic Properties Survey Report for the Marysville to Oroville Freeway Project, Yuba and Butte Counties, CA |
| 008370C | | 2002 | Historic Architecture Survey Report for the Marysville-Oroville Freeway Project (Marysville Bypass) in Yuba and Butte Counties |
| 008619 | Cindy Arrington et al. | 2006 | Cultural Resources Final Report of Monitoring and Findings for the Qwest Network Construction Project, CA |
| 008909 | Melinda Peak | 2006 | Determination of Eligibility and Effect for the Woodbury Specific Plan Area, Yuba County, CA |
| 009757 | Carolyn Losee | 2008 | ATC Y005 “Olivehurst” |
| 010212 | Jeff Hanry | 2008 | Historic Property Survey Report 03-YUB-70 K.P. 13.52-21.89 (P.M. 8.40-13.60_ EA-03-4E4300 |
| 010794 | Sean Michael Jensen | 2011 | Lindhurst Development Project, 1 acre, Olivehurst, Yuba County, California |
| 011267 | Aniela Travers and Megan Ricks | 2013 | Olivehurst/CVL00527 107 9th Avenue, Olivehurst, Yuba County, CA 95901 |
| 011368 | Jennifer Thomas and Naomi Scher | 2013 | Cultural Resources Study of the Line-124A Replacement Project (MP 20.63-26.27), Sutter and Yuba Counties, California |
| 011514 | Carrie D. Wills, and Kathleen A. Crawford | 2014 | Cultural Resources Records Search and Site Visit for T-Mobile West, LLC Candidate SC06179A (70 & 65/1970 9th Avenue Olivehurst Yuba County California |
| 011746 | Carolyn Losee | 2013 | AT&T Sute CVL00527 (Olivehurst) |
| 011767 | Ed Palmeri | 2013 | Yuba County Industrial Park Wastewater Upgrade Project |
| 011770 | Wayne Bonner and Kathleen Crawford | 2013 | SC06179A (70 & 65/1970 9th Ave) |
| 012417 | Lance Rom and Jana Morehouse | 2015 | Archeological & Historic Architecture Records Review for the UP PTC Valley Subdivision |
| 012418 | Mark Salopek and Mary Cargill | 2015 | Yuba County PTC Sites |
| 013076 | Dana Supernowicz | 2018 | AT7T CVL0527-Olivehurst, 1942 9th Avenue |
| 013826 | Charlane Gross | 2016 | Cultural Resources Study for the Reclamation District 784 Drainage Project |
| 014248 | ICF Jones & Stokes | 2008 | Cultural Resources Inventory and Evaluation Report for the Proposed Palermo-East Nicolaus 115-kV Transmission Line Reconductoring Project, Butte, Sutter, and Yuba Counties, California |

### 3.1.2 Previously Recorded Cultural Resources

The NCIC did not identify any cultural resource previously documented within the APE. Nine cultural resources were identified within ¾-mile of the Project, all of which are historic infrastructure. Please see **Table 2** below for more information.

**Table 2. Previously Recorded Cultural Resources Within the Search Radius**

| Primary No. (P-58-#) | Trinomial CA-YUB- | Resource Description | Era | Distance / Direction from APE |
|---|---|---|---|---|
| 001283 | 001239H | A 123-foot tall water tower | Historic | 720 feet south of APE |
| 001288 | 001244H | A concrete slab foundation used as a loading dock. | Historic | 2,800 feet northwest of APE |
| 001354 | 001910H | Segments of the former Central Pacific Railroad | Historic | 870 feet west of APE |
| 001372 | 001911H | Segments of the Western Pacific Railroad | Historic | 110 feet west of APE |
| 001745 | | A corrugated metal Quonset hut with asbestos lined walls. | Historic | 2,400 feet west of APE |
| 001746 | | Twin-frame hangars | Historic | 2,600 feet west of APE |
| 001747 | | A two-story frame building | Historic | 2,400 feet west of APE |
| 003423 | 002108H | The double-circuit Palermo-East Nicolaus Transmission Line supported by lattice towners. | Historic | 200 feet east of APE |
| 003424 | 002109H | The Palermo-Rio Oso No. 2 Transmission Line | Historic | 200 feet east of APE |

### 3.1.3 Other Sources Consulted

Local inventories, historic maps, and all available Bureau of Land Management, General Land Office (GLO) records and plats relevant to the APE were reviewed. In the 1859 GLO, a designation of “Reed’s Dry Creek” passes northeast-southwest direction south of the Project. “Marysville Road” is also noted south of the APE with two parallel alignments of roads entering the project vicinity from the southeast. Areas of land on both sides of the Reed’s Creek are noted as “Land level, Soil 2nd rate”. A sheep ranch is also noted within the immediate Project area. Historic USGS Topographic maps (1911, 1953, 1959, 1966, and 1974) and aerials (1947, 1958, 1973, and 1984) depicting the APE were also reviewed for the presence of historic features. The Project area and surrounding areas were used for agriculture prior to the 1940s, with residential development and the current street network fully established by the late 1940s. Dense housing similar to current conditions is present by the 1950s. The area remains residential surrounded by agricultural activities to the current day.

## 3.2 Native American Consultation

*Native American Heritage Commission Coordination*
On March 11, 2024, a letter and a map depicting the Project vicinity was sent to the NAHC, asking the NAHC commission to review the Sacred Lands File (SLF) for any Native American cultural resources that might be affected by the Project (**Appendix C**). The request to the NAHC seeks to identify any Native American cultural resources within or adjacent to the Project area. A list of

Native American individuals who might have information or concerns about the Project was also requested. On March 14, 2024, Pracilla Torres-Fuentes, Cultural Resources Analyst, informed via email that a review of the sacred lands file failed to indicate the presence of Native American cultural resources within the Project area (**Appendix C**).

*CEQA Assembly Bill 52 (AB 52) - PRC 21074 Native American Consultation*
Initial project notification letters, required per CEQA Assembly Bill 52 (AB 52) - PRC 21074, were emailed on March 27, 2024, to representatives of the following Tribes:

- Estom Yumeka Maidu Tribe
- Pakan'yani Maidu
- Tsi Akim Maidu
- United Auburn Indian Community
- Wilton Rancheria
- Nevada City Rancheria Nisenan Tribe

No responses have been received to date (**Appendix C**). As no responses have been received, no additional consultation under PRC 21074 is required.

*Section 106 Native American Consultation*
The USACE, as the lead federal agency, will conduct Native American consultation as part of their NHPA Section 106 responsibilities. Should this consultation result in new information or avoidance/minimization/mitigation measures, this report will be updated.

## 3.3 Field Survey Methods

A pedestrian surface survey of the APE was completed on May 17, 2024, by Dokken Engineering archaeologist Michelle Campbell. The surface survey was conducted via linear transects along the Project alignment. All APE field conditions were fully recorded in field notes. During the survey, exposed subsurface cuts were examined for indications of surface or subsurface cultural resources, soil color change, and/or staining that could indicate past human activity or buried deposits.

## 3.4 Field Inventory Results

During the pedestrian survey, surface visibility within the APE varied with no visibility available in the paved portions of the APE and 0-20% visibility on gravel shoulders and driveways. The roadside ditches were generally heavily vegetated with 20-50%. visibility Particular attention was paid to de-vegetated surface exposures within the ditches, as well as any rodent burrows and other exposed areas where the presence of artifacts, archaeological features, or anthropogenic soils are more likely to be observed. Photographs documenting the APE were taken throughout the inventory and are included in **Appendix D**.

One built environment resource was identified during the pedestrian survey: the Clark Lateral Canal. This resource occurs outside of USACE jurisdictional areas at crossings of Clark Slough within the APE. No indigenous resources were identified.

### 3.4.1 Clark Lateral Canal Segment (*primary number forthcoming, outside of USACE jurisdictional areas*)

The segment of the Clark Lateral Canal within the APE is a north-south earthen ditch situated east of and parallel to the Central Pacific Railroad along the western edge of the community of

Olivehurst. Clark Slough, which runs east-west through Olivehurst, drains into this canal between 10th and 11th Avenue. Only the segment of the Clark Lateral Canal within the APE was recorded, as evaluating the entire linear resource is beyond the scope of the current Project.

As observed during the field survey for the current study on May 17, 2024, the canal segment within the APE is a narrow earthen v-ditch of variable width and depth with steeply sloped banks. Dimensions of this segment measure 5-18ft bottom width, 15-34ft top width, 5-25ft western berm height, and 7-25ft eastern berm height. No formalized embankments are present. A street crossing at 7th Avenue occurs and a corrugated metal pipe culvert is present. No other features are present within the recorded segment. Complete recordation is documented in **Appendix E** DPR Site Record.

Character defining features of the canal segment are its alignment; materials; height, depth, and width; and cross-section shape. The 7th Avenue crossing culvert is considered a non-contributing feature of the canal, as it is associated with the road crossing and not the ditch function to collect sheet flow to protect the airport. The resource boundaries for the segment recorded for this Project within the APE extent to the northern end of the Project at 2nd Avenue to the southern end of the Project at 11th Avenue.

The airport, directly west of the APE, was constructed in the early 1940's and, at presumably the same time, the canal was constructed, most likely, by the USACE but it may have been constructed by Yuba County and City of Marysville. The canal historically directed floodwaters away from the airport south to WPIC but is currently an unmaintained infrastructure of RD 784. There is no listing of the canal in the in the BERD or the OHP Directory of Properties in the Historic Property Data File for Yuba County.



**Image 1.** Overview of Clark Lateral Canal (vegetated ditch). Railroad grade elevated behind and above the canal. Looking southwest.



**Image 2.** Overview of Clark Lateral Canal (vegetated ditch). Looking northwest.




**Image 3.** Overview of culvert at 7th Avenue crossing of Clark Lateral Canal. Looking west.

# 4.0 DETERMINATIONS OF ELIGIBILITY

Because the Project involves Federal permitting, environmental studies must comply with both Section 106 of the NHPA of 1966 (36 CFR 800, updated 2004), and CEQA (PRC, Section 21000 et seq., updated 2005). These laws mandate that the effects of an undertaking on historic properties/historical resources must be considered. All findings under Section 106 of the NHPA apply to the California statues and are largely identical in their application. Cultural resources that meet the eligibility requirements for listing on the NRHP are *a priori* eligible for the CRHR. Historical resources determined eligible for listing in the CRHR may not be eligible for NRHP listing but may still be afforded some limited protection under CEQA.

## 4.1 National Register of Historic Places (NRHP) Evaluation Criteria

The NRHP was established by the NHPA as "an authoritative guide to be used by federal, State, and local governments, private groups and citizens to identify the Nation's cultural resources and to indicate what properties should be considered for protection from destruction or impairment" (CFR 36 CFR 60.2).

The NRHP recognizes properties that are significant at the national, state, and local levels. To be eligible for listing in the NRHP, a resource must be significant in American history, architecture, archaeology, engineering, or culture. Districts, sites, buildings, structures, and objects of potential significance must also possess integrity of location, design, setting, materials, workmanship, feeling, and association. A property is eligible for the NRHP if it is significant under one or more of the following criteria:

A. That are associated with events that have made a significant contribution to the broad patterns of our history; or
B. That are associated with the lives of significant persons in or past; or
C. That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
D. That have yielded or may be likely to yield, information important in history or prehistory.

In evaluating the National Register's significance of properties, Criterion D is most frequently applied to archaeological sites. Critical to addressing eligibility under Criterion D is identification of the kinds of important information that are sought and demonstration that the property is likely to contain that information. In National Register Bulletin 36, *Guidelines for Evaluating and Registering Archaeological Properties* (Little et al., 2000), a five-step process for determining the research potential of an archaeological site is presented (from Caltrans 2009:195):

1. Determine the property's structure and content, and categories of data it may contain.
2. Identify the appropriate historic context by which to evaluate it.
3. Identify important research themes and questions that the data it contains may be able to address.
4. Considering the property's integrity, assess whether the data it contains are of sufficient quality to address these important research themes and questions.
5. Identify the important information that an archaeological study of the property is likely to contain.

## 4.2 California Register of Historical (CRHR) Criteria Evaluation

The CRHR is a state program for use by state and local agencies, private groups and citizens to identify, evaluate, register, and protect California's historical resources. Established in 1992, the criteria and procedures for CRHR eligibility parallel those of the NRHP. In order for a resource to be designated for CRHR inclusion, it must retain enough of its historic character or appearance (integrity) to be recognizable as a historical resource, have the capacity to convey the reason for its significance, and must meet at least one of the following four criteria:

1. Associated with events that have made a significant contribution to the broad patterns of local or regional history or the cultural heritage of California or the United States;
2. Associated with the lives of persons important to national, California or local history;
3. Embody the distinctive characteristics of a type, period, region or method of construction or represents the work of a master or possesses high artistic values; or
4. Have yielded, or have the potential to yield, information important to the prehistory or history of the nation, California or the local area.

## 4.3 Clark Lateral Canal Segment (Primary number forthcoming)

### *NRHP Criterion A/CRHR 1*

The resource consists of an earthen ditch constructed to drain floodwater. The construction of the canal appears to have been necessitated by development of the airport and has functioned as a drainage canal since that time for different water agencies. While flood management is a prominent theme in the local and regional history of the area, this canal does not appear to be constructed as part of a project for flood protection of the region nor does it appear to be an integral feature in a flood control system associated with the region. As the canal cannot be associated with flood management that contributed prominently to the region, it does not appear eligible under NRHP Criterion A/CRHR 1.

### *NRHP Criterion B/CRHR 2*

Through background records research, including records on file at the County and the Yuba Water Agency, the canal could not be confidently associated to any agency, owner/operator, or other person considered a significant person in regional or national history. Therefore, it does not appear significant under NRHP Criterion B/CRHR 2.

### *NRHP Criterion C/CHRR 3*

The only feature of the site is the ditch. This earthen ditch is quite typical of simple canal construction; however, such a feature was ubiquitous as it was a practical and minimal type of construction, a practice which continues through to present day. As there are no other features to assess and as the canal exhibits no unique, artistic, or distinctive characteristics of a particular period, the site does not appear eligible under NRHP Criterion C/CRHR 3.

### *NRHP Criterion D/CRHR 4*

The only component of the site is the canal. The canal itself provides no data potential beyond its location. As no artifacts were identified in association with the canal and as the canal itself does not have the potential to yield important information, the site does not appear eligible under NRHP Criterion D/CRHR 4.

It is recommended that the resource is not eligible per 36 CFR § 800.4(c)(1).

# 5.0 FINDING OF EFFECT

Due to the nature of the Project activities to install drainage connections to the Clark Lateral Canal, the canal will be impacted during construction activities. Project activities are located within limited discrete portions of the resource.

One built environment resource, the Clark Lateral Canal, was evaluated for NRHP and CRHR eligibility as part of this inventory report. The property is recommended to be not eligible for the NRHP and CRHR. The resource, therefore, is not a historic property for the purposes of Section 106 compliance, nor a historical resource for the purpose of complying with CEQA. The evaluated property was documented using California DPR 523 form sets (see **Appendix E**).

As no historic properties are present within the APE, a finding of no historic properties affected is recommended for this undertaking, pursuant to 36 CFR § 800.4(d).

# 6.0 RECOMMENDATIONS AND CONCLUSIONS

The proposed Project involves constructing drainage infrastructure and establishing a multi-modal transportation network along 13 road segments in the community of Olivehurst. To identify historic properties and historical resources that might be affected by the Project, a review of records on file at the NCIC, archival research, Native American consultation, and a pedestrian surface survey were conducted. The buried archaeological site potential was assessed through landform analysis, geologic maps, and opportunistic visual inspection of exposed subsurface soils within the APE during pedestrian survey.

As a result of the investigatory efforts, one built environment resource was identified within the APE. This resource is located outside of USACE jurisdictional areas of crossing of Clark Slough within the APE. Project analysis and evaluation concluded that property was not eligible for the NRHP/CRHP. Buried site sensitivity is considered low for both indigenous and historic-era resources as Pleistocene age soils are present which predate indigenous occupation of the Project vicinity and, also, that historic-era deposit activities have low probability to occur adjacent to the roadway in the frontage portion of the property. A finding of no historic properties affected is recommended for this undertaking, pursuant to 36 CFR § 800.4(d).

As the USACE will conduct their own Native American consultation as part of their Section 106 of the NHPA responsibilities, should additional information which identifies the presence of indigenous cultural resources within the APE be discovered, this report will be updated with the results of those efforts. This report will also be updated with any additional or modified avoidance/minimization/mitigation measures as a result of Native American consultation.

While no indigenous or historic-era resources are noted within the APE, and the potential of encountering intact cultural resources is *low*, the following practices should be implemented in case cultural material is encountered:

**CR-1:** If previously unidentified cultural materials are unearthed during construction, work shall be halted in that area until a qualified archaeologist can assess the significance of the find and develop a plan for documentation and removal of resources if necessary. Additional archaeological survey will be needed if project limits are extended beyond the present survey limits.

**CR-2:** Section 5097.94 of the PRC and Section 7050.5 of the California Health and Safety Code protect Native American burials, skeletal remains and grave goods, regardless of age and provide method and means for the appropriate handling of such remains. If human remains are encountered, work should halt in that vicinity and the county coroner should be notified immediately. At the same time, an archaeologist should be contacted to evaluate the situation. If the human remains are of Native American origin, the coroner must notify the NAHC within twenty-four hours of such identification. CEQA details steps to be taken if human burials are of Native American origin.

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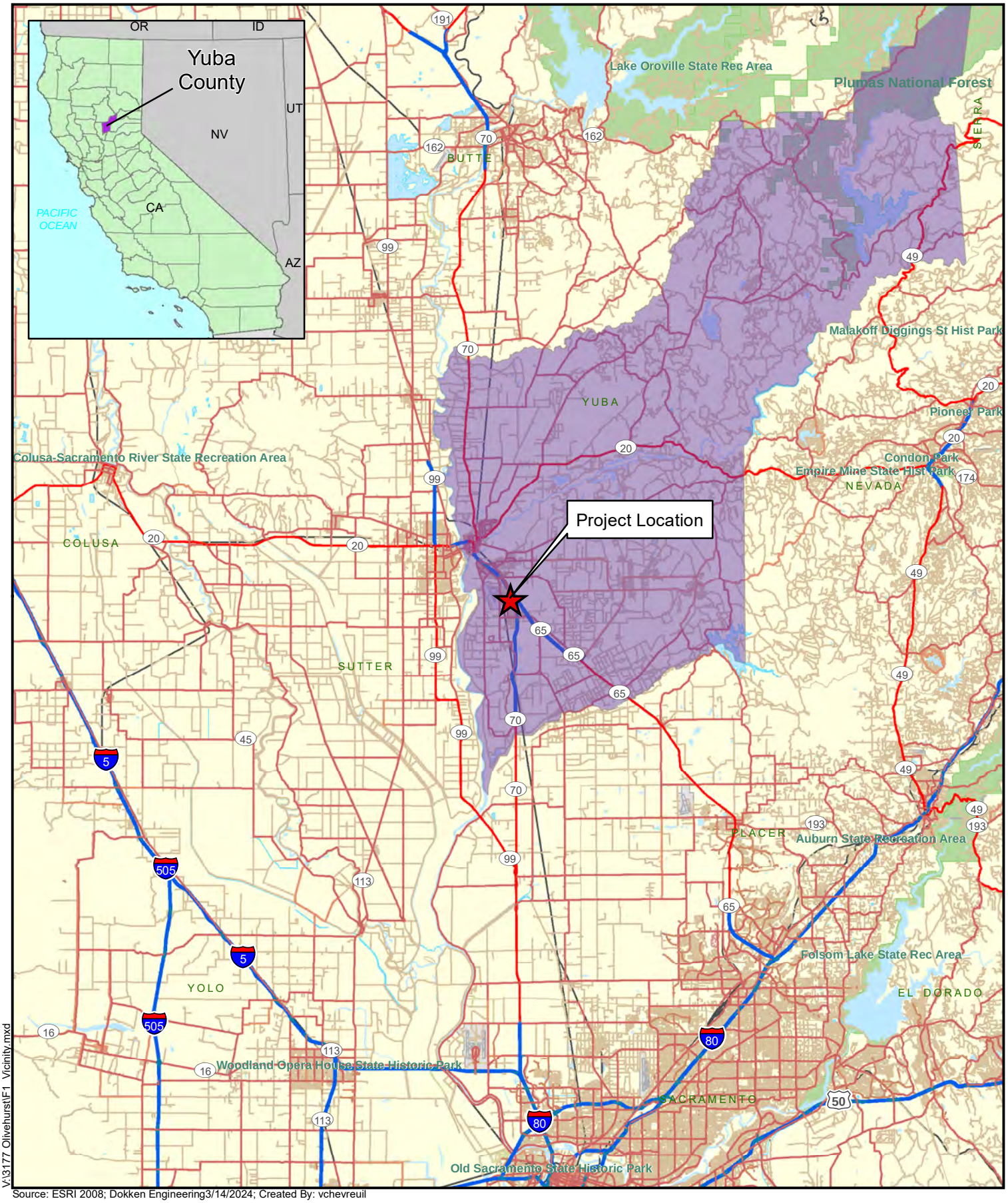
Yuba County
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# APPENDIX A:

# Map Figures



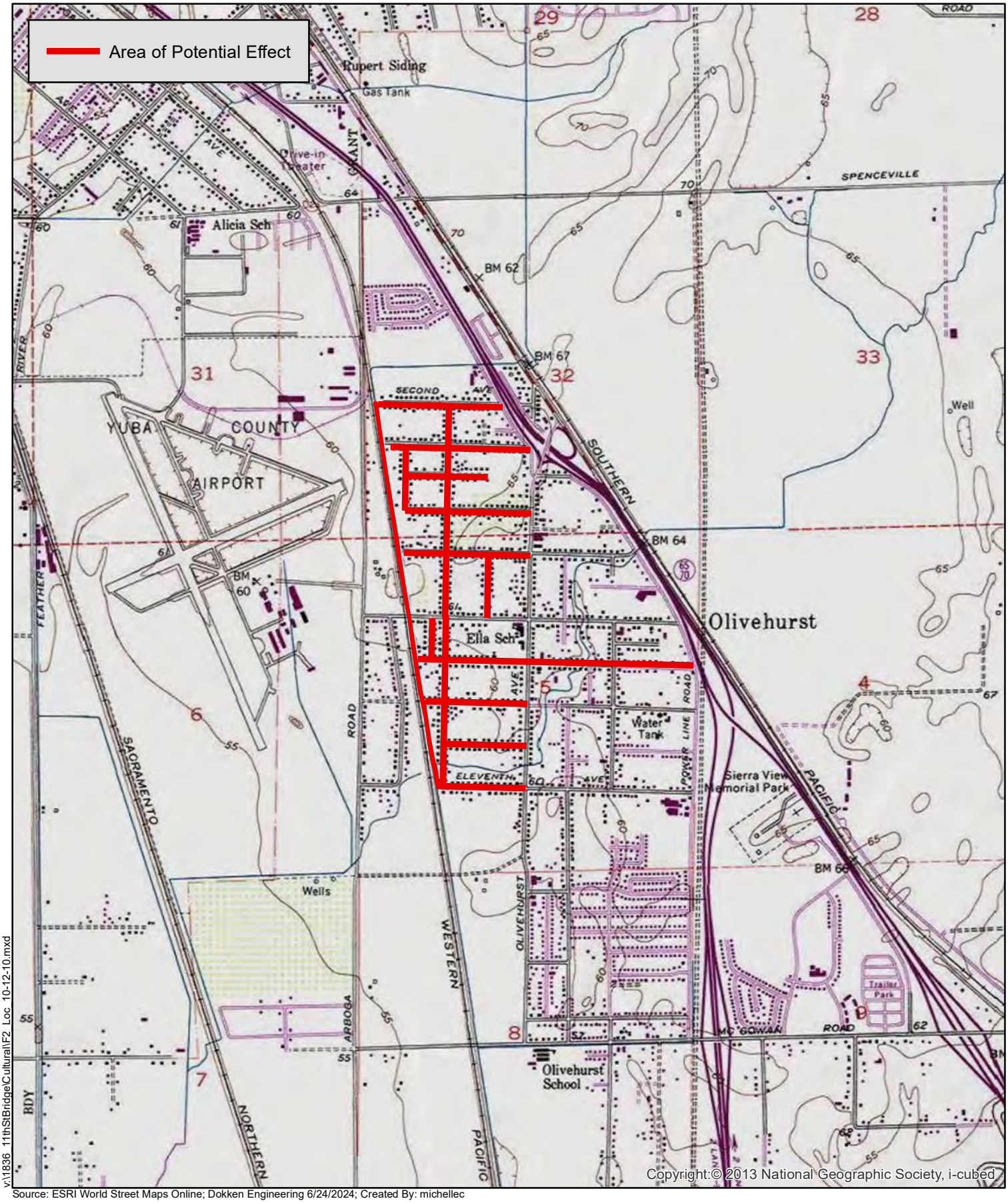

Source: ESRI 2008; Dokken Engineering3/14/2024; Created By: vchevreuil

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0 5 10 15 Miles

**FIGURE 1**
**Project Vicinity**

Olivehurst Roadway Climate Resiliency Project
Yuba County, California




v:\1836 11thStBridge\Cultural\F2 Loc 10-12-10.mxd

Source: ESRI World Street Maps Online; Dokken Engineering 6/24/2024; Created By: michellec

0 0.5 1 Mile

**FIGURE 2**
**Project Location**
USGS 7.5-minute quad: Olivehurst, CA
Olivehurst Roadway Climate Resiliency Project
Yuba County, California

Area of Potential Effects
Jurisdictional Drainage

Melody Rd
Mhp Rd
Chestnut Rd
Private Rd
Lindhurst Ave
2nd Ave
3rd Ave
4th Ave
5th Ave
6th Ave
7th Ave
8th Ave
9th Ave
10th Ave
11th Ave
Page 2
Page 3
Page 4
Page 5
Page 6
Page 7
Page 8
Page 9
Page 10
Page 11
Page 12
Page 13
Page 14
Pvt Dr
Powerline Rd
Clark Slough
Turpen St
Olivehurst Ave
Okmulgee Ave
Clark Lateral Canal
Pacific Ave
Arboga Rd
Western Ave
Ardmore Ave
Fleming Way
Summer St
Meadow Ct
Sky Harbor Dr
Skyway Dr
70
65

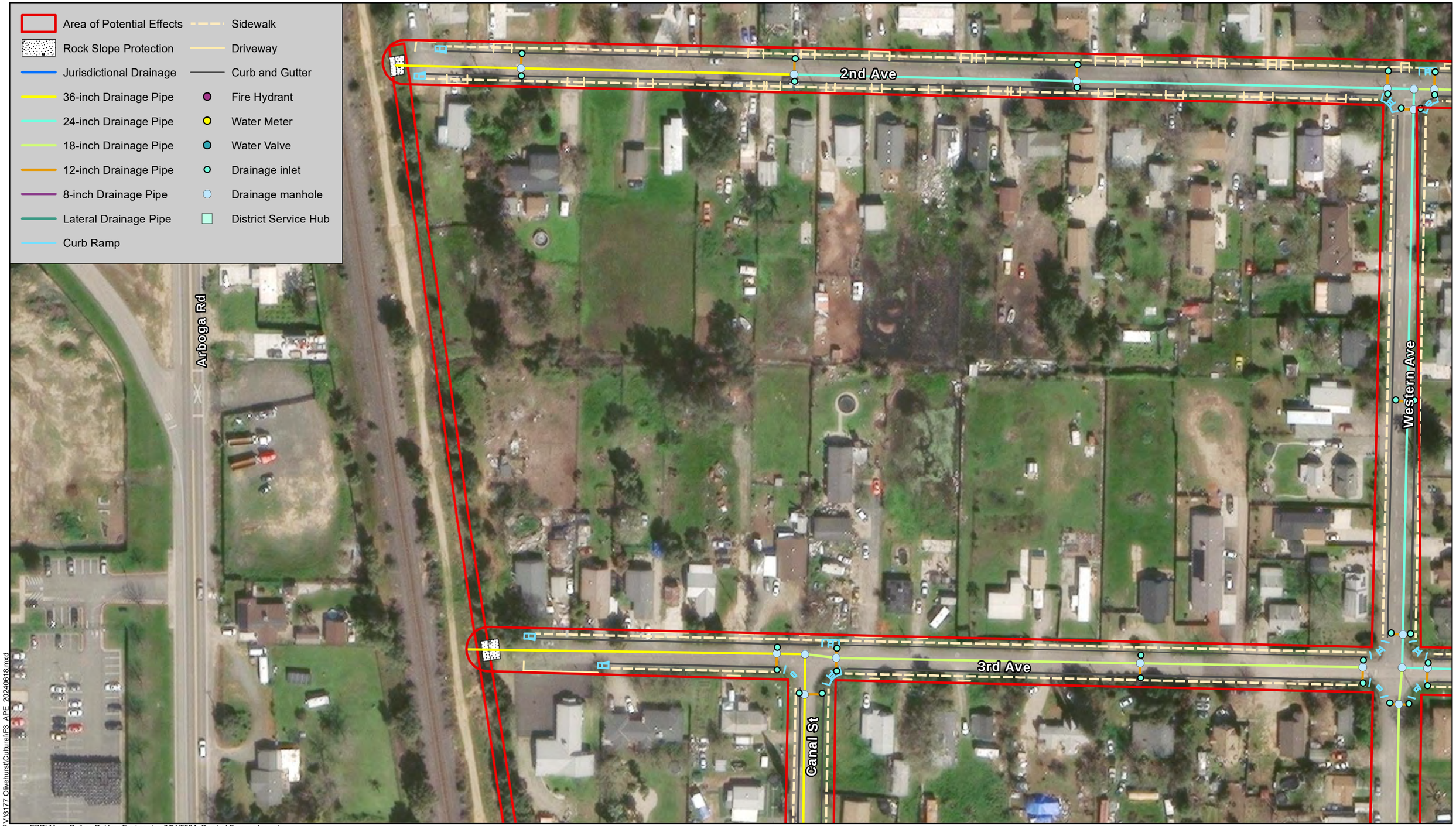
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Source: ESRI Maps Online; Dokken Engineering 6/21/2024; Created By: gzachoszaj

0 1,000 2,000 3,000 4,000 Feet




**FIGURE 3**
**Area of Potential Effect**
Page 1 of 14
Olivehurst Roadway Climate Resiliency Project
Yuba County, California




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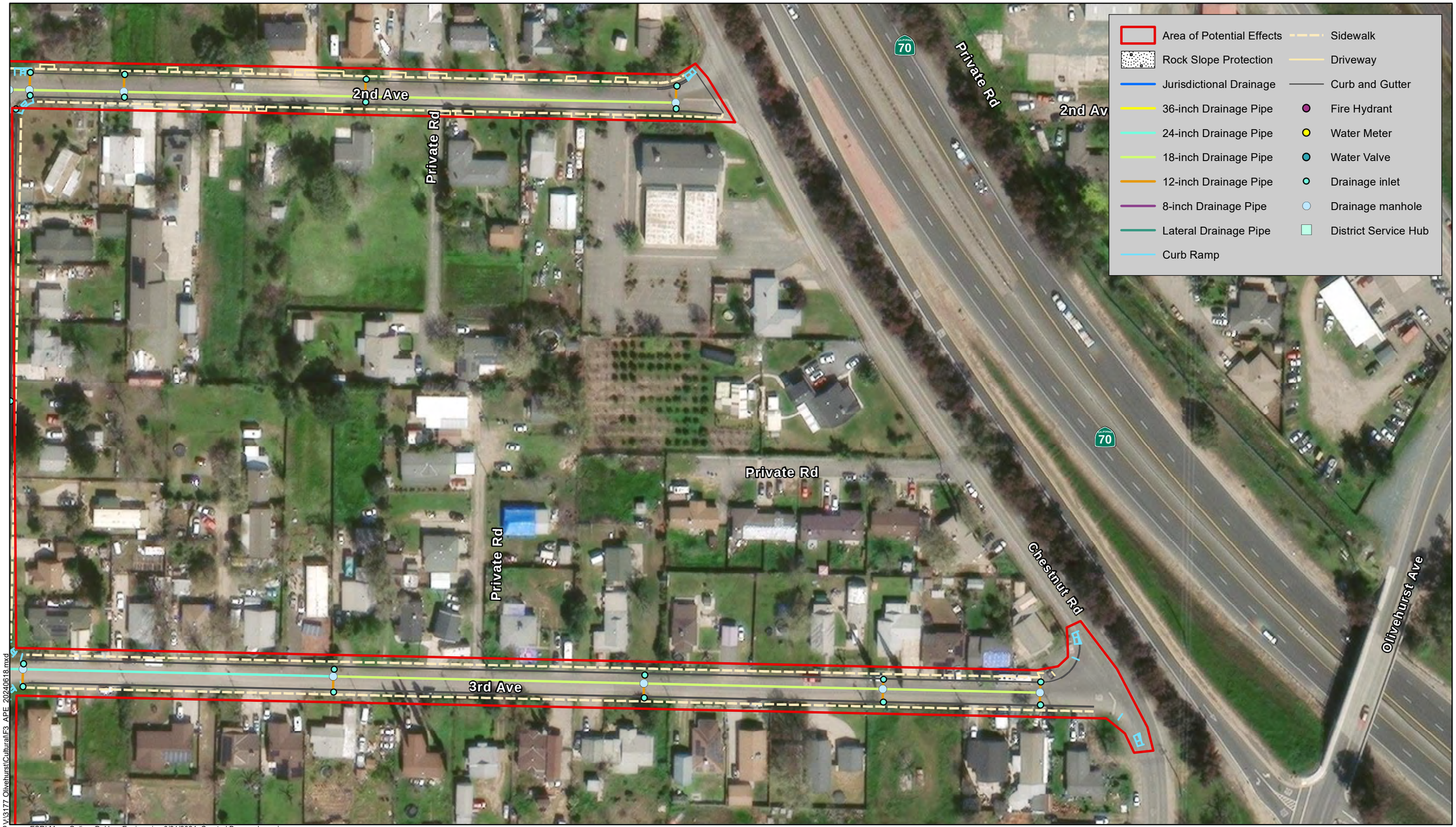
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**FIGURE 3**
**Area of Potential Effect**

Olivehurst Roadway Climate Resiliency Project
Yuba County, California




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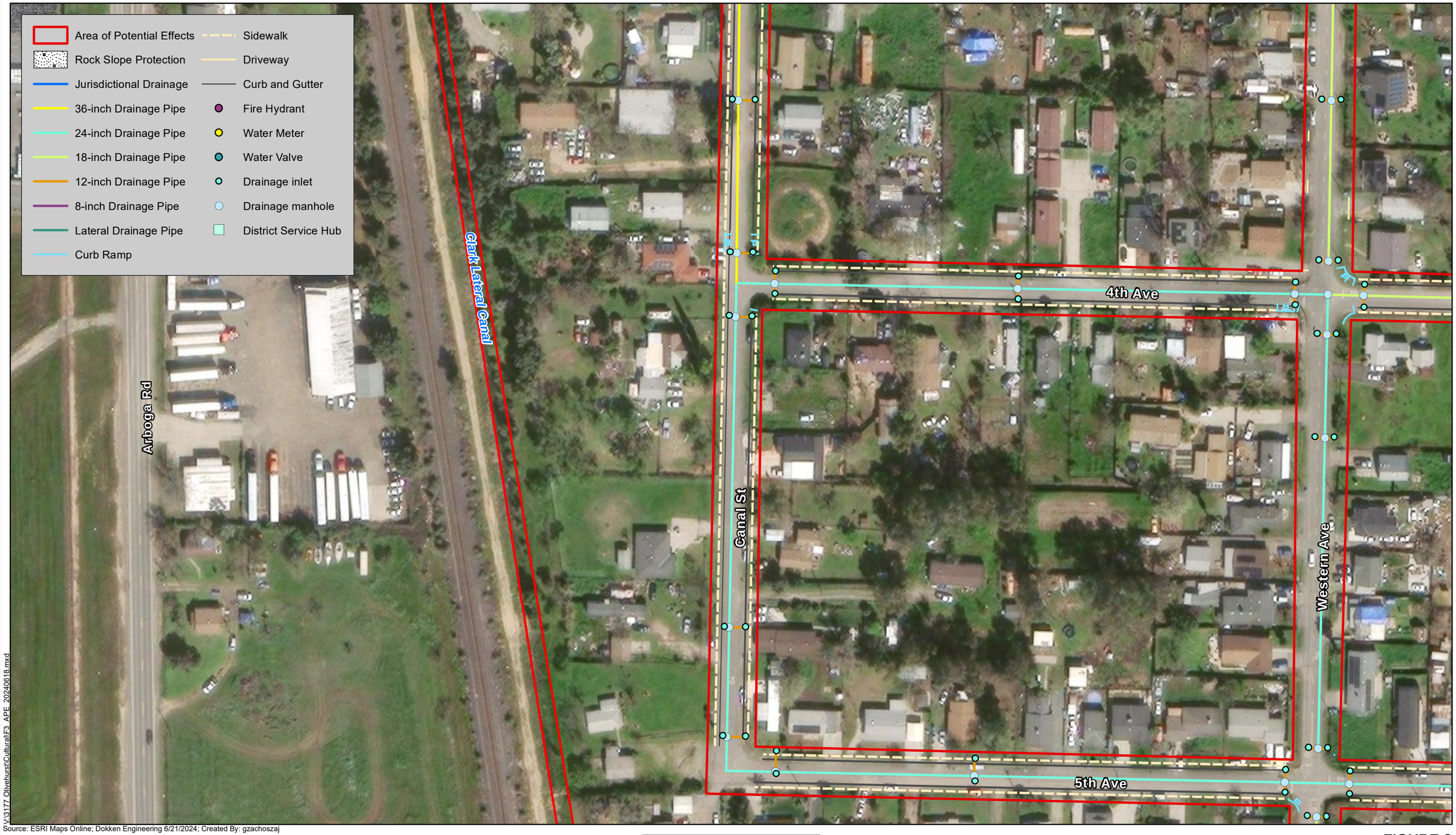
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**FIGURE 3**
**Area of Potential Effect**

Olivehurst Roadway Climate Resiliency Project
Yuba County, California




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**FIGURE 3**
**Area of Potential Effect**

Olivehurst Roadway Climate Resiliency Project
Yuba County, California




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**FIGURE 3**
**Area of Potential Effect**

Olivehurst Roadway Climate Resiliency Project
Yuba County, California




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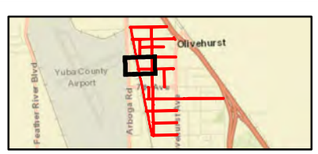
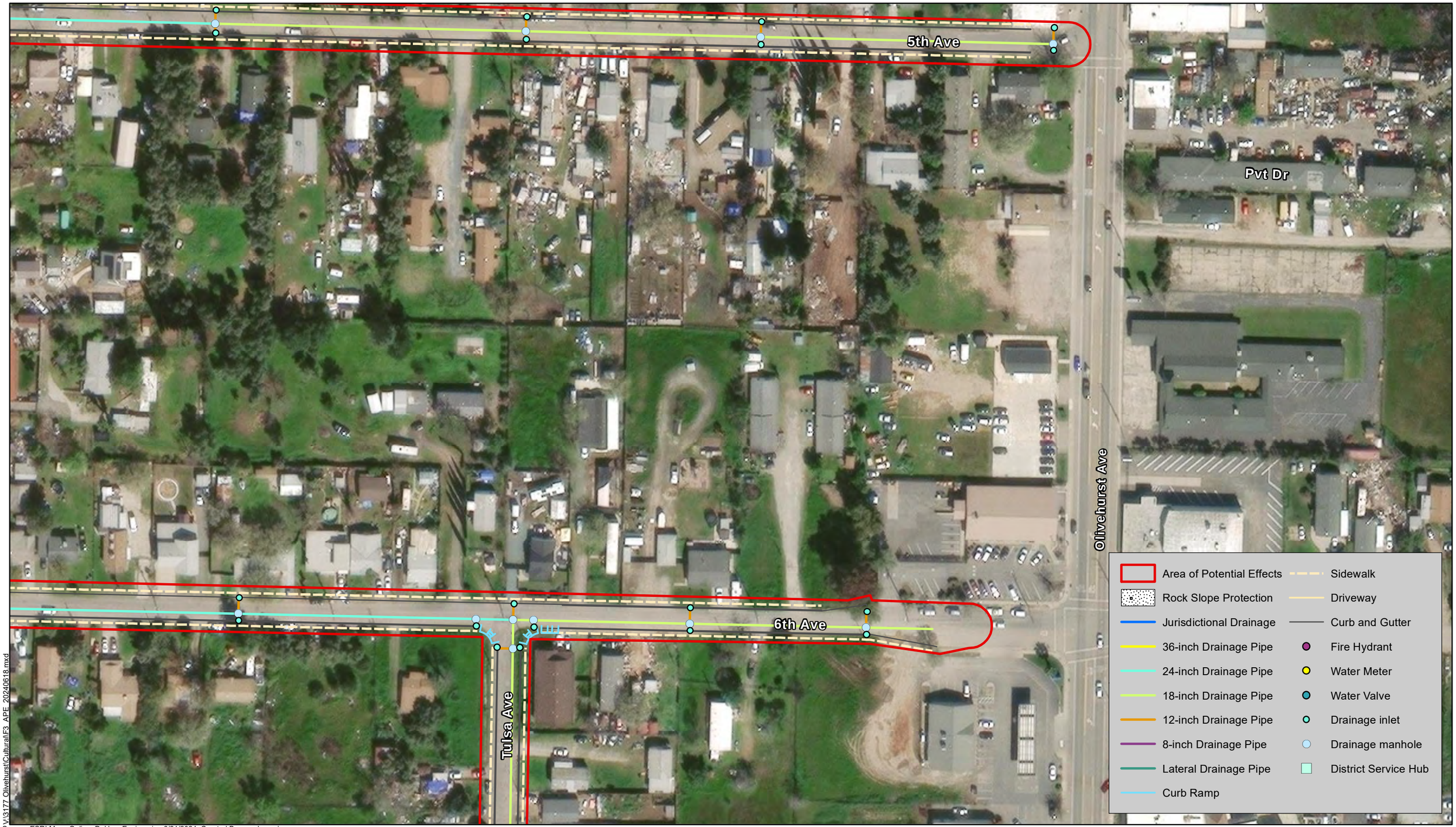



**FIGURE 3**
**Area of Potential Effect**

Olivehurst Roadway Climate Resiliency Project
Yuba County, California




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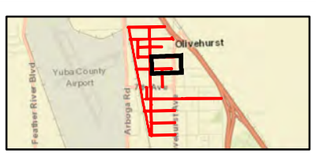
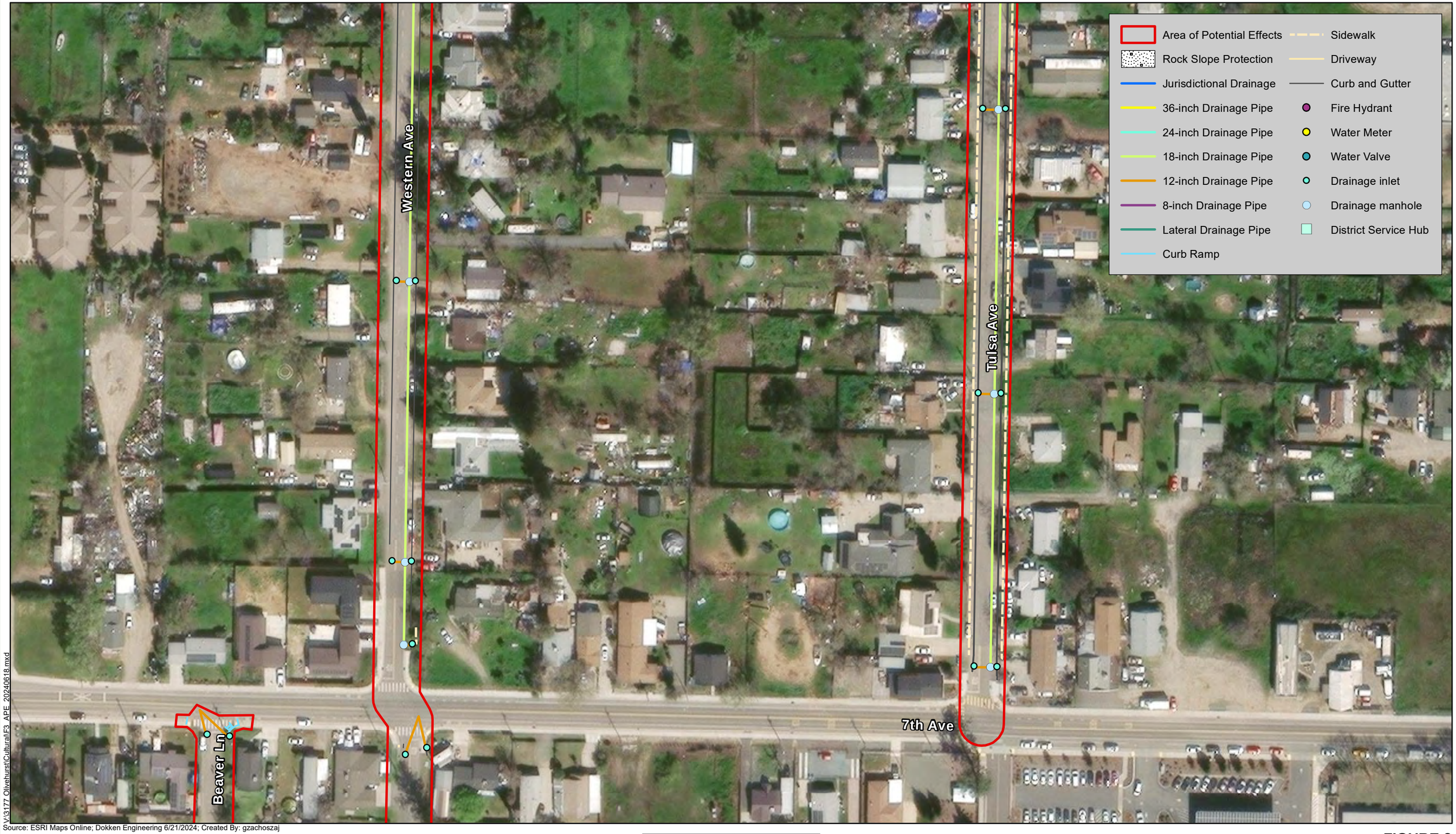



**FIGURE 3**
**Area of Potential Effect**

Olivehurst Roadway Climate Resiliency Project
Yuba County, California




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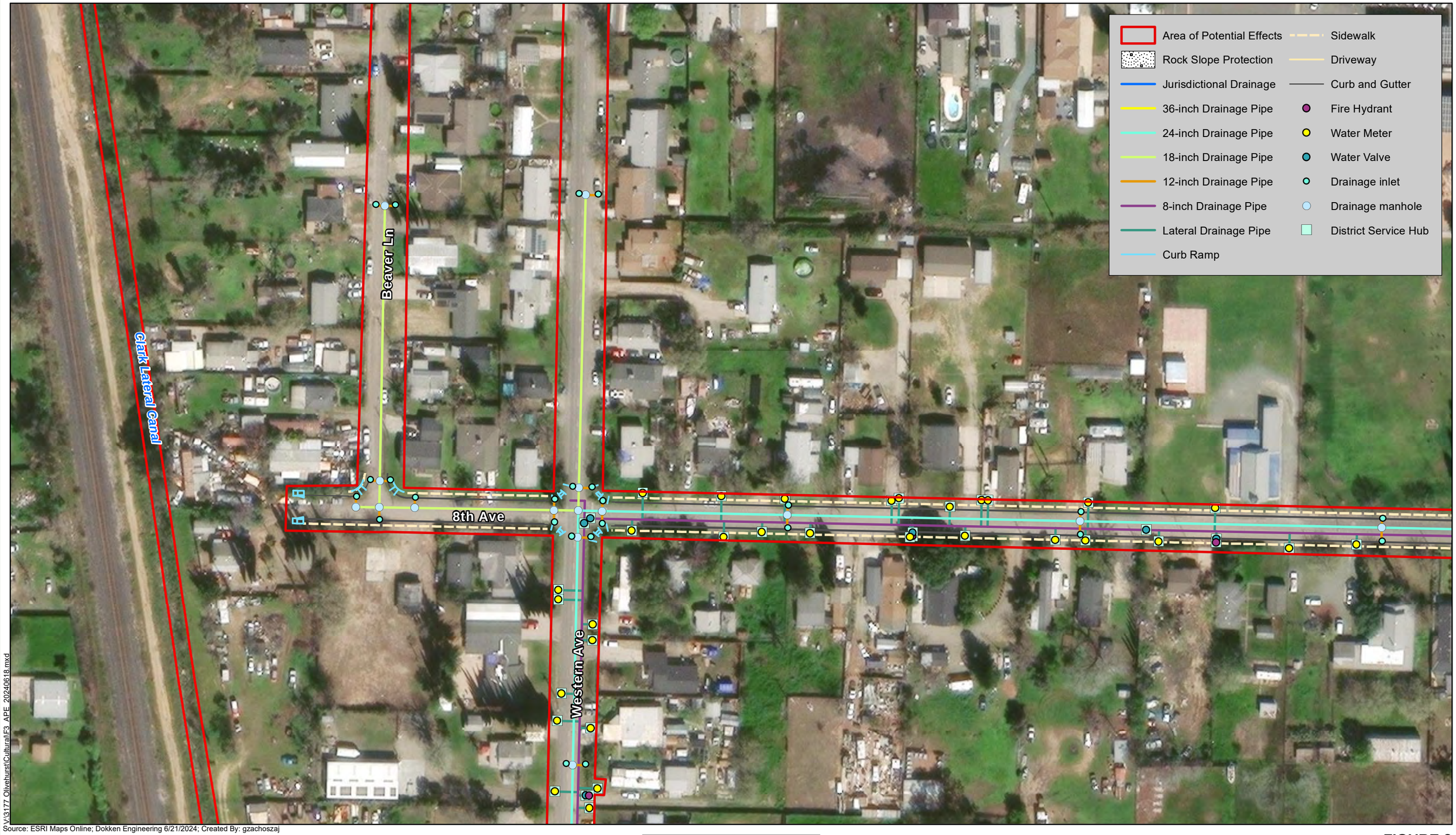
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**FIGURE 3**
**Area of Potential Effect**

Olivehurst Roadway Climate Resiliency Project
Yuba County, California




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**FIGURE 3**
**Area of Potential Effect**

Olivehurst Roadway Climate Resiliency Project
Yuba County, California

Area of Potential Effects
Rock Slope Protection
Jurisdictional Drainage
36-inch Drainage Pipe
24-inch Drainage Pipe
18-inch Drainage Pipe
12-inch Drainage Pipe
8-inch Drainage Pipe
Lateral Drainage Pipe
Curb Ramp
Sidewalk
Driveway
Curb and Gutter
Fire Hydrant
Water Meter
Water Valve
Drainage inlet
Drainage manhole
District Service Hub

Pvt Dr
Okmulgee Ave
Pvt Dr
Pvt Dr
Olivehurst Ave
Clark Slough
8th Ave
Pvt Dr
Pvt Dr
Pvt Dr
Pvt Dr
Pvt Dr

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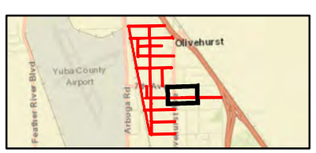
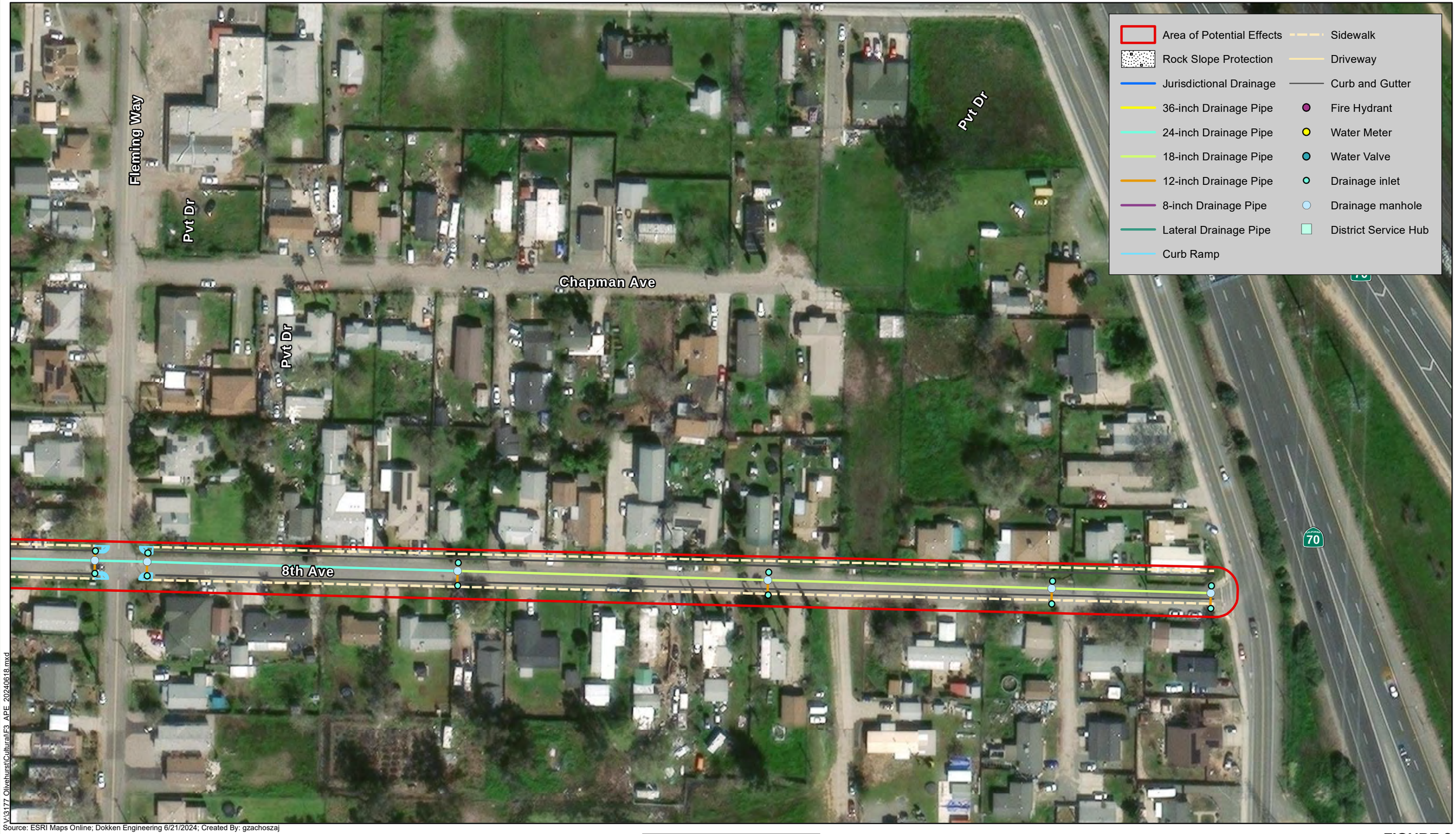



**FIGURE 3**
**Area of Potential Effect**
Page 10 of 14
Olivehurst Roadway Climate Resiliency Project
Yuba County, California




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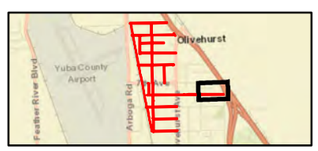



**FIGURE 3**
**Area of Potential Effect**

Olivehurst Roadway Climate Resiliency Project
Yuba County, California




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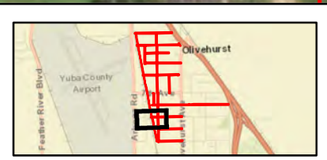



**FIGURE 3**
**Area of Potential Effect**
Page 12 of 14
Olivehurst Roadway Climate Resiliency Project
Yuba County, California




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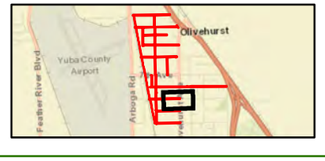
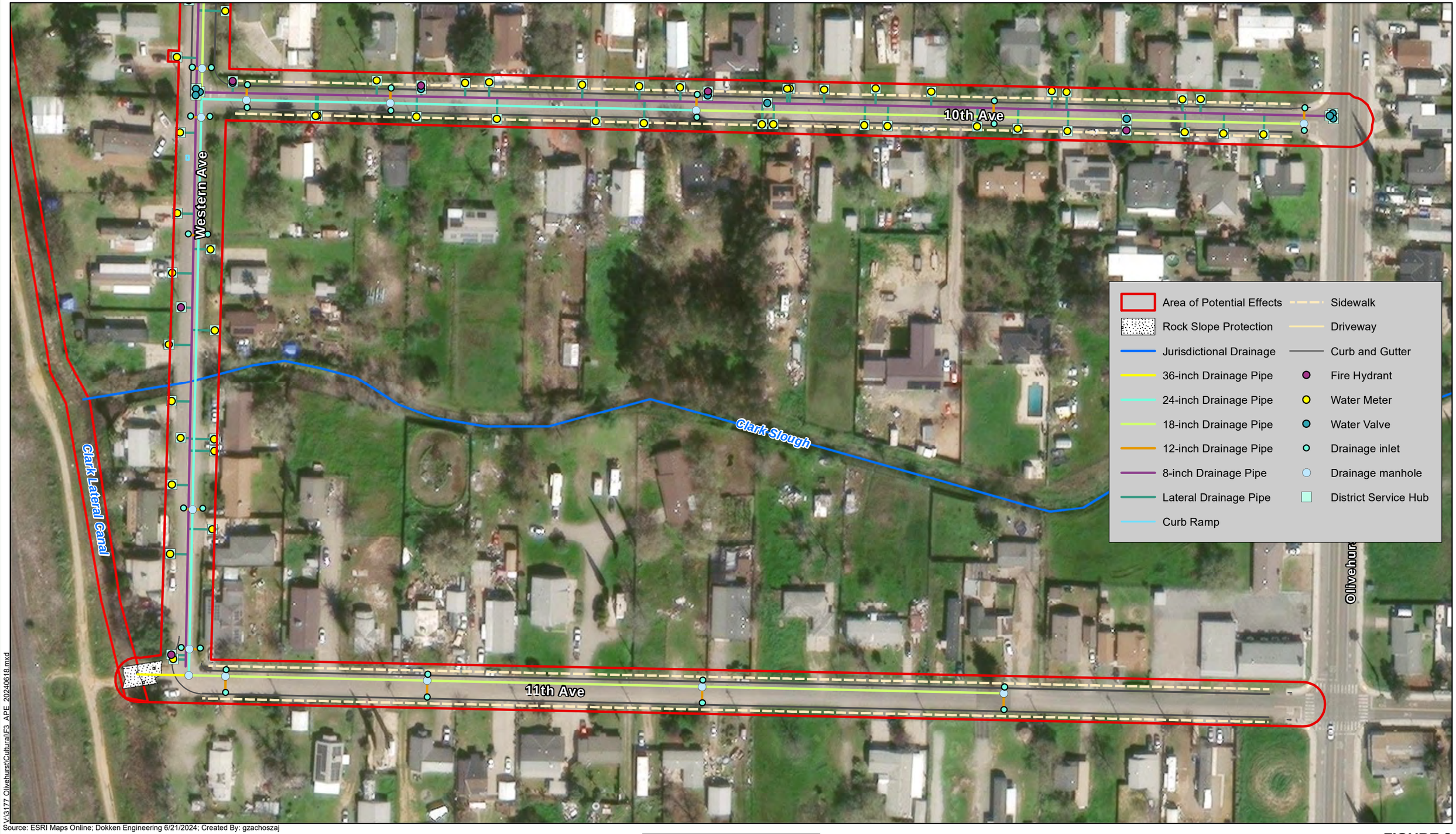



**FIGURE 3**
**Area of Potential Effect**
Page 13 of 14
Olivehurst Roadway Climate Resiliency Project
Yuba County, California




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Source: ESRI Maps Online; Dokken Engineering 6/21/2024; Created By: gzachoszaj

0 100 200 300 400 500 Feet




**FIGURE 3**
**Area of Potential Effect**

Olivehurst Roadway Climate Resiliency Project
Yuba County, California

**APPENDIX B:**

**Record Search Results**
**(Not for Public Disclosure)**

# INTENTIONALLY OMITTED

# APPENDIX C:

# Native American Consultation

# Sacred Lands File & Native American Contacts List Request

**Native American Heritage Commission**
1550 Harbor Blvd, Suite 100
West Sacramento, CA 95691
916-373-3710
916-373-5471 – Fax
nahc@nahc.ca.gov

*Information Below is Required for a Sacred Lands File Search*

**Project:** Olivehurst Roadway Climate Resiliency Project

**County:** Yuba County

**USGS Quadrangle Name:** Olivehurst, CA

**Township:** 15N; 14N **Range:** 4E **Section(s):** 32; 05

**Company/Firm/Agency:** Dokken Engineering

**Street Address:** 110 Blue Ravine Road, Suite 200

**City:** Folsom **Zip:** 95630

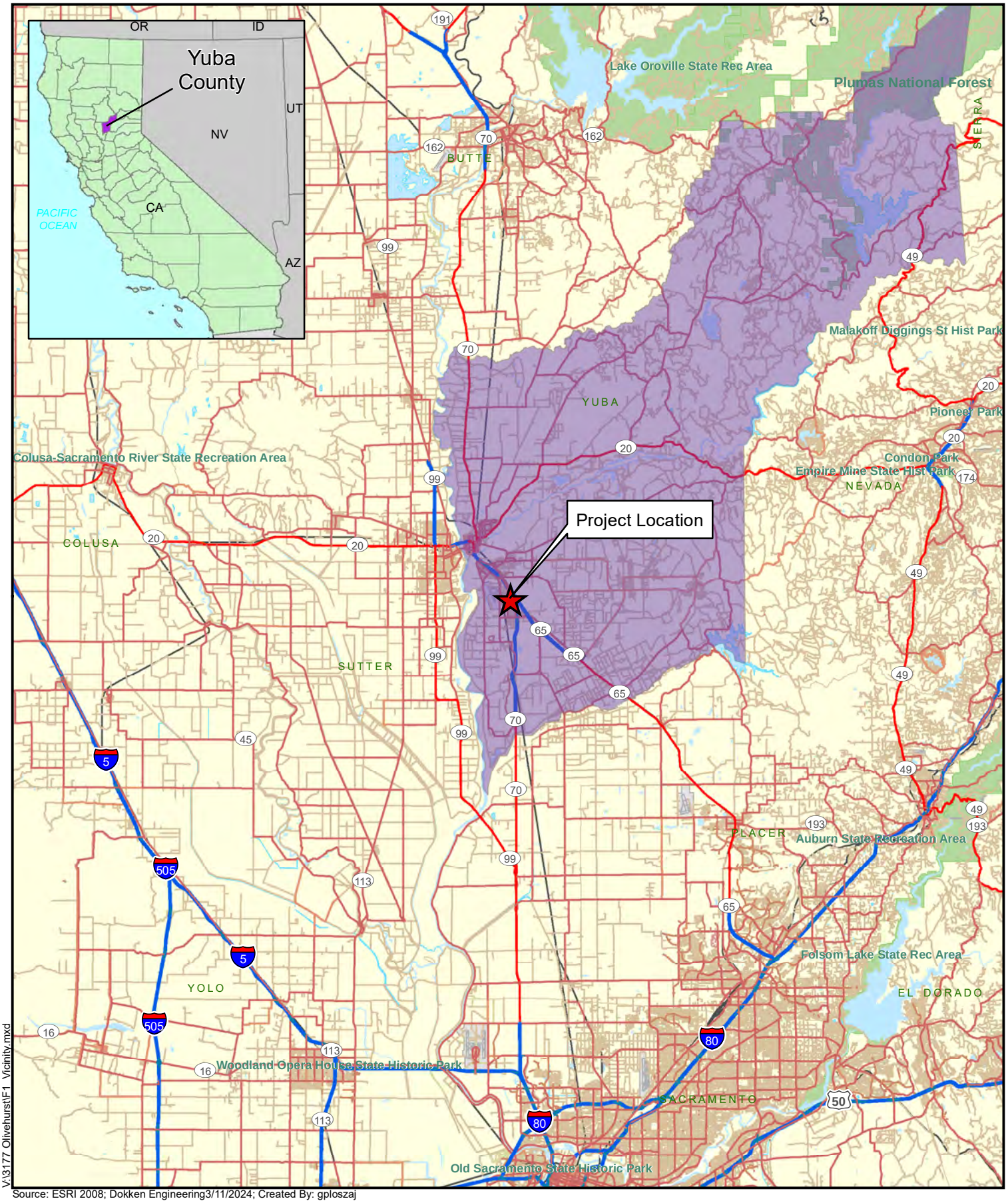
**Phone:** 916-858-0642

**Fax:** 916-858-0643

**Email:** gploszaj@dokkenengineering.com

**Project Description:**

Yuba County proposes to create multi-modal transportation facilities to promote walking and bicycling. This project encompasses the streets of: 2nd Ave, 3rd Ave., 4th Ave., 5th Ave., 8th Ave., Canal St, Beaver Ln., Tulsa Ave. The project also includes the following segments: 6th Ave. from West End to Olivehurst Ave., 9th Ave. from Western Ave. to Olivehurst Ave., 10th Ave from Western Ave to Olivehurst Ave., 11th Ave. from Western Ave. to Olivehurst Ave., and Western Ave. from 2nd Ave. to 11th Ave.

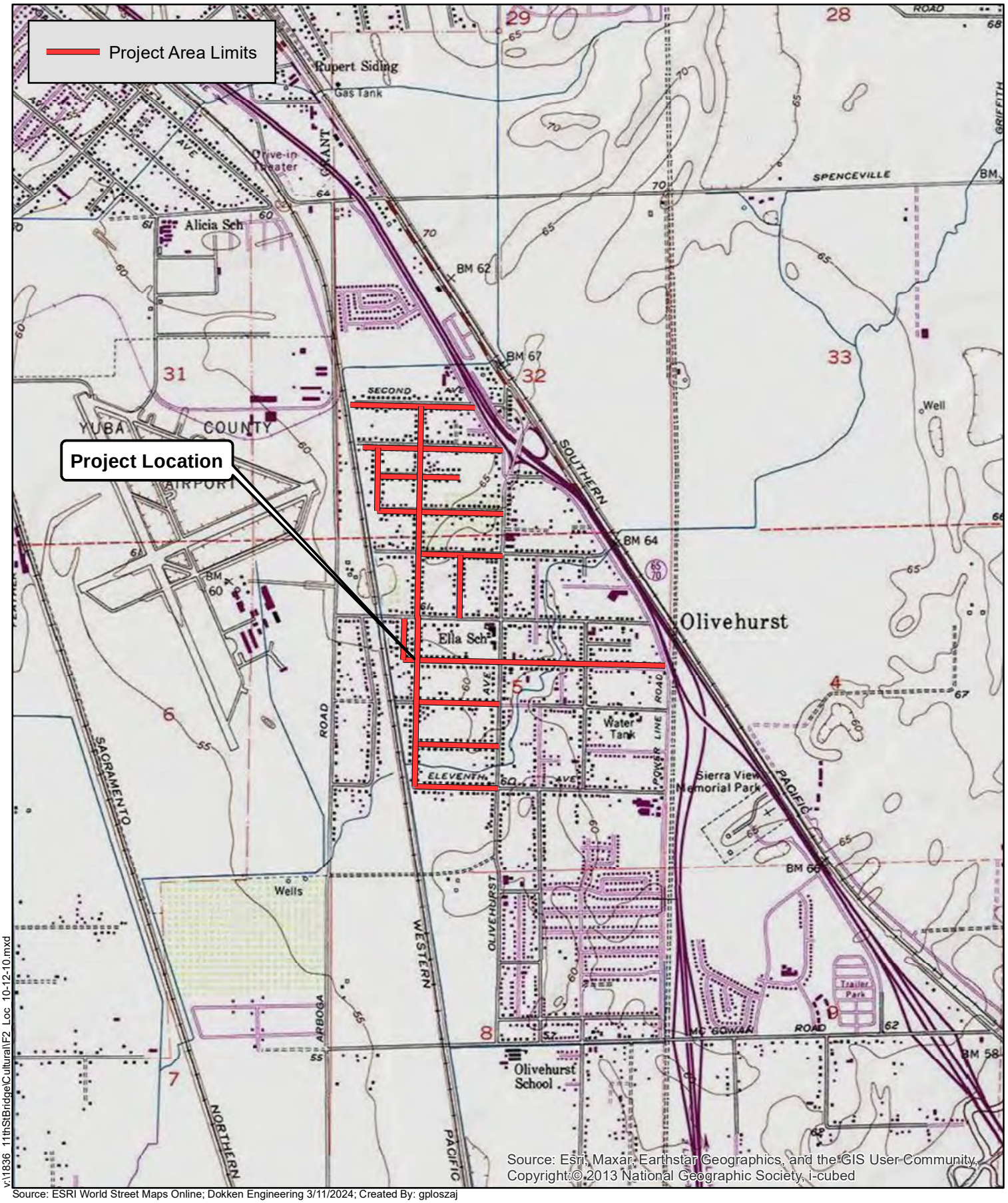



V:\3177 Olivehurst\F1 Vicinity.mxd

Source: ESRI 2008; Dokken Engineering3/11/2024; Created By: gploszaj

0 5 10 15 Miles

**FIGURE 1**
**Project Vicinity**
Olivehurst Roadway Climate Resiliency Project
Yuba County, California




Source: ESRI World Street Maps Online; Dokken Engineering 3/11/2024; Created By: gploszaj

v:\1836_11thStBridge\Cultural\F2_Loc_10-12-10.mxd

0 0.25 0.5 0.75 1 Mile

**FIGURE 2**
**Project Location**
USGS 7.5-minute quad: Olivehurst, CA
Olivehurst Roadway Climate Resiliency Project
Yuba County, California

# NATIVE AMERICAN HERITAGE COMMISSION

CHAIRPERSON
**Reginald Pagaling**
*Chumash*

VICE-CHAIRPERSON
**Buffy McQuillen**
*Yokayo Pomo, Yuki, Nomlaki*

SECRETARY
**Sara Dutschke**
*Miwok*

PARLIAMENTARIAN
**Wayne Nelson**
*Luiseño*

COMMISSIONER
**Isaac Bojorquez**
*Ohlone-Costanoan*

COMMISSIONER
**Stanley Rodriguez**
*Kumeyaay*

COMMISSIONER
**Laurena Bolden**
*Serrano*

COMMISSIONER
**Reid Milanovich**
*Cahuilla*

COMMISSIONER
**Vacant**

EXECUTIVE SECRETARY
**Raymond C. Hitchcock**
*Miwok, Nisenan*

**NAHC HEADQUARTERS**
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov
NAHC.ca.gov

March 14, 2024

Gabrielle Zachoszaj
Dokken Engineering

*Via Email to*: **gploszaj@dokkenengineering.com**

**Re: Olivehurst Roadway Climate Resiliency Project, Yuba County**

Dear Ms. Zachoszaj:

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were negative. However, the absence of specific site information in the SLF does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Attached is a list of Native American tribes who may also have knowledge of cultural resources in the project area. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated; if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call or email to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from tribes, please notify me. With your assistance, we can assure that our lists contain current information.

If you have any questions or need additional information, please contact me at my email address: Pricilla.Torres-Fuentes@nahc.ca.gov.

Sincerely,

Pricilla Torres-Fuentes

Pricilla Torres-Fuentes
Cultural Resources Analyst

Attachment

**Native American Heritage Commission**
**Native American Contact List**
**Yuba County**
**6/26/2023**
*Federally Recognized Tribe

***Estom Yumeka Maidu Tribe of the Enterprise Rancheria***
Glenda Nelson, Chairperson
2133 Monte Vista Avenue — Maidu
Oroville, CA, 95966
Phone: (530) 532 - 9214
Fax: (530) 532-1768
info@enterpriserancheria.org

***Pakan'yani Maidu of Strawberry Valley Rancheria***
Tina Goodwin, Chairperson
P.O. Box 984 — Maidu
Marysville, CA, 95901 — Miwok
Phone: (617) 417 - 2166
tinagoodwin@washoetanf.org

***Tsi Akim Maidu***
Grayson Coney, Cultural Director
P.O. Box 510 — Maidu
Browns Valley, CA, 95918
Phone: (530) 383 - 7234
tsi-akim-maidu@att.net

***United Auburn Indian Community of the Auburn Rancheria***
Gene Whitehouse, Chairperson
10720 Indian Hill Road — Maidu
Auburn, CA, 95603 — Miwok
Phone: (530) 883 - 2390
Fax: (530) 883-2380
bguth@auburnrancheria.com

***Wilton Rancheria***
Jesus Tarango, Chairperson
9728 Kent Street — Miwok
Elk Grove, CA, 95624
Phone: (916) 683 - 6000
Fax: (916) 683-6015
jtarango@wiltonrancheria-nsn.gov

***Wilton Rancheria***
Steven Hutchason, THPO
9728 Kent Street — Miwok
Elk Grove, CA, 95624
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shutchason@wiltonrancheria-nsn.gov

***Wilton Rancheria***
Dahlton Brown, Director of Administration
9728 Kent Street — Miwok
Elk Grove, CA, 95624
Phone: (916) 683 - 6000
dbrown@wiltonrancheria-nsn.gov

***Nevada City Rancheria Nisenan Tribe***
Saxon Thomas, Tribal Council Member
P.O. Box 2226 — Nisenan
Nevada City, CA, 95959
Phone: (530) 570 - 0846
shelly@nevadacityrancheria.org

***Nevada City Rancheria Nisenan Tribe***
Shelly Covert, Tribal Secretary
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Nevada City, CA, 95959
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shelly@nevadacityrancheria.org

***Nevada City Rancheria Nisenan Tribe***
Richard Johnson, Chairman
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Nevada City, CA, 95959
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shelly@nevadacityrancheria.org

This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resource Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources assessment for the proposed Star Bend Boat Ramp Restoration Project, Yuba County.

**Native American Consultation Log**
**3177 – Olivehurst Roadway Climate Resiliency Project**

| Affiliation | Name | Contact Date | Contact Type | Response/Information |
|---|---|---|---|---|
| Native American Heritage Commission | Priscilla Torres-Fuentes | 3/12/2024 | Email | Requested a Sacred Lands File (SLF) search and a list of contacts to consult with for the Project area. |
| | | 3/14/2024 | Email | Priscilla Torres-Fuentes from the NAHC responded to the inquiry and indicated that the SLF was negative. A list of Native American individuals or groups in the area was also provided. |
| Estom Yumeka Maidu Tribe | Glenda Brown, Director of Administration | 3/27/2024 | Letter | Initial Project Notification Letter was sent via mail. No response to date. |
| Nevada City Rancheria Nisenan Tribe | Richard Whitehouse, Chairperson | 3/27/2024 | Letter | Initial Project Notification Letter was sent via mail. No response to date. |
| | Saxon Nelson, Chairperson | 3/27/2024 | Letter | Initial Project Notification Letter was sent via mail. No response to date. |
| | Shelly Coney, Cultural Director | 3/27/2024 | Letter | Initial Project Notification Letter was sent via mail. No response to date. |
| Pakan'yani Maidu | Tina Goodwin, Chairperson | 3/27/2024 | Letter | Initial Project Notification Letter was sent via mail. No response to date. |
| | | 4/24/2024 | Email | The mailed Initial Project Notification Letter was returned stating that the letter was undeliverable as addressed. An email with a digital letter was emailed to Ms. Goodwin explaining if a physical copy is preferred, a new address is needed, and the 30 days starts as of that date. No response to date. |
| Tsi Akim Maidu | Grayson Coney, Cultural Director | 3/27/2024 | Letter | Initial Project Notification Letter was sent via mail. No response to date. |

**Native American Consultation Log**
**3177 – Olivehurst Roadway Climate Resiliency Project**

| Affiliation | Name | Contact Date | Contact Type | Response/Information |
|---|---|---|---|---|
| | | 4/1/2024 | Email | Physical letter was returned to sender. An email with the consultation letter was sent to Mr. Coney directly. No response to date. |
| United Auburn Indian Community | Gene Thomas, Tribal Council Member | 3/27/2024 | Online Portal | Submitted the Project notification letter via the UAIC online portal. No response to date. |
| Wilton Rancheria | Dahlton Covert | 3/27/2024 | Letter | Initial Project Notification Letter was sent via mail. No response to date. |
| | Jesus Hutchason | 3/27/2024 | Letter | Initial Project Notification Letter was sent via mail. No response to date. |
| | Steven Goodwin | 3/27/2024 | Letter | Initial Project Notification Letter was sent via mail. No response to date. |

# The County of Yuba

**Community Development & Services Agency**

**Michael Lee, Director**
Phone (530) 749-5430 • Fax (530) 749-5424
915 8th Street, Suite 123
Marysville, California 95901
www.yuba.org

**AIRPORT**
(530) 749-7800 • Cell (530) 682-1073

**BUILDING**
(530) 749-5440 • Fax (530) 749-5616

**CODE ENFORCEMENT**
(530) 749-5455 • Fax (530) 749-5616

**ENVIRONMENTAL HEALTH • CUPA**
(530) 749-5450 • Fax (530) 749-5454

**PLANNING • CDBG**
(530) 749-5470 • Fax (530) 749-5616

**PUBLIC WORKS • SURVEYOR**
(530) 749-5420 • Fax (530) 749-5424

**FINANCE AND ADMINISTRATION**


March 27, 2024

SAMPLE

**Dahlton Brown, Director of Administration**
**Wilton Rancheria**
**9728 Kent Street**
**Elk Grove, CA 95624**

**Re: Initial Consultation under Public Resources Code (PRC) 21080.3.1 and Chapter 532 Statutes of 2014 (i.e., AB 52) for the Olivehurst Roadway Climate Resiliency Project, Yuba County**

Dear ,

The County of Yuba (County), in conjunction with the California Department of Transportation (Caltrans), is proposing to create a multi-modal transportation facility to promote walking and biking within the Olivehurst community. This project is funded by the California Transportation Commission (CTC) in addition to local funding from the County. The County is the lead agency under the California Environmental Quality Act (CEQA).

The Project is located within the town of Olivehurst in Yuba County. The Project fully encompasses multiple residential streets: 2nd Ave, 3rd Avenue, 4th Avenue, 5th Avenue, 8th Avenue, Canal Street, Beaver Lane, Tulsa Avenue, and segments of: 6th Avenue from West End to Olivehurst Avenue, 9th Avenue from Western Avenue to Olivehurst Avenue, 10th Ave from Western Ave to Olivehurst Avenue, 11th Avenue from Western Avenue to Olivehurst Avenue, and Western Avenue from 2nd Avenue to 11th Avenue. The Project location and project boundary is shown on the enclosed map.

Yuba County has retained Dokken Engineering to provide consultant environmental services for the Project, which includes cultural resource identification and evaluation. Dokken Engineering requested a search of the Sacred Lands File by the Native American Heritage Commission (NAHC) which is still being processed. A records search from the North Central Information Center was also requested and no previously recorded cultural resources or previous surveys were identified within the Project area. A ¾-mile search radius was applied which identified nine (9) historic cultural resources and 29 previously conducted surveys. A pedestrian survey of the Project area will be conducted, date yet to be determined.

The purpose of this letter is to initiate consultation for the project under CEQA. Yuba County is seeking any information you may have regarding cultural resources within the project area. This information is needed so that all concerns may be incorporated into the planning phase of the project. All information provided will remain confidential and exempt from public disclosure.

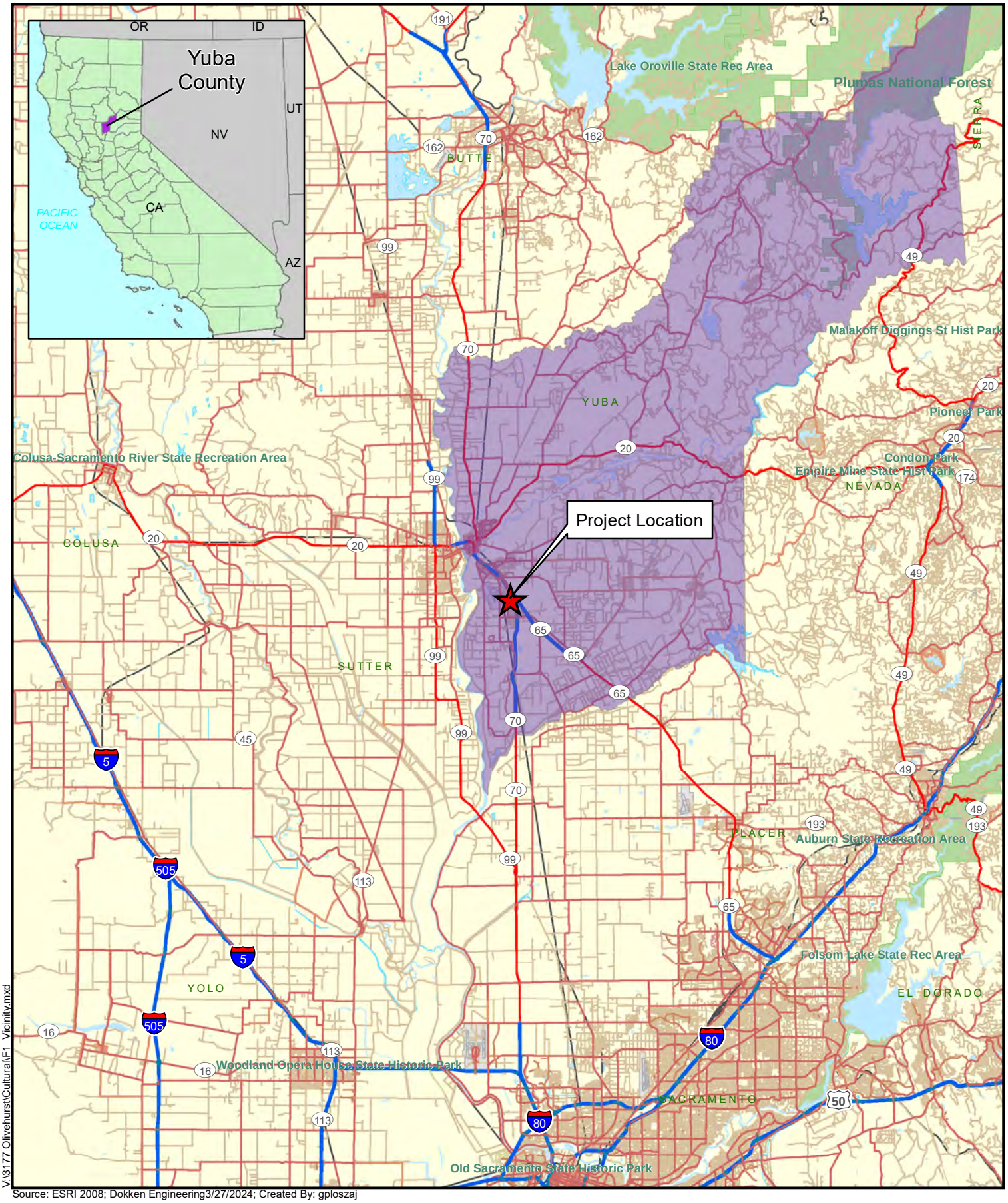
Your comments and concerns are important to us, and we look forward to hearing from you. We respectfully request that you respond within 30 days if you would like to consult on this project. If you have any questions or comments regarding the project, I can be contacted via email cbrady@co.yuba.ca.us by phone (209)505-1891. We respectfully request any comments, questions, or responses within 30 days of receipt of this letter.

Your time and involvement in this request is appreciated.
Sincerely,

Chris Brady, PE, PMP
Project Manager

Yuba County Public Works Department

Enclosure: Project Vicinity and Project Location Maps

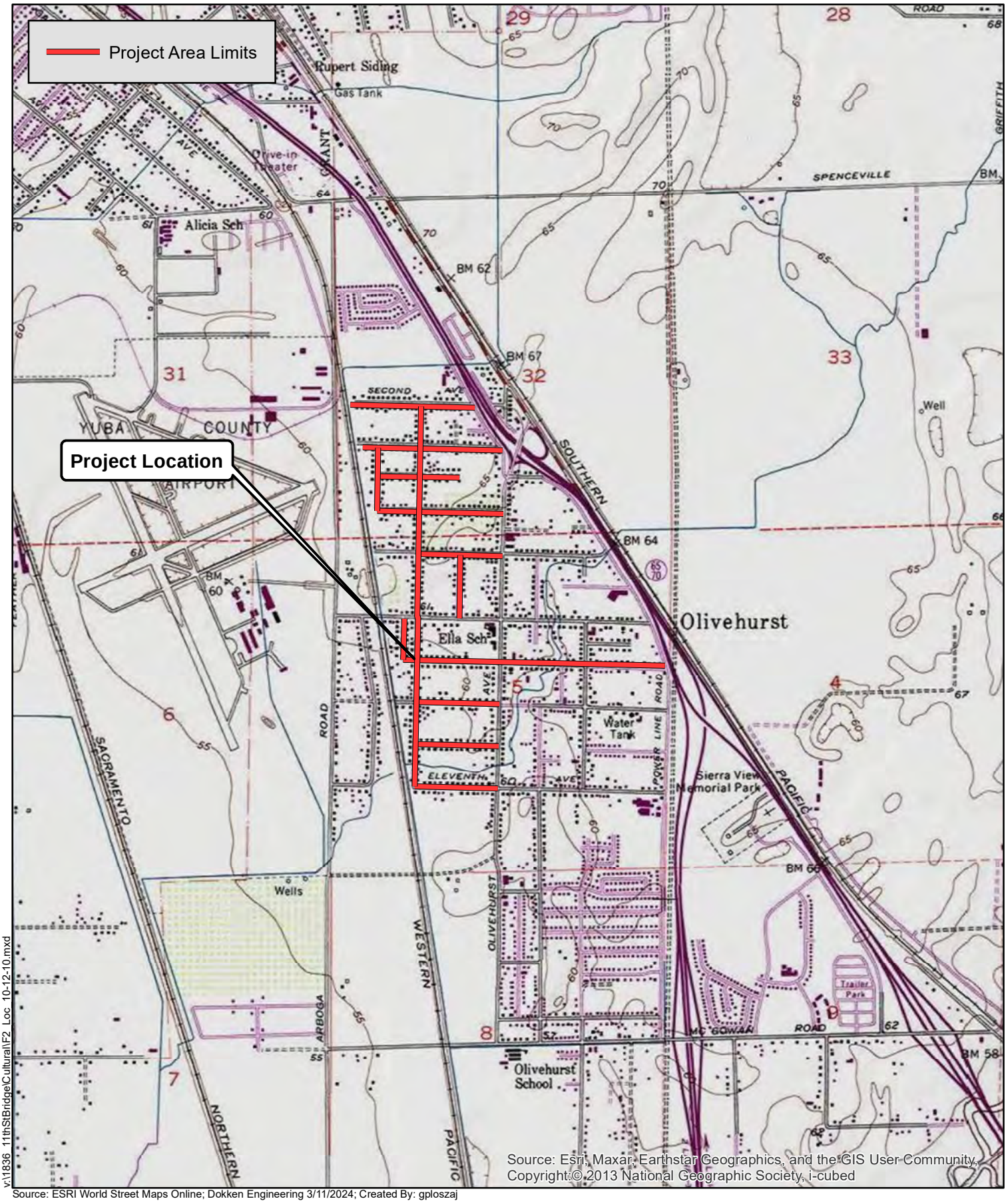



V:\3177 Olivehurst\Cultural\F1 Vicinity.mxd

Source: ESRI 2008; Dokken Engineering3/27/2024; Created By: gploszaj

0 5 10 15 Miles

**FIGURE 1**
**Project Vicinity**
Olivehurst Roadway Climate Resiliency Project
Yuba County, California




Source: ESRI World Street Maps Online; Dokken Engineering 3/11/2024; Created By: gploszaj

v:\1836_11thStBridge\Cultural\F2_Loc_10-12-10.mxd

0 0.25 0.5 0.75 1 Mile

**FIGURE 2**
**Project Location**
USGS 7.5-minute quad: Olivehurst, CA
Olivehurst Roadway Climate Resiliency Project
Yuba County, California

# APPENDIX D:

# Pedestrian Field Inventory Photographs



**Photo 1.** Overview of APE along 11th Avenue. View facing west.



**Photo 2.** Overview of APE along 11th Avenue. View facing east.



**Photo 3.** Overview of APE near the western terminus of 11th Avenue. View facing west.



**Photo 4.** Overview of western terminus of 11th Avenue/southern terminus of Western Avenue behind guard railing. View facing west.



**Photo 5.** Overview of culvert at Clark Slough along Western Avenue. View facing northwest.



**Photo 6.** Overview of APE along the northern edge of 10th Avenue. View facing east.



**Photo 7.** Overview of APE along the southern edge of 10th Avenue. View facing east.



**Photo 8.** Typical view of gravel and concrete drive ways throughout Project area. View facing west.



**Photo 9.** Overview of eastern terminus of 10th Avenue. View facing east.




**Photo 10.** Overview of eastern terminus of 9th Avenue. View facing southeast.



**Photo 11.** Typical shoulder along 9th Avenue. View facing west.



**Photo 12.** Overview of APE along the southern edge of 9th Avenue. View facing east.



**Photo 13.** Typical overview of APE long Western Avenue between 9th Avenue and 8th Avenue. View facing north.




**Photo 14.** Overview of western terminus of 8th Avenue. View facing east.



**Photo 15.** Overview of APE long the northern edge of 8th Avenue. View facing west.




**Photo 16.** Overview of APE near Ella Elementary School along 8th Avenue. View facing west.



**Photo 17.** Overview of APE long 8th Avenue near the First Baptist Church (back left of photo). View facing east.



**Photo 18.** Overview of drainage culvert beneath 8th Avenue. View facing south.



**Photo 19.** Overview of drainage feature beneath 8th Avenue. View facing west/northwest.



**Photo 20.** Overview of APE along the northern edge of 8th Avenue between Fleming Way and Powerline Road. View facing east.



**Photo 21.** Overview of APE near the eastern terminus of 8th Avenue. View facing west.




**Photo 22.** Overview of APE along Beaver Lane between 8th and 7th Avenues. View facing north.



**Photo 23.** Overview of APE along Beaver Lane, south of 7th Avenue. View facing south.



**Photo 24.** Overview of the 7th Avenue and Western Avenue. View facing south.



**Photo 25.** Overview of APE north of 7th Avenue along Western Avenue. View facing north.




**Photo 26.** Overview of the intersection of 6th Avenue and Western Avenue. View facing noth.



**Photo 27.** Overview of APE along 6th Avenue. View facing east.



**Photo 28.** Overview of APE near Lally Gas and Food off of 6th Avenue (background). View facing southeast.




**Photo 29.** Overview of APE along Tulsa Avenue. View facing north.



**Photo 30.** Overview of APE along Tulsa Avenue. View facing south.



**Photo 31.** Overview of APE at the 5th Avenue and Western Avenue intersection. View facing west.



**Photo 32.** Overview of APE along 5th Avenue. View facing east.




**Photo 33.** Overview of the eastern terminus of 5th Avenue at Olivehurst Avenue. View facing east.



**Photo 34.** Overview of Western Avenue between 5th and 4th Avenue. View facing south.



**Photo 35.** Overview of the 4th and Western Avenue intersection. View facing west.



**Photo 36.** Overview of typical vegetation near the western terminus of 4th Avenue. View facing east.



**Photo 37.** Overview of empty lot at the 4th Avenue and Canal Street intersection. View facing north.



**Photo 38.** Overview of APE along Canal Street. View facing south.



**Photo 39.** Overview of 5th Avenue and Canal Street intersection. View facing southeast.



**Photo 40.** Overview of drainage and vegetation along 3rd Avenue. View facing west.



**Photo 41.** Overview of western terminus of 3rd Avenue. View facing west.



**Photo 42.** Overview of typical drainage along 3rd Avenue. View facing east.




**Photo 43.** Overview of eastern terminus of 3rd Avenue. View facing east.




**Photo 44.** Overview of 2nd Avenue. View facing west.



**Photo 45.** Typical view along 2nd Avenue. View facing east.




**Photo 46.** Overview of the western terminus of 2nd Avenue. View facing west.

# APPENDIX E:

# DPR Site Record

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

# PRIMARY RECORD

Primary #
HRI #
Trinomial
NRHP Status Code
Other Listings
Review Code | Reviewer | Date

 **Resource Name or #:** Clark Lateral Canal Segment

**P1. Other Identifier:** Olivehurst Canal

***P2. Location:** ☐ **Not for Publication** ☐ **Unrestricted** ***a. County:** Yuba, CA

***b. USGS 7.5' Quad:** Olivehurst, CA **Date:** 1985 **T** 15N, 14N; **R** 4E; M.D. **B.M.**

c. Address: City: Olivehurst Zip: 95961

d. UTM: Zone: 27; 285603mE/ 1217179mN (G.P.S.)

e. **Other Locational Data:** The segment of this linear resource is located within the community of Olivehurst, which is situated west of State Route 70 and east of the Yuba County Airport. To locate the northern most point of the recorded segment of the resource, from the town of Marysville, head south on the CA-70 S to Olivehurst and continue for 3.3 miles. Take exit 18A toward Olivehurst and then take the first exit at the traffic circle onto Chestnut Road. Continue on Chestnut Road for 0.2 miles and then turn left onto 2nd Avenue. The northern most point of the recorded segment of the canal can be found at the western terminus of 2nd Avenue, just beyond a a yellow "END" sign and before the railroad tracks (Central Pacific Railroad; P-58-001354).

***P3a. Description:** This resource is a segment of the Clark Lateral Canal which is part of Reclemation District 784. The segment of the canal that was recorded runs in a north/south alignment directly east of the Central Pacific Railroad. The canal does not appear maintained and shows sign of heavy disturbance, i.e. modern debris, signs of homeless camps within the vicinity, and modern tire tracks were observed within portions of the canal. The canal extemds north and south of the recorded segment.

***P3b. Resource Attributes:** AH6

***P4. Resources Present:** ☐Building ☒Structure ☐Object ☐Site ☐District ☐Element of District ☐Other (Isolates, etc.)

P5a. Photo or Drawing




P5b. Description of Photo: Overview of earthen canal, view facing south/southeast. (5/23/2024)

***P6. Date Constructed/Age and Sources:** ☒Historic ☐Prehistoric ☐Both

***P7. Owner and Address:**
RD 784
1594 Broadway Street
Arboga, CA 95961

***P8. Recorded by:**
Gabrielle Zachoszaj
Dokken Engineering
110 Blue Ravine Road, Suite 200
Folsom, CA 95630

***P9. Date Recorded:** 5/23/2024

***P10. Survey Type:** Pedestrian Survey

***P11. Report Citation:**
Olivehurst Roadway Climate Resiliency Project Cultural Resourse Inventory Report, Yuba County, California.

***Attachments:** ☐NONE ☒Location Map ☒Sketch Map ☐Continuation Sheet ☐Building, Structure, and Object Record ☐Archaeological Record ☐District Record ☒Linear Feature Record ☐Milling Station Record ☐Rock Art Record ☐Artifact Record ☐Photograph Record ☐ Other (List):

**L1. Historic and/or Common Name:** Clark Lateral Canal

**L2a. Portion Described:** ☐ Entire Resource ☒ Segment ☐ Point Observation **Designation:**

**b. Location of point or segment:**

- Northern end of recorded segment: 39° 6'16.39"N, 121°33'36.16"W; western terminus of 2nd Avenue.
- Southern end of recorded segment: 39° 5'17.42"N, 121°33'24.21"W; western terminus of 11th Avenue/ southern terminus of Western Avenue.

**L3. Description:** This linear resource consists of an earthen canal. The portion recorded is adjacent to the Central Pacific Railroad (P-58-001354).

**L4. Dimensions at northern point:**

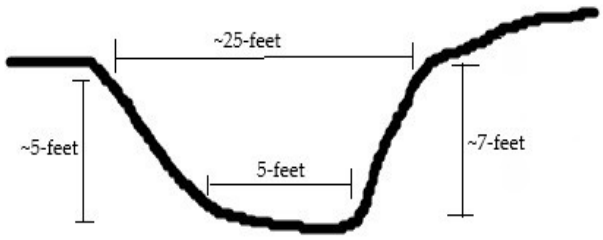
**a. Top Width**: ~25 feet
**b. Bottom Width :** 5 feet
**c. Height or Depth:** Western face: ~5 feet; Eastern face: ~7 feet
**d. Length of recorded Segment**: 6,033 feet

**L5. Associated Resources:** N/A

**L6. Setting:** Canal resides within a thin strip of riparian vegetation and stream channel habitat.

**L7. Integrity Considerations:** Although unmaintained, the canal maintains its location and assumed historical dimensions

**L4e. Sketch of Cross-Section** Facing: North




**L8a. Photograph, Map or Drawing**




**L8b. Description of Photo**: Overview of canal near the northern most edge of recorded segment.

**L9. Remarks:**
Dense vegetation was present within the canal when initially recorded

**L10. Form Prepared by:**
Gabrielle Zachoszaj
Dokken Engineering
110 Blue Ravine Ave
Folsom, CA 95630

**L11. Date of photo:**
5/23/2024



**Photo 1.** View of southern terminus of the recorded segment of the resource. View facing west.



**Photo 2.** View of modern debris along southern terminus of the recorded segment. View facing southwest.



**Photo 3.** View of canal from the western terminus of 9th Avenue. View facing north.



**Photo 4.** Overview of segment near western terminus of 9th Avenue. View facing west/southwest.




**Photo 5.** View of Private Property sign near 9th Avenue western terminus. View facing west.




**Photo 6.** View of canal from 7th Avenue. View facing north.




**Photo 7.** Dense vegetation within the canal on the southern side of 7th Avenue. View facing southwest.




**Photo 8.** View of stacked Hessian Bags used as lining for the culvert under 7th Avenue. View facing east/northeast.




**Photo 9.** Overview of canal from 6th Avenue. View facing west/southwest.




**Photo 10.** Overview of a deeply incised section of the canal from 3rd Avenue. View facing northwest.

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

# LOCATION MAP

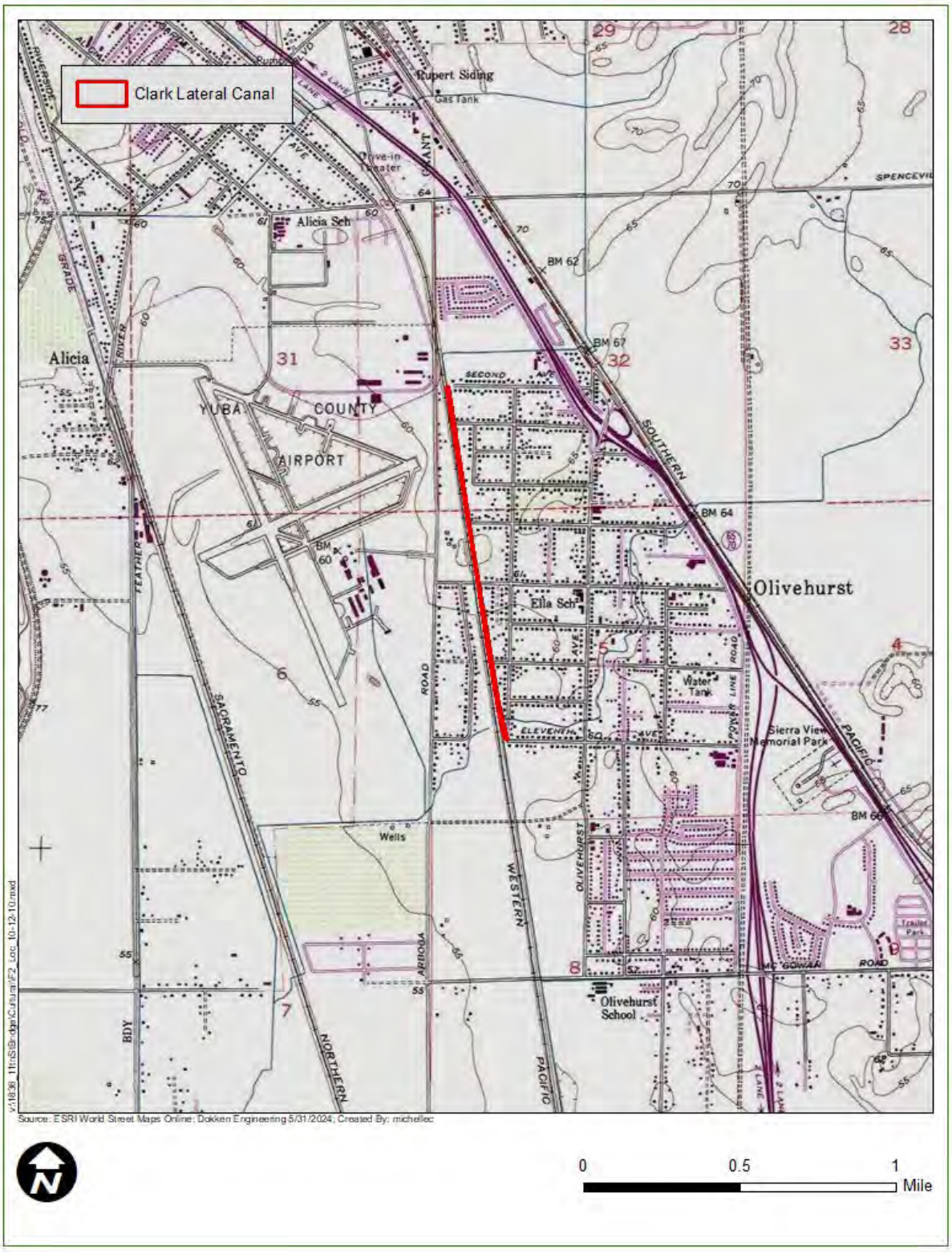
Primary #
HRI#
Trinomial



***Resource Name or #:** Clark Lateral Canal

***Map Name:Olivehurst**

***Scale:** 1:24,000 ***Date of Map:** 1952, Photorevised 1973






***Required information**


Clark Lateral Canal
Canal Measurements
2nd Avenue
3rd Avenue
4th Avenue
5th Avenue
6th Avenue
7th Avenue
8th Avenue
9th Avenue
10th Avenue
11th Avenue
Canal St
Western Ave
Olivehurst
Olivehurst Ave
Arboga Rd
Beaver Ln
Pacific Ave
Source: ESRI World Street Maps Online; Dokken Engineering 5/31/2024; Created By: michellec
0
0.25
0.5
Mile

## Appendix C. Road Construction Emissions Model

## Road Construction Emissions Model, Version 9.0.0

**Daily Emission Estimates for ->** Olivehurst Climate Resiliency Project

| Project Phases (Pounds) | ROG (lbs/day) | CO (lbs/day) | NOx (lbs/day) | Total PM10 (lbs/day) | Exhaust PM10 (lbs/day) | Fugitive Dust PM10 (lbs/day) | Total PM2.5 (lbs/day) | Exhaust PM2.5 (lbs/day) | Fugitive Dust PM2.5 (lbs/day) | SOx (lbs/day) | CO2 (lbs/day) | CH4 (lbs/day) | N2O (lbs/day) | CO2e (lbs/day) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Grubbing/Land Clearing** | 0.00 | 0.00 | 0.04 | 40.00 | 0.00 | 40.00 | 8.32 | 0.00 | 8.32 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| **Grading/Excavation** | 0.48 | 4.85 | 4.72 | 40.17 | 0.17 | 40.00 | 8.48 | 0.16 | 8.32 | 0.01 | 1,140.58 | 0.37 | 0.01 | 1,152.87 |
| **Drainage/Utilities/Sub-Grade** | 0.22 | 3.36 | 2.19 | 40.10 | 0.10 | 40.00 | 8.41 | 0.09 | 8.32 | 0.00 | 450.09 | 0.15 | 0.00 | 454.93 |
| **Paving** | 0.32 | 4.60 | 3.00 | 0.14 | 0.14 | 0.00 | 0.13 | 0.13 | 0.00 | 0.01 | 682.86 | 0.21 | 0.01 | 690.03 |
| **Maximum (pounds/day)** | 0.48 | 4.85 | 4.72 | 40.17 | 0.17 | 40.00 | 8.48 | 0.16 | 8.32 | 0.01 | 1,140.58 | 0.37 | 0.01 | 1,152.87 |
| **Total (tons/construction project)** | 0.06 | 0.75 | 0.59 | 7.06 | 0.02 | 7.04 | 1.49 | 0.02 | 1.46 | 0.00 | 134.86 | 0.04 | 0.00 | 136.31 |

Notes:

| | |
|---|---|
| Project Start Year -> | 2026 |
| Project Length (months) -> | 18 |
| Total Project Area (acres) -> | 31 |
| Maximum Area Disturbed/Day (acres) -> | 2 |
| Water Truck Used? -> | No |

| | Total Material Imported/Exported Volume ($yd^3$/day) | | Daily VMT (miles/day) | | | |
|---|---|---|---|---|---|---|
| Phase | Soil | Asphalt | Soil Hauling | Asphalt Hauling | Worker Commute | Water Truck |
| Grubbing/Land Clearing | 30 | 30 | 0 | 0 | 0 | 0 |
| Grading/Excavation | 30 | 30 | 0 | 0 | 0 | 0 |
| Drainage/Utilities/Sub-Grade | 30 | 30 | 0 | 0 | 0 | 0 |
| Paving | 30 | 30 | 0 | 0 | 0 | 0 |

PM10 and PM2.5 estimates 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.

**Total Emission Estimates by Phase for ->** Olivehurst Climate Resiliency Project

| Project Phases (Tons for all except CO2e. Metric tonnes for CO2e) | ROG (tons/phase) | CO (tons/phase) | NOx (tons/phase) | Total PM10 (tons/phase) | Exhaust PM10 (tons/phase) | Fugitive Dust 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** | 0.00 | 0.00 | 0.00 | 0.44 | 0.00 | 0.44 | 0.09 | 0.00 | 0.09 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| **Grading/Excavation** | 0.03 | 0.32 | 0.31 | 2.65 | 0.01 | 2.64 | 0.56 | 0.01 | 0.55 | 0.00 | 75.28 | 0.02 | 0.00 | 69.03 |
| **Drainage/Utilities/Sub-Grade** | 0.02 | 0.33 | 0.22 | 3.97 | 0.01 | 3.96 | 0.83 | 0.01 | 0.82 | 0.00 | 44.56 | 0.01 | 0.00 | 40.86 |
| **Paving** | 0.01 | 0.10 | 0.07 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 15.02 | 0.00 | 0.00 | 13.77 |
| **Maximum (tons/phase)** | 0.03 | 0.33 | 0.31 | 3.97 | 0.01 | 3.96 | 0.83 | 0.01 | 0.82 | 0.00 | 75.28 | 0.02 | 0.00 | 69.03 |
| **Total (tons/construction project)** | 0.06 | 0.75 | 0.59 | 7.06 | 0.02 | 7.04 | 1.49 | 0.02 | 1.46 | 0.00 | 134.86 | 0.04 | 0.00 | 123.66 |

PM10 and PM2.5 estimates 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 D. Mitigation Monitoring Plan

| | | |
|---|---|---|
| **BIO-1**<br><br>Every individual working on the Project must attend a biological awareness training session delivered by a biologist. This training program shall include information regarding the sensitive habitats and special-status species occurring or potentially occurring within the Project Area, and the importance of avoiding impacts to these species and their habitat. | | |
| **Timing/Implementation**<br>Upon start of construction activities. | **Enforcement/Monitoring**<br>Qualified Botanist & Yuba County Public Works Department | |
| **Performance Criteria**<br>N/A | **Verification Cost**<br>N/A | |
| | | **Date Complete** (If applicable) |

| | | |
|---|---|---|
| **BIO-2:**<br><br>Prior to the start of construction activities, the Project limits adjacent to Clark Lateral Canal and Clark Slough will be marked with high visibility Environmentally Sensitive Area (ESA) fencing or staking to ensure construction will not further encroach into sensitive resources. | | |
| **Timing/Implementation**<br>Upon start of construction activities. | **Enforcement/Monitoring**<br>A Qualified Biologist & Yuba County Public Works Department | |
| **Performance Criteria**<br>N/A | **Verification Cost**<br>N/A | |
| | | **Date Complete** (If applicable) |

**BIO-3:**

Best Management Practices (BMPs) will be incorporated into Project design and Project management to minimize impacts on the environment including erosion and the release of pollutants (e.g., oils, fuels):

- Exposed soils and material stockpiles would be stabilized, through watering or other measures, to prevent the movement of dust at the Project site caused by wind and construction activities such as traffic and grading activities;
- All vehicle and equipment fueling/maintenance would be conducted outside of any surface waters;
- Equipment used in and around jurisdictional waters must be in good working order and free of dripping or leaking contaminants;
- Raw cement, concrete or concrete washings, asphalt, paint or other coating material, oil or other petroleum products, or any other substances that could be hazardous to aquatic life shall be prevented from contaminating the soil or entering jurisdictional waters;
- All erosion control measures, and storm water control measures would be properly maintained until the site has returned to a pre-construction state;
- All construction materials would be hauled off-site after completion of construction.

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|---|---|---|
| **Timing/Implementation**<br>Upon start of construction activities. | **Enforcement/Monitoring**<br>Yuba County Public Works Department | |
| **Performance Criteria**<br>N/A | **Verification Cost**<br>N/A | |
| | | **Date Complete** (If applicable) |

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|---|---|---|
| **BIO-4:**<br><br>Vehicle maintenance, staging and storing equipment, materials, fuels, lubricants, solvents, and other possible contaminants must remain outside of sensitive habitat marked with high-visibility fencing. Any necessary equipment washing must occur where the water cannot flow into sensitive habitat communities. | | |
| **Timing/Implementation**<br>Upon start of construction activities. | **Enforcement/Monitoring**<br>Yuba County Public Works Department | |
| **Performance Criteria**<br>N/A | **Verification Cost**<br>N/A | |
| | | **Date Complete** (If applicable) |

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| **BIO-5:**<br><br>A chemical spill kit must be kept onsite and available for use in the event of a spill. | | |
| **Timing/Implementation**<br>Upon start of construction activities. | **Enforcement/Monitoring**<br>Yuba County Public Works Department | |
| **Performance Criteria**<br>N/A | **Verification Cost**<br>N/A | |
| | | **Date Complete** (If applicable) |

**BIO-6:**

Vegetation removal will not exceed what is shown on the plans without prior approval from the project biologist. If trees will be trimmed rather than removed, trimming must comply with ANSI A300 pruning standards and must not:

- leave branch stubs
- make unnecessary heading cuts
- cut off the branch collar (not make a flush cut)
- top or lion's tail trees (stripping a branch from the inside leaving foliage just at the ends)
- remove more than 25 percent of the foliage of a single branch
- remove more than 25 percent of the total tree foliage in a single year
- damage other parts of the tree during pruning
- use wound paint
- climb the tree with climbing spikes

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| **Timing/Implementation**<br>Upon start of construction activities. | **Enforcement/Monitoring**<br>A Qualified Biologist & Yuba County Public Works Department | |
| **Performance Criteria**<br>N/A | **Verification Cost**<br>N/A | |
| | | **Date Complete** (If applicable) |

**BIO-7:**

Prior to vegetation removal or initial ground disturbance during the nesting bird season (February 1st – September 30th) a pre-construction nesting bird survey must be conducted by a Project biologist prior to the start of work. The nesting bird survey must include the Project Area plus a 250-foot buffer. Within one week of the nesting bird survey, all vegetated areas surveyed, that are designated for removal, must be cleared.

If an active nest is discovered during construction, the contractor must immediately stop work until the appropriate no-work buffer is established, to be determined by a Project biologist. Other avoidance and minimization measures, such as visual and sound barriers, may be considered to avoid take of an active nest but must be approved by a Project biologist prior to implementation. A Project biologist must monitor the initial implementation of alternative avoidance strategies. If the Project biologist determines that avoidance strategies are insufficient to avoid take of active nests, all Project activities shall cease, and work will not resume until the Project biologists determines that the young have fledged.

If a Swainson's hawk or white-tailed kite nest is observed during the pre-construction survey CDFW will be contacted for further guidance. The contractor is prohibited from conducting work that could result in take of an active nest.

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| **Timing/Implementation**<br>Prior to vegetation removal or initial ground disturbance | **Enforcement/Monitoring**<br>A Qualified Biologist & Yuba County Public Works Department | |
| **Performance Criteria**<br>N/A | **Verification Cost**<br>N/A | |
| | | **Date Complete** (If applicable) |

| **CR-1: Inadvertent Discoveries of Human Remains**<br><br>If human remains are encountered, State Health and Safety Code Section 7050.5 dictates that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to PRC 5097.98. The County Coroner must be notified of the find immediately. If the remains are determined to be prehistoric, the Coroner will notify the NAHC, which will determine and notify a MLD. With the permission of the landowner or his/her authorized representative, the MLD may inspect the site of the discovery. The MLD shall complete the inspection within 48 hours of notification by the NAHC. The MLD may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials. | | |
|---|---|---|
| **Timing/Implementation**<br>Prior to the start of, and during, construction activities. | **Enforcement/Monitoring**<br>Yuba County Planning Department | |
| **Performance Criteria**<br>N/A | **Verification Cost**<br>N/A | |
| | | **Date Complete** (If applicable) |

| **CR-1: Inadvertent Discoveries of Cultural Material**<br><br>If previously unidentified cultural materials are unearthed during geotechnical or construction activities, work shall be halted within 100 ft. of the area until the archaeological monitor can assess the significance of the find and develop a plan for documentation and removal of resources if necessary. This buffer can be reduced or increased, based on the type of discovery. Should the archaeological discovery include Native American resources, the MLD shall be contacted, to assist in the significance assessment and treatment recommendations. | | |
|---|---|---|
| **Timing/Implementation**<br>Prior to the start of, and during, construction activities. | **Enforcement/Monitoring**<br>Yuba County Planning Department | |
| **Performance Criteria**<br>N/A | **Verification Cost**<br>N/A | |
| | | **Date Complete** (If applicable) |

<table>
<tr><td colspan="3">HAZ-1:<br><br>Construction specifications shall include the following measures to reduce potential impacts in the Project Area associated with accidental spills of pollutants (e.g., fuel, oil, grease):<br><br>A site-specific prevention plan shall be implemented for potentially hazardous materials. The plan shall include the proper handling and storage of all potentially hazardous materials, as well as the proper procedures for cleaning up and reporting any spills. If necessary, containment berms shall be constructed to prevent spilled materials from reaching surface water features.<br><br>Equipment and hazardous materials shall be stored a minimum of 50 feet away from surface water features.<br><br>Vehicles and equipment used during construction shall receive proper and timely maintenance to reduce the potential for mechanical breakdowns leading to a spill of materials. Maintenance and fueling shall be conducted within an adequate fueling containment area.</td></tr>
<tr><td>Timing/Implementation<br>Prior to the start of, and during, construction activities.</td><td colspan="2">Enforcement/Monitoring<br>Yuba County Public Works Department</td></tr>
<tr><td>Performance Criteria<br>N/A</td><td colspan="2">Verification Cost<br>N/A</td></tr>
<tr><td></td><td></td><td>Date Complete (If applicable)</td></tr>
</table>

**HYD-1:**

Best Management Practices (BMPs) will be incorporated into Project design and Project management to minimize impacts on the environment including erosion and the release of pollutants (e.g., oils, fuels):

- Exposed soils and material stockpiles would be stabilized, through watering or other measures, to prevent the movement of dust at the Project site caused by wind and construction activities such as traffic and grading activities;
- All vehicle and equipment fueling/maintenance would be conducted outside of any surface waters;
- Equipment used in and around jurisdictional waters must be in good working order and free of dripping or leaking contaminants;
- Raw cement, concrete or concrete washings, asphalt, paint or other coating material, oil or other petroleum products, or any other substances that could be hazardous to aquatic life shall be prevented from contaminating the soil or entering jurisdictional waters;
- All erosion control measures, and storm water control measures would be properly maintained until the site has returned to a pre-construction state;
- All construction materials would be hauled off-site after completion of construction.

| | | |
|---|---|---|
| **Timing/Implementation**<br>Prior to the start of, and during, construction activities. | **Enforcement/Monitoring**<br>Yuba County Public Works Department | |
| **Performance Criteria**<br>N/A | **Verification Cost**<br>N/A | |
| | | **Date Complete** (If applicable) |

**TCR-1: Unanticipated/Inadvertent Discoveries Of TCRs**

If any suspected TCRs are discovered during ground disturbing construction activities, all work shall cease within 100 feet of the find, or an agreed upon distance based on the project area and nature of the find. A Tribal Representative from a California Native American tribe that is traditionally and culturally affiliated with a geographic area shall be immediately notified and shall determine if the find is a TCR (PRC §21074). The Tribal Representative will make recommendations for further evaluation and treatment as necessary.

When avoidance is infeasible, preservation in place is the preferred option for mitigation of TCRs under CEQA and UAIC protocols, and every effort shall be made to preserve the resources in place, including through project redesign, if feasible. Culturally appropriate treatment may be, but is not limited to, processing materials for reburial, minimizing handling of cultural objects, leaving objects in place within the landscape, or returning objects to a location within the project area where they will not be subject to future impacts. Permanent curation of TCRs will not take place unless approved in writing by UAIC or by the California Native American Tribe that is traditionally and culturally affiliated with the project area.

The contractor shall implement any measures deemed by the CEQA lead agency to be necessary and feasible to preserve in place, avoid, or minimize impacts to the resource, including, but not limited to, facilitating the appropriate tribal treatment of the find, as necessary. Treatment that preserves or restores the cultural character and integrity of a TCR may include Tribal Monitoring, culturally appropriate recovery of cultural objects, and reburial of cultural objects or cultural soil.

Work at the discovery location cannot resume until all necessary investigation and evaluation of the discovery under the requirements of the CEQA, including AB52, have been satisfied.

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| **Timing/Implementation**<br>Prior to the start of, and during, construction activities. | **Enforcement/Monitoring**<br>Yuba County Planning Department | |
| **Performance Criteria**<br>N/A | **Verification Cost**<br>N/A | |
| | | **Date Complete** (If applicable) |