PUBLIC REVIEW DRAFT

INITIAL STUDY/ MITIGATED NEGATIVE DECLARATION

FOR THE

WATER SUPPLY TRUNK LINES PROJECT

City of Ripon, CA

November 2024

Prepared for:

City of Ripon
259 N. Wilma Avenue
Ripon, CA 95366

Prepared by:

BaseCamp Environmental, Inc.
802 W. Lodi Avenue
Lodi, CA 95240

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259 N. Wilma Avenue
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209-599-2108

Prepared by:

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LIST OF ACRONYMS AND ABBREVIATIONS USED IN THIS DOCUMENT

AB	Assembly Bill
ARB	California Air Resources Board
CDFW	California Department Fish and Wildlife
CEQA	California Environmental Quality Act
CHRIS	California Historical Resources Information System
CNDDB	California Natural Diversity Database
CO_2e	carbon dioxide equivalent
CRHR	California Register of Historical Resources
dBA	A-weighted decibels
DTSC	California Department of Toxic Substances Control
DWSRF	Drinking Water State Revolving Fund
EIR	Environmental Impact Report
EPA	U.S. Environmental Protection Agency
FEMA	Federal Emergency Management Agency
GHG	greenhouse gas
IS/MND	Initial Study/Mitigated Negative Declaration
kWh	kilowatt-hour
NO_x	nitrogen oxide
NRHP	National Register of Historic Places
PM_{10}	particulate matter 10 microns or less in diameter
$PM_{2.5}$	particulate matter 2.5 microns or less in diameter
PVC	polyvinyl chloride
RCEM	Road Construction Emissions Model
ROG	reactive organic gas
RWQCB	Regional Water Quality Control Board
SB	Senate Bill
SJCOG	San Joaquin Council of Governments
SJVAPCD	San Joaquin Valley Air Pollution Control District
SJMSCP	San Joaquin County Multi-Species Open Space and Habitat Conservation Plan
SSJID	South San Joaquin Irrigation District
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAC	toxic air contaminant
USFWS	U.S. Fish and Wildlife Service
VMT	vehicle miles traveled

NEGATIVE DECLARATION

A. General Project Information

Project Title:	Ripon Water Supply Trunk Line
Lead Agency Name and Address:	City of Ripon 259 Wilma Avenue Ripon, CA 95366
Contact Person and Phone Number:	Christy Giedd, Senior Engineer (209) 599-2108
Project Location:	Along Jack Tone Road in the City of Ripon and unincorporated San Joaquin County
Project Sponsor Name and Address:	City of Ripon 259 Wilma Avenue Ripon, CA 95366
General Plan Designation:	Various residential and agricultural designations along Jack Tone Road alignment.
Zoning:	Various City and San Joaquin County residential and agricultural zoning districts along project alignment; no zoning within public road right-of-way.
Description of Project:	The project would allow the City to take delivery of drinking water treated by the South San Joaquin Irrigation District (SSJID) as part of the South County Water Supply Project (SWSCP).The project proposes to install two parallel water pipelines, each 18 inches in diameter, or a single pipeline 24 inches in diameter, along Jack Tone Road from River Road in Ripon to French Camp Road, where the lines would connect to an existing 48-inch diameter SWSCP potable water line managed by SSJID. The total length of the project would be approximately 4.5 miles. The project would tie into the City of Ripon water system in the vicinity of River Road by means yet to be determined.

Surrounding Land Uses and Setting:	The project alignment extends north along Jack Tone Road from the existing Mistlin Sports Park area through the predominantly agricultural lands north of the City. Agricultural lands, primarily vineyards and orchards, are distributed along the alignment, together with miscellaneous agricultural facilities, and low-density rural residences fronting primarily on Jack Tone Road. The proposed project would cross several existing SSJID irrigation canals and pipelines, along with State Route 120 and East Louise Avenue.
Other Public Agencies Whose Approval is Required:	San Joaquin County (construction plan approval and road encroachment permits), SSJID (construction plan approval), California Department of Transportation (encroachment permit for work at State Route 120).
Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code Section 21080.3.1? If so, has consultation begun?	No tribes have requested consultation. See Appendix C for tribal outreach records.

B. Environmental Factors Potentially Affected

The environmental factors checked below may be significantly affected by this project, involving at least one impact that is a "Potentially Significant Impact" prior to mitigation. Mitigation measures that would avoid potential effects or reduce them to a less than significant level have been prescribed for each of these effects, as described in the checklist and narrative on the following pages, and in the Summary Table at the end of Chapter 1.0.

☐ Aesthetics	☐ Agriculture/Forestry Resources	☐ Air Quality
✓ Biological Resources	✓ Cultural Resources	☐ Energy
✓ Geology/Soils	☐ Greenhouse Gas Emissions	✓ Hazards/Hazardous Materials
☐ Hydrology/Water Quality	☐ Land Use	☐ Mineral Resources
✓ Noise	☐ Population/Housing	☐ Public Services
☐ Recreation	✓ Transportation	✓ Tribal Cultural Resources

☐ Utilities/Service Systems ☐ Wildfire ✓ Mandatory Findings of Significance

C. Lead Agency Determination

On the basis of this initial evaluation:

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

✓ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project and/or mitigation measures that would reduce potential effects to a less than significant level 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.

CITY OF RIPON

Christy Giedd
Senior Engineer

Date

1.0 INTRODUCTION

1.1 Project Brief

This document is an Initial Study/Mitigated Negative Declaration (IS/MND) for the Ripon Water Supply Trunk Lines Project (project). The project is located within the City of Ripon and in the unincorporated area of San Joaquin County north of Ripon (Figures 1-1 through 1-4). The City of Ripon is the project proponent. The IS/MND has been prepared in compliance with the requirements of the California Environmental Quality Act (CEQA). For the purposes of CEQA, the City of Ripon (City) is the Lead Agency for the project.

The project proposes to connect the City's water system to the existing South San Joaquin Irrigation District (SSJID) South County Surface Water Supply Project system, which currently provides treated drinking water to other south San Joaquin County cities. The project would involve the installation of two parallel water pipelines, each 18 inches in diameter, or a single pipeline 24 inches in diameter, along Jack Tone Road from the existing SSJID system at French Camp Road south to its intersection with River Road in Ripon. The project would require approvals from both the City, SSJID and San Joaquin County (County), along with encroachment permits from SSJID and the California Department of Transportation (Caltrans) for crossings of SSJID irrigation facilities and pipeline crossing of State Route 120.

1.2 Purpose of Initial Study

CEQA requires that public agencies document and consider the potential environmental effects of the agency's actions that meet CEQA's definition of a "project." Briefly summarized, a "project" is an action that has the potential to result in direct or indirect physical changes in the environment. A project includes the agency's direct activities as well as activities that involve public agency approvals or funding. Guidelines for an agency's implementation of CEQA are found in the CEQA Guidelines (California Code of Regulations Title 14, Division 6, Chapter 3).

Provided that a project is not exempt from CEQA, the first step in the agency's consideration of its potential environmental effects is the preparation of an Initial Study. The purpose of an Initial Study is to determine whether the project would involve "significant" environmental effects, as defined by CEQA, and to describe any feasible mitigation measures that would avoid significant effects or reduce them to a level that is less than significant. If the Initial Study does not identify significant effects, then the agency ordinarily prepares a Negative Declaration. If the Initial Study notes significant effects but also identifies mitigation measures that would reduce these significant effects to a level that is less than significant, then the agency ordinarily prepares a Mitigated Negative Declaration. If a project would involve significant effects that cannot be readily mitigated, then the agency must prepare an Environmental Impact Report. The agency may

also decide to proceed directly with the preparation of an Environmental Impact Report without first preparing an Initial Study.

The proposed project is a "project" as defined by CEQA and is not exempt from CEQA consideration. The City has determined that the project may potentially have significant environmental effects and therefore requires preparation of an Initial Study. This Initial Study describes the proposed project and its environmental setting, discusses the potential environmental effects of the project, and identifies feasible mitigation measures that would eliminate any potentially significant environmental effects of the project or reduce them to a level that would be less than significant. The Initial Study considers the project's potential for significant environmental effects in the following subject areas:

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

This Initial Study concludes that the project would have some potentially significant environmental effects, but that recommended mitigation measures would reduce all of these effects to a level that would be less than significant. As of the distribution of the IS/MND for public review, the City has accepted and will implement all the mitigation measures recommended by the Initial Study. As a result, the City has prepared a draft Mitigated Negative Declaration and notified the public of the City's intent to adopt the Initial Study/Mitigated Negative Declaration. A copy of the City's Notice of Intent, which indicates the time available for public and agency comment, is immediately inside the cover of this document.

1.3 Project Background

The City of Ripon operates a water system that provides water for drinking and non-potable uses to residences, businesses, and public land uses in the Ripon City limits. The source of water for Ripon is currently groundwater. The City manages eight groundwater wells that provide drinking water and three wells for non-potable uses (i.e., irrigation and other non-drinking uses).

The South County Water Supply Project (SCWSP) is a collective effort between SSJID and the cities of Manteca, Escalon, Lathrop, Ripon, and Tracy to provide supplemental, high-quality drinking water for urban uses. SSJID serves as the wholesale water agency and water treatment plant operator, and the cities are the retail water agencies. The water

supply from the SCWSP comes from SSJID's senior pre-1914 appropriative water rights to the Stanislaus River. The SCWSP facilities consist of an intake facility at Woodward Reservoir in Stanislaus County, a membrane-filtration water treatment plant, and about 35 miles of pipeline ending in the City of Tracy. The Nick C. DeGroot Water Treatment Plant (WTP), located west of Woodward Reservoir, currently has a maximum sustained treatment capacity of approximately 40 million gallons per day (mgd). The WTP includes pre-chlorination, coagulation, dissolved air flotation pretreatment for removal of solids and dissolved material, chemical stabilization to minimize internal pipe corrosion, membrane filtration, and chlorination for disinfection. Treated water deliveries from the SCWSP began in July 2005. In 2020, SSJID supplied approximately 23,935 acre-feet of water to the SCWSP cities (SSJID 2021).

The City contracted with SSJID for the delivery of 500 acre-feet per year starting in 1999 and running through the year 2029. Beginning in 2006, the contract provided that the initial 500 acre-feet per year could be increased annually by 229 acre-feet per year to a maximum of 6,000 acre-feet per year in 2029. Surface water from SSJID is subject to availability (City of Ripon 2017). When surface water is available from SSJID, it is delivered to the City via the SSJID canal system and used for groundwater recharge, which helps replenish the aquifer and ensures groundwater is available for future City use.

The City is currently not a SCWSP potable water program participant; however, the City has explored a potential pipeline connection to the SCWSP as early as 1996 (Christiana Giedd electronic mail). The City is now seeking to receive treated water from the SCWSP to supplement its existing groundwater supply, particularly as the cost of treating groundwater is projected to increase. The change to surface water will be contingent on funding, an agreement with SSJID, construction of the proposed new conveyance pipelines, CEQA review, and permitting (SSJID 2021).

The City is working with the State Water Resources Control Board (SWRCB) Drinking Water State Revolving Fund (DWSRF) to provide funding for the project, which will include the above-described project components. The DWSRF is funded in part with federal funds. As a result, the project will also be subject to review under the National Environmental Policy Act (NEPA). NEPA review will be conducted separately from this CEQA environmental review.

1.4 Environmental Evaluation Checklist Terminology

The project's potential environmental effects are evaluated in the Environmental Evaluation Checklist presented in Chapter 3.0 of this IS/MND. The checklist includes a list of environmental considerations against which the project is evaluated. For each question, the City determines whether the project would involve 1) a Potentially Significant Impact, 2) a Less Than Significant Impact with Mitigation Incorporated, 3) a Less Than Significant Impact, or 4) No Impact.

> A Potentially Significant Impact occurs when there is substantial evidence that the project would involve a substantial adverse change to the physical environment, i.e., the environmental effect may be significant, and mitigation measures have not

been defined that would reduce the impact to a level that would be less than significant. If there is a Potentially Significant Impact entry in the Initial Study, then an EIR is required. No Potentially Significant Impacts are identified in this Initial Study.

An environmental effect that is Less Than Significant with Mitigation Incorporated is a Potentially Significant Impact that can be avoided or reduced to a level that is less than significant with the application of defined mitigation measures.

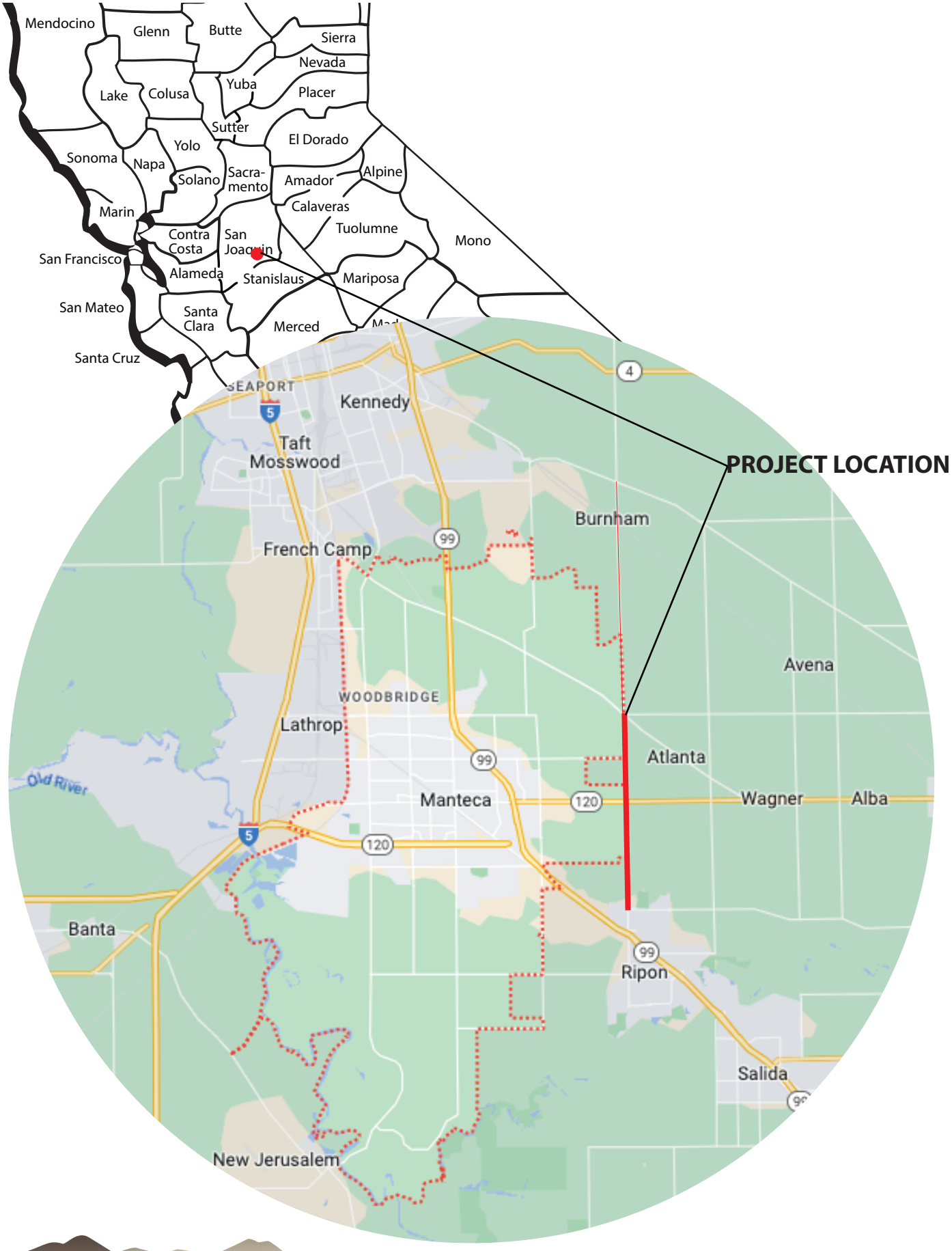
A Less Than Significant Impact occurs when the project would involve an environmental impact, but the impact would not cause a substantial adverse change to the physical environment that would require mitigation.

A determination of No Impact is self-explanatory.

This IS/MND identifies certain potentially significant environmental effects that would be mitigated by implementation of existing provisions of law and standards of practice related to land use planning and environmental protection. Such provisions are identified and considered in the environmental impact analysis, and the degree to which they would reduce potential environmental effects is discussed. These protections are considered part of the existing regulatory environment and are assumed to counter the potential environmental effects of the project as discussed. The need for additional mitigation measures described in this Initial Study occurs when such existing environmental protections are not adequate to avoid potential environmental effects or to reduce them to a level that is less than significant.

1.5 Summary of Environmental Effects and Mitigation Measures

Table 1-1, which follows Figure 1-4, summarizes the results of the Environmental Evaluation Checklist and associated narrative discussion in Chapter 3.0 of this IS/MND. The potential environmental impacts of the proposed project are listed in the left-most column of this table. The level of significance of each impact is indicated in the second column. Feasible mitigation measures that are considered necessary to avoid or minimize the impacts are shown in the third column, and the significance of the impact after mitigation measures are applied is shown in the fourth column.



BaseCamp Environmental

Figure 1-1
REGIONAL LOCATION MAP

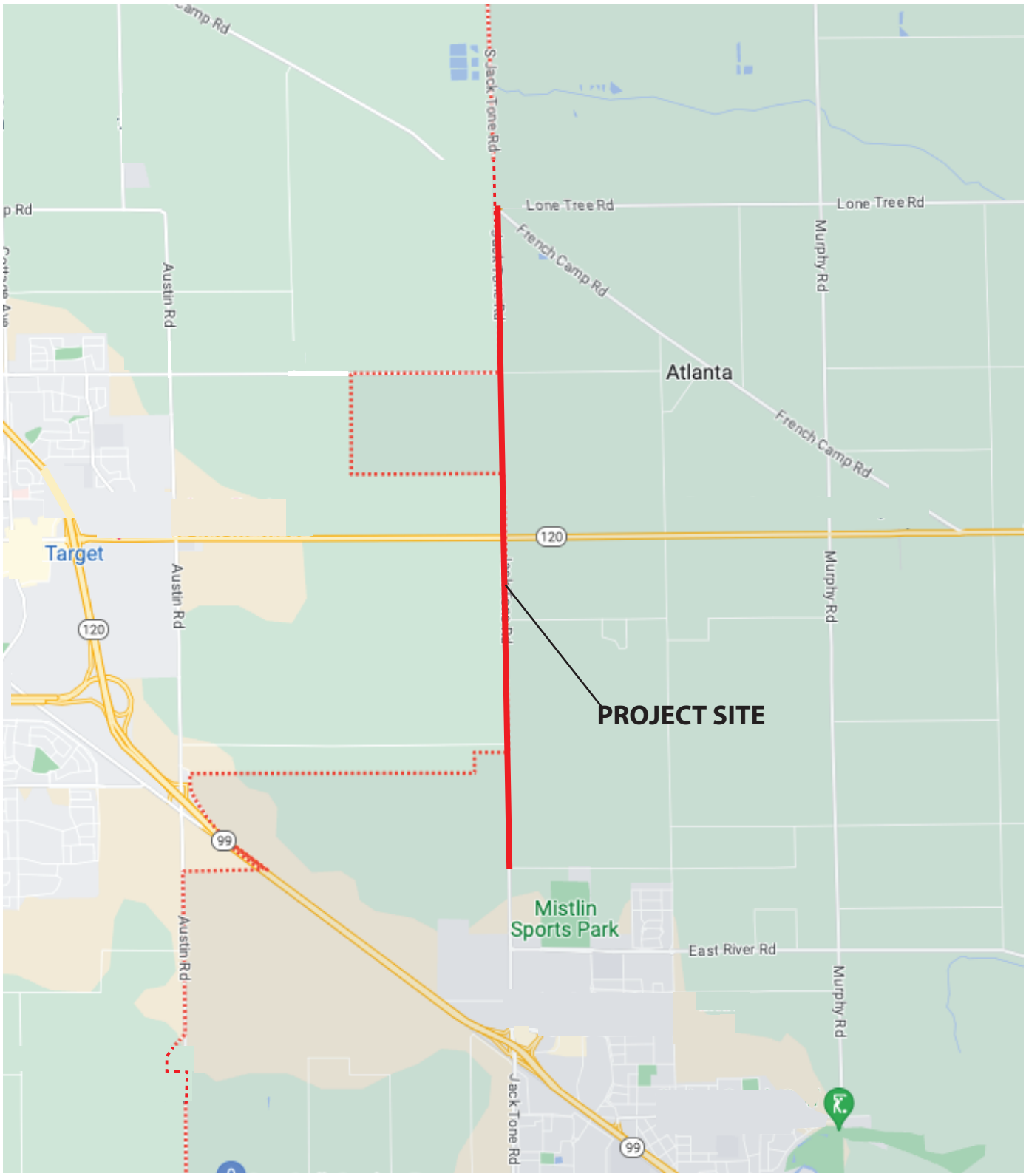
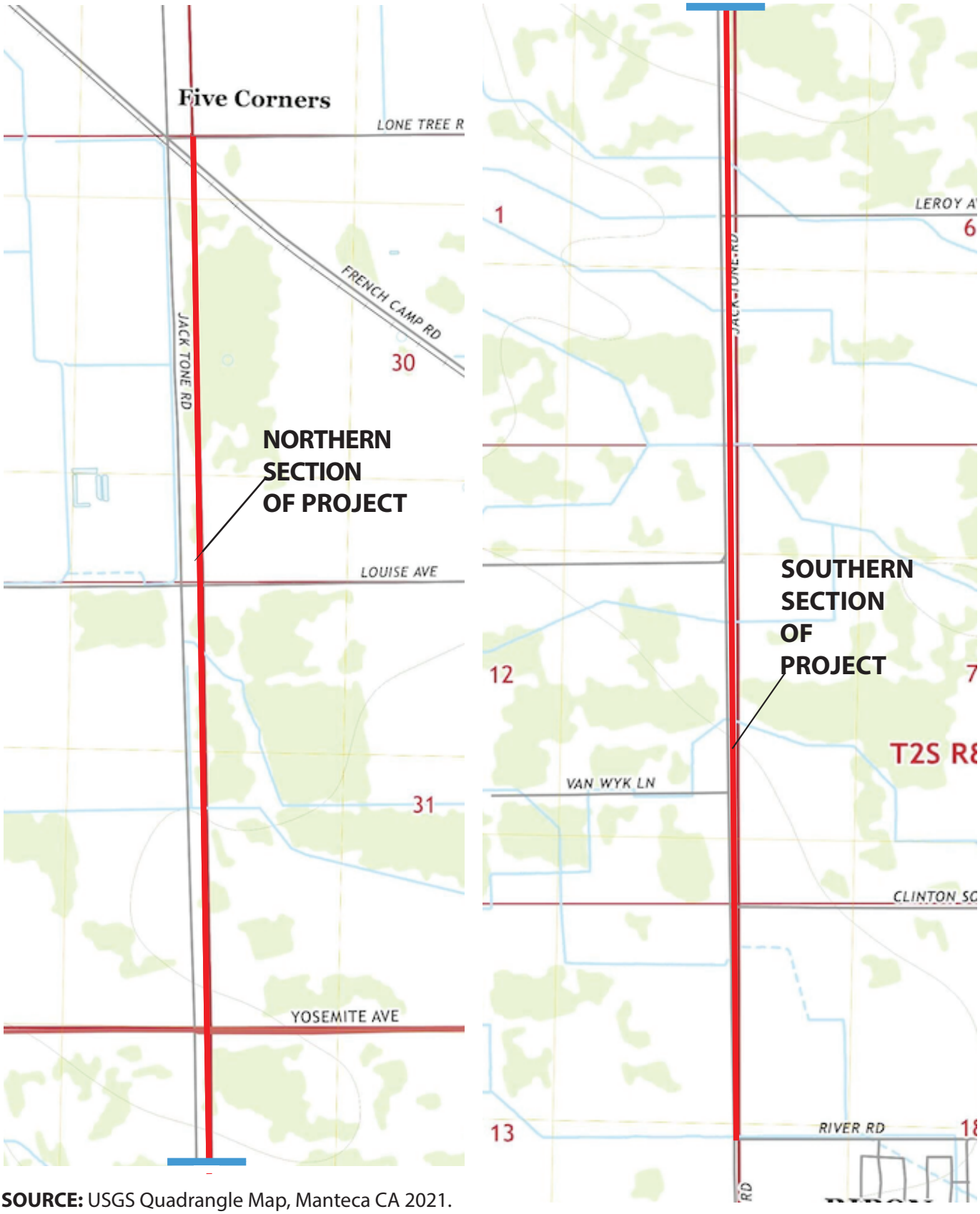


Figure 1-2
STREET MAP



SOURCE: USGS Quadrangle Map, Manteca CA 2021.

SOURCE: Google Earth

TABLE 1-1
SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Potential Impact	Significance Before Mitigation Measures	Mitigation Measures	Significance After Mitigation Measures
3.1 AESTHETICS			
a) Scenic Vistas	NI	None required.	-
b) Scenic Routes and Resources	NI	None required.	-
c) Visual Character and Quality	LS	None required.	-
d) Light and Glare	NI	None required.	-
3.2 AGRICULTURE AND FORESTRY RESOURCES			
a) Agricultural Land Conversion	NI	None required.	-
b) Agricultural Zoning and Williamson Act	NI	None required.	-
c, d) Forest Land Zoning and Conversion	NI	None required.	-
e) Indirect Conversion of Farmland and Forest Land	LS	None required.	-
3.3 AIR QUALITY			
a) Air Quality Plan Consistency	LS	None required.	-
b) Cumulative Emissions	NI	None required.	-
c) Exposure of Sensitive Receptors	LS	None required.	-
d) Odors	NI	None required.	-
3.4 BIOLOGICAL RESOURCES			
a) Special-Status Species	LS	None required.	-
b) Riparian and Other Sensitive Habitats	NI	None required.	-

TABLE 1-1
SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Potential Impact	Significance Before Mitigation Measures	Mitigation Measures	Significance After Mitigation Measures
c) Wetlands and Waters of the U.S.	NI	None required.	-
d) Fish and Wildlife Movement	PS	BIO-1: If vegetation removal or project construction commences during the nesting season for raptors (January 1 through July 31), a pre-construction survey for nesting raptors shall be conducted within one-quarter mile of the project site. If vegetation removal or project construction commences during the general avian nesting season (March 1 through July 31), a pre-construction survey for nesting birds shall be conducted on and within 500 feet of the project site. If active nests are found, work in the vicinity of the nest shall be delayed until the young fledge. A qualified wildlife biologist shall determine if temporal restrictions on construction are required.	LS
e) Local Biological Requirements	NI	None required.	-
f) Conflict with Habitat Conservation Plans	NI	None required.	-
3.5 CULTURAL RESOURCES			
a) Historical Resources	LS	None required.	-
b) Archaeological Resources	PS	CULT-1: If any subsurface cultural resources are encountered during construction of the project, all construction activities within 30 feet of the encounter shall be halted until a qualified archaeologist can examine these materials, determine their significance, and if significant recommend treatment of the resource. Recommended treatment could include, but are not limited to, 1) preservation in place, or 2) excavation, recovery, and curation by qualified professionals. The treatment would be determined in consultation with the project applicant, San Joaquin County, appropriate tribes, and any other relevant regulatory agencies or interested parties as appropriate. Construction activities shall not resume in the area of the find until the find is appropriately treated. The	LS

TABLE 1-1
SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Potential Impact	Significance Before Mitigation Measures	Mitigation Measures	Significance After Mitigation Measures
		City of Ripon Planning Department shall be notified, and the project developer shall be responsible for retaining qualified professionals, implementing recommended mitigation measures, and documenting mitigation efforts in a written report to the City's Planning Department, consistent with the requirements of the CEQA Guidelines.	
c) Human Burials	LS	None required.	-
3.6 ENERGY			
a) Project Energy Consumption	LS	None required.	-
b) Consistency with Energy Plans	NI	None required.	-
3.7 GEOLOGY AND SOILS			
a-i) Fault Rupture Hazards	NI	None required.	-
a-ii) Seismic Ground Shaking	LS	None required.	-
a-iii) Other Seismic Hazards	NI	None required.	-
a-iv) Landslides	NI	None required.	-
b) Soil Erosion	LS	None required.	-
c) Unstable Soils	LS	None required.	-
d) Expansive Soils	NI	None required.	-
e) Adequacy of Soils for Wastewater Disposal	NI	None required.	-
f) Paleontological Resources and Unique Geologic Features	LS	None required.	-

TABLE 1-1
SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Potential Impact	Significance Before Mitigation Measures	Mitigation Measures	Significance After Mitigation Measures
3.8 GREENHOUSE GAS EMISSIONS			
a) Project GHG Emissions	LS	None required.	-
b) Consistency with GHG Reduction Plans	NI	None required.	-
3.9 HAZARDS AND HAZARDOUS MATERIALS			
a) Hazardous Material Transport, Use and Storage	NI	None required.	-
b) Release of Hazardous Materials by Upset or Accident	LS	None required.	-
c) Hazardous Materials Releases near Schools	NI	None required.	-
d) Hazardous Materials Sites	LS	None required.	-
e) Airport Operations	NI	None required.	-
f) Emergency Response and Evacuation	PS	HAZ-1: Prior to the start of project construction, the contractor shall develop and implement a Traffic Control Plan. The Traffic Control Plan shall include such items as traffic control requirements, resident notification of access closure, and daily access restoration. The contractor shall specify dates and times of road or access closures or restrictions, if any, and shall ensure that adequate access will be provided for emergency vehicles and residents. The Traffic Control Plan shall be reviewed and approved by the City Department of Public Works and shall be coordinated with the Ripon Consolidated Fire District, the Lathrop-Manteca Fire District, and the San Joaquin County Sheriff's Department.	LS
g) Wildland Fire Hazards	NI	None required.	-

TABLE 1-1
SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Potential Impact	Significance Before Mitigation Measures	Mitigation Measures	Significance After Mitigation Measures
3.10 HYDROLOGY AND WATER QUALITY			
a) Violation of Water Quality Standards	LS	None required.	-
b) Groundwater Supplies and Recharge	LS	None required.	-
c-i, ii, iii) Drainage Patterns and Runoff	NI	None required.	-
c-iv) Flood Flows	NI	None required.	-
d) Release of Pollutants in Flood Zone	NI	None required.	-
e) Conflict with Water Quality or Sustainable Groundwater Plans	LS	None required.	-
3.11 LAND USE AND PLANNING			
a) Division of Established Communities	NI	None required.	-
b) Conflict with Applicable Plans, Policies and Regulations Avoiding or Mitigating Environmental Effects	LS	None required.	-
3.12 MINERAL RESOURCES			
a, b) Loss of Mineral Resource Availability	NI	None required.	-
3.13 NOISE			
a) Exposure to Noise Exceeding Local Standards	LS	None required.	-
b) Groundborne Vibrations	LS	None required.	-
c) Exposure to Airport/Airstrip Noise	NI	None required.	-

TABLE 1-1
SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Potential Impact	Significance Before Mitigation Measures	Mitigation Measures	Significance After Mitigation Measures
3.14 POPULATION AND HOUSING			
a) Unplanned Population Growth	LS	None required.	-
b, c) Displacement of Housing and People	NI	None required.	-
3.15 PUBLIC SERVICES			
a-i) Fire Protection	NI	None required.	-
a-ii) Police Protection	NI	None required.	-
a-iii) Schools	NI	None required.	-
a-iv) Parks	NI	None required.	-
a-v) Other Public Facilities	NI	None required.	-
3.16 RECREATION			
a, b) Recreational Facilities	NI	None required.	-
3.17 TRANSPORTATION			
a) Conflict with Transportation Plans, Ordinances and Policies	NI	None required.	-
b) Conflict with CEQA Guidelines Section 15064.3(b)	NI	None required.	-
c) Traffic Hazards	NI	None required.	-
d) Emergency Access	PS	Mitigation Measure HAZ-1.	LS

TABLE 1-1
SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Potential Impact	Significance Before Mitigation Measures	Mitigation Measures	Significance After Mitigation Measures
3.18 TRIBAL CULTURAL RESOURCES			
a-i, ii) Tribal Cultural Resources	PS	Mitigation Measure CULT-1.	LS
3.19 UTILITIES AND SERVICE SYSTEMS			
a) Construction or Relocation of Infrastructure	LS	None required.	-
b) Water Supply	LS	None required.	-
c) Wastewater Systems	NI	None required.	-
d, e) Solid Waste Services	NI	None required.	-
3.20 WILDFIRE			
a) Emergency Response and Emergency Evacuation Plans	NI	None required.	-
b) Exposure of Project Occupants to Pollutants	NI	None required.	-
c) Installation and Maintenance of Infrastructure	NI	None required.	-
d) Risks from Runoff, Post-Fire Slope Instability, or Drainage Changes	NI	None required.	-
3.21 MANDATORY FINDINGS OF SIGNIFICANCE			
a) Findings on Biological and Cultural Resources	PS	Mitigation measures in Sections 3.4 and 3.5.	LS
b) Findings on Individually Limited but Cumulatively Considerable Impacts	NI	None required.	-
c) Findings on Adverse Effects on Human Beings	LS	None required.	-

LEGEND: NI = No Impact; LS = Less Than Significant; PS = Potentially Significant

2.0 PROJECT DESCRIPTION

2.1 Project Location

The project site is the right-of-way of Jack Tone Road, partly within the City of Ripon and the adjacent unincorporated area of San Joaquin County north of the City (see Figures 1-1 to 1-4). The project is located from East River Road in Ripon to Lone Tree Road in the County. The project site is shown on the U.S. Geological Survey's Manteca, California, 7.5-minute quadrangle map along the boundary line between Range 7 East and Range 8 East, extending from Section 18 Township 2 South, Range 8 East to Section 30, Township 1 North, Range 8 East, Mt. Diablo Base and Meridian. The latitude of the approximate center of the project site is 37° 47′ 42″ North, and the longitude is approximately 121° 08′ 37″ West.

2.2 Project Details

As noted in Chapter 1.0, Introduction, the City has contracted for water from SSJID. The City plans to purchase and use water during the off-peak season for SSJID's water demand. During this time, City wells would not be used, or their use would be limited. This would allow for groundwater recharge at the well sites. In the peak season for SSJID water demand, the City would use its existing wells to satisfy its water demands.

To obtain the SSJID water, the project proposes the installation of approximately 4.5 miles of new water pipelines within the existing right-of-way of Jack Tone Road. Figures 2-1A through 2-1C show the approximate alignment of the pipelines. At this time, it has not been determined if the pipelines would be located along the east or west road shoulder; the project may cross the road one or more times along the length of the alignment, depending on local conditions and constraints. Both sides of Jack Tone Road have similar adjacent land uses and have similar facilities crossing them, including SR 120 and other public roads, private driveways, farm roads, and SSJID irrigation laterals. The new pipeline or pipelines would be of polyvinyl chloride, or PVC; the planned project consists of two pipelines approximately 18 inches in diameter. Alternatively, the project may be constructed as a single 24-inch pipeline.

The northern terminus of the pipelines would tie into an existing 48-inch SSJID pipeline, that conveys treated water from the Nick DeGroot Water Treatment Plant west of Woodward Reservoir in Stanislaus County to the south County cities to the west that are part of the SCWSP. The tie-in would occur beneath Lone Tree Road, and the contractor would coordinate the tie-in with SSJID. Where the proposed pipelines would tie into the SSJID pipeline, an air release valve would be installed at the end of each pipeline (Figure 2-2). The air release valves ensure that any entrained air in the water pipelines is automatically released to maximize system performance. Control valves would be installed

below surface grade and would be connected to the proposed pipelines via a three-inch diameter pipe.

The southern terminus of these pipelines would connect with the City's existing water storage and distribution facilities at Mistlin Sports Park in northern Ripon. At this time, no specific plans have been drafted for the tie-in to the Ripon facilities; one possible tie-in point is an existing 24-inch diameter water line beneath East River Road that extends to Jack Tone Road the exact location of the southern pump station has not been determined.

The project would include installation of one pump station, to be placed near either the northern or southern terminus of the project as shown in Figures 2-1A and 2-1C. The exact location of this pump station has not been determined at this time. However, should the pump station be located near the southern terminus, it would be installed within parcel APN 245-74-006, which contains City Well 19. Whether at the northern or southern terminus, the pump station would occupy up to one-half acre.

Project Construction

For most of the project alignment, the pipelines would be installed within trenches, covered by a minimum of four feet of backfill. Where the project crosses SR 120 and the SSJID laterals, the pipelines would be installed using trenchless methods such as bore-and-jack.

Pipeline construction would be confined to the existing right-of-way of Jack Tone Road; no additional acquisition of right-of-way would be required. All crossings of utility lines will be verified by the contractor, and the City Engineer will be notified of any conflicts. A field adjacent to the project alignment and to Mistlin Sports Park has been proposed as a potential staging area for construction equipment, as shown in Figure 2-1C.

2.3 Permits and Approvals

As the project is within both the City and unincorporated San Joaquin County, approvals from both agencies would be required, mainly of construction plans and encroachment permits for work within City streets and County roads. In particular, the City's Public Works Department would review and approve all connections to the City's water system, as well as issue encroachment permits for work in City streets. The County's Public Works Department would issue encroachment permits for work on County roads. The project would also require the review and approval of SSJID for the connection of the pipelines to the SSJID pipeline.

It is anticipated that the project would be funded largely by the Environmental Protection Agency though the SWRCB's Drinking Water State Revolving Fund (DWSRF) program. This federal funding will require evaluation of the potential environmental impacts of the proposed project under the National Environmental Policy Act (NEPA). As noted in Chapter 1.0, Introduction, the NEPA evaluation would be conducted separately from the CEQA evaluation. The SWRCB also has approval authority for a Construction General Permit that would apply to the project (see Section 3.7, Geology and Soils).

BaseCamp Environmental

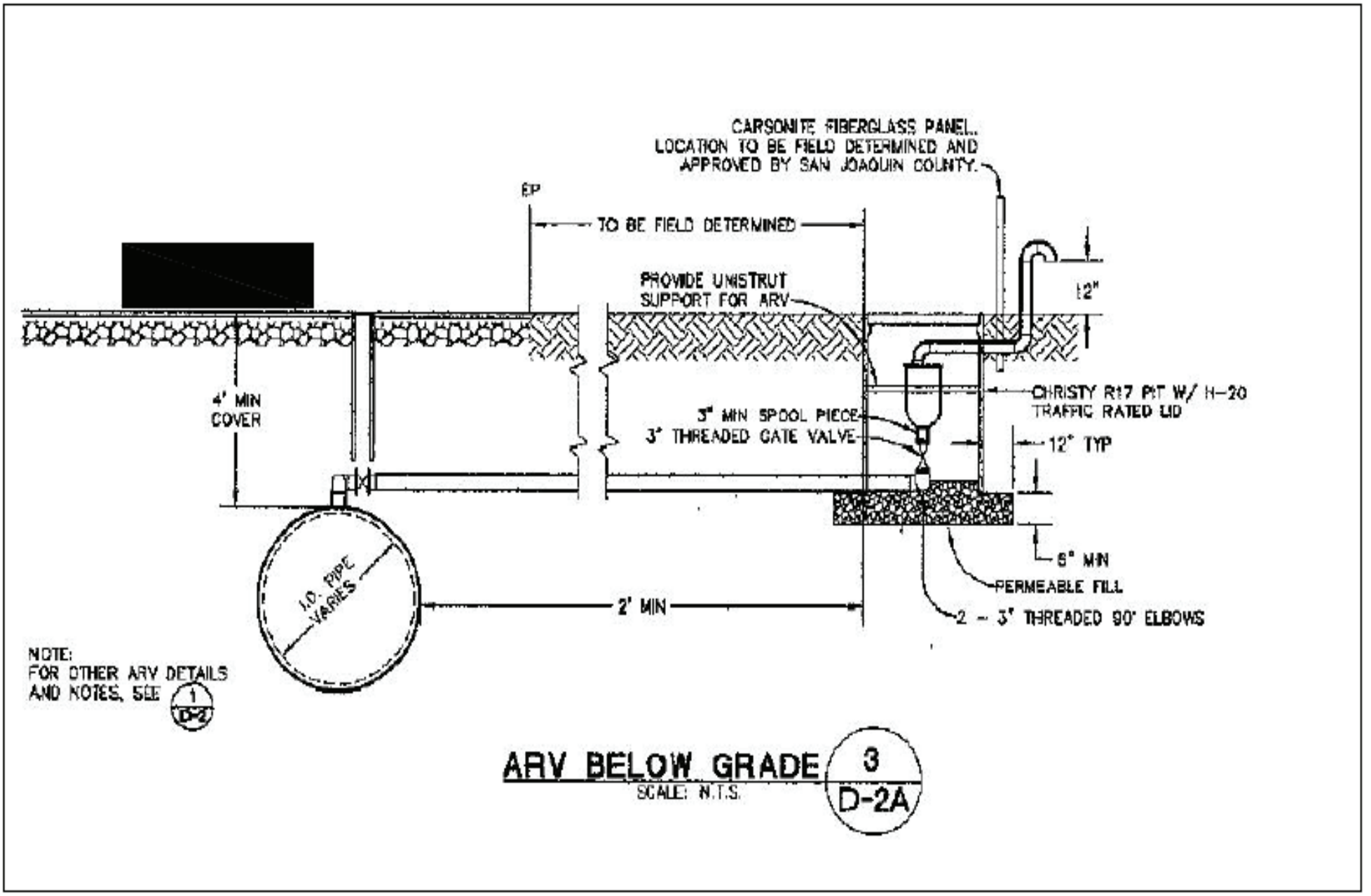
Figure 2-1A
PROJECT ALIGNMENT, PART 1

BaseCamp Environmental

Figure 2-1B
PROJECT ALIGNMENT, PART 2

BaseCamp Environmental

Figure 2-1C
PROJECT ALIGNMENT, PART 3



SOURCE: CITY OF RIPON

Figure 2-2
AIR RELEASE VALVE

3.0 ENVIRONMENTAL EVALUATION CHECKLIST

The following environmental evaluation considers the potential environmental effects of City approval of the proposed project, as described in Chapter 2.0, Project Description. The format of this evaluation is based on the Environmental Checklist presented in CEQA Guidelines Appendix G.

3.1 AESTHETICS

Except as provided in Public Resources Code Section 21099, 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) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?			✓	
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?				✓

Environmental Setting

The project traverses a mostly rural agricultural landscape largely orchards, vineyards and rural residences. The southernmost portion of the project is within the City of Ripon. The landscape in the vicinity of the project's southern end consists mainly of Mistlin Sports Park, agricultural land, rural residences, and vacant land. The Ripon water tank at Mistlin Park is a prominent viewshed feature near the southern terminus of the project. There are no other notable aesthetic features in the project vicinity.

Environmental Impacts and Mitigation Measures

a) Scenic Vistas.

The project is the installation and operation of underground water pipelines. It would not involve the construction of any substantial aboveground structures that could interfere with

existing scenic vistas from areas at or near the project site. The project would have no impact on scenic vistas.

b) Scenic Routes and Resources.

There are no scenic resources of substantial value along the project alignment, such as trees, rock outcroppings, or historic buildings. California's Scenic Highway Program was created by the Legislature in 1963 to preserve and protect scenic highway corridors from change which would diminish the aesthetic value of lands adjacent to highways. According to the Caltrans list of designated scenic highways, there are only two officially designated state scenic highways within San Joaquin County: Interstate 5 from the Stanislaus County Line to Interstate 580, and Interstate 580 from I-5 to the Alameda County Line (Caltrans 2019). Neither of these State Scenic Highways are on or near the project site.

The San Joaquin County Plan has designated several County roads as scenic routes. The nearest County scenic routes to the project site are Austin Road west of Ripon and River Road east of the eastern Ripon City limits (San Joaquin County 2016a). Jack Tone Road along the project alignment is not a designated County scenic route. Overall, the project would have no impact on scenic resources or scenic highways.

c) Visual Character and Quality.

A recent change to the Environmental Checklist in CEQA Guidelines Appendix G emphasizes aesthetic and visual resource impacts on public views in non-urbanized areas. As defined in Appendix G, "public views" are views that are experienced from publicly accessible vantage points. Although not specifically defined, "publicly accessible vantage points" are assumed to include, though not necessarily limited to, public roads, parks, trails, and vista turnouts. For this project, publicly accessible vantage points would be from Jack Tone Road.

Installation of the pipelines would involve trenching, which would temporarily affect visual quality along the roads where trenching occurs. The project alignment would be restored to its pre-project condition upon completion of work, so there would be no permanent visual impacts. Existing visual landscapes would not be altered by the project, as the pipelines would be beneath the ground surface and no aboveground structures would be installed. Project impacts on visual character and quality would be less than significant.

d) Light and Glare.

Existing lighting along the project alignment is found mainly at rural residences. The project would not add any lighting, and it would not install any aboveground structures that may require lighting or produce glare. The project would have no impact related to light or glare.

3.2 AGRICULTURE AND FORESTRY RESOURCES

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?			✓	

Environmental Setting

The project alignment is adjacent to agricultural lands, mainly orchards. The Important Farmland Maps, prepared by the California Department of Conservation as part of its Farmland Mapping and Monitoring Program, designate the viability of lands for farmland use, based on the physical and chemical properties of the soils. The maps categorize farmland as Prime Farmland, Unique Farmland, and Farmland of Statewide Importance. Collectively, these three categories are referred to as "Farmland" by CEQA Guidelines Appendix G. There are also designations for other agricultural land and for urban/built-up areas, among others. According to the 2018 Important Farmland Map of San Joaquin County, the project is adjacent to lands designated predominantly as Farmland of Statewide Importance, with a few areas designated as Prime Farmland (FMMP 2018).

Environmental Impacts and Mitigation Measures

a) Agricultural Land Conversion.

As noted, the project is adjacent to land designated Farmland of Statewide Importance and Prime Farmland, which are defined as Farmland by CEQA Guidelines Appendix G. However, the project would be located entirely within existing public road rights-of-way.

No Farmland would be used for the project. The project would have no impact on Farmland conversion.

b) Agricultural Zoning and Williamson Act.

Most of the lands along the project alignment have been zoned by the County as AG-40, General Agriculture, 40-acre minimum. Lands near the City have been zoned as AU-20, Agriculture Urban Reserve, 20-acre minimum. As discussed in a) above, the project would be located entirely within public road rights-of-way. The project would not encroach upon lands zoned for agricultural use.

The Williamson Act is State legislation that seeks to preserve farmland by offering property tax breaks to farmers who sign a contract pledging to keep their land in agricultural use. There are some lands adjacent to the proposed pipeline alignment that are under a Williamson Act contract. However, as noted, the project would be confined to the public road rights-of-way, which are not subject to Williamson Act contracts. The project would have no impact on agricultural zoning or Williamson Act contracts.

c, d) Forest Land Zoning and Conversion.

There is no forest land in the project vicinity or in the Central Valley portion of San Joaquin County. No land in the area is zoned for timber production. The project would have no impact on forest land zoning or conversion.

e) Indirect Conversion of Farmland and Forest Land.

The project would not involve any conflict with, or have an adverse effect on, the ongoing and continued use of agricultural land in the project vicinity. The purpose of the project is to provide a reliable water supply to the City of Ripon, including planned new development. The project does not include any plan to oversize distribution pipe and/or provide additional service connections in anticipation of expanding its service area. Project impacts regarding indirect conversion of farmland are considered less than significant. The project would have no indirect effect on conversion of forest land to non-forest use, as there is no forest land in the area.

3.3 AIR QUALITY

Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. 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 Attainment Plan?	☐	☐	✓	☐
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region	☐	☐	☐	✓

is non-attainment under an applicable federal or state ambient air quality standard?				
c) Expose sensitive receptors to substantial pollutant concentrations?			✓	
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?				✓

Environmental Setting

Air Quality Background

The project site is within the San Joaquin Valley Air Basin. The San Joaquin Valley Air Pollution Control District (SJVAPCD), which includes San Joaquin County and the adjacent Stanislaus County, has jurisdiction over most air quality matters in the Air Basin; vehicle emissions are the responsibility of the California Air Resources Board (ARB). The SJVAPCD is tasked with developing and implementing plans, programs and regulations that would enable the Air Basin to attain ambient air quality standards set under both the federal and California Clean Air Acts.

TABLE 3-1
SAN JOAQUIN VALLEY AIR BASIN ATTAINMENT STATUS

	Designation/Classification	
Pollutant	**Federal Primary Standards**	**State Standards**
Ozone - One hour	No Federal Standard*	Nonattainment/Severe
Ozone - Eight hour	Nonattainment/Extreme	Nonattainment
PM_{10}	Attainment	Nonattainment
$PM_{2.5}$	Nonattainment	Nonattainment
Carbon Monoxide	Attainment/Unclassified	Attainment/Unclassified
Nitrogen Dioxide	Attainment/Unclassified	Attainment
Sulfur Dioxide	Attainment/Unclassified	Attainment
Lead (Particulate)	No Designation/Classification	Attainment
Hydrogen Sulfide	No Federal Standard	Unclassified
Sulfates	No Federal Standard	Attainment
Visibility Reducing Particles	No Federal Standard	Unclassified
Vinyl Chloride	No Federal Standard	Attainment

* Effective June 15, 2005, EPA revoked the federal 1-hour ozone standard, including associated designations and classifications.

Source: SJVAPCD 2020.

Under their respective Clean Air Acts, both the State of California and the federal government have established ambient air quality standards for six criteria air pollutants: ozone, particulate matter, carbon monoxide, nitrogen dioxide, sulfur dioxide, and lead. California has four additional criteria pollutants under its Clean Air Act; none of the latter four pollutants are generated in the project area. Table 3-1 shows the current attainment status of the Air Basin relative to the federal and State ambient air quality standards for criteria pollutants.

Except for ozone and particulate matter, the Air Basin is in attainment of, or unclassified for, all federal and State ambient air quality standards. Ozone is not emitted directly into the air but is formed when reactive organic gases (ROG) and nitrogen oxides (NO_x) react in the atmosphere in the presence of sunlight. The SJVAPCD currently has a 2022 Plan for the 2015 8-Hour Ozone Standard and the 2023 Maintenance Plan and Redesignation Request for the Revoked 1-Hour Ozone Standard to attain federal ambient air quality standards for ozone.

Particulate matter is a mixture of solid and liquid particles suspended in air, including dust, pollen, soot, smoke, and liquid droplets. In San Joaquin County, particulate matter is generated by a mix of rural and urban sources, including agricultural operations, industrial emissions, dust suspended by vehicle traffic, and secondary aerosols formed by reactions in the atmosphere. Two types of particulate matter are of concern: particulate matter 10 micrometers or less in diameter (PM_{10}), and particulate matter 2.5 micrometers or less in diameter ($PM_{2.5}$). The SJVAPCD currently has a 2018 Plan for the 1997, 2006, and 2012 PM2.5 Standards to attain federal ambient air quality standards for $PM_{2.5}$ and the 2007 PM10 Maintenance Plan to maintain its current PM_{10} attainment status.

In addition to the criteria pollutants, the ARB has identified other air pollutants as toxic air contaminants (TACs) - pollutants that are carcinogenic (i.e., cause cancer) or that may cause other adverse short-term or long-term health effects. Diesel particulate matter, considered a carcinogen, is the most common TAC, as it is a product of combustion in diesel engines. It is present at some concentration in all developed areas of the state. Other TACs are less common and are typically associated with industrial operations.

As noted, the SJVAPCD is tasked with implementing regulations designed to attain ambient air quality standards. SJVAPCD rules and regulations that are potentially applicable to the project are summarized below.

Regulation VIII (Fugitive Dust PM_{10} Prohibitions). Rules 8011-8081 are designed to reduce PM_{10} emissions - predominantly dust/dirt - generated by human activity, including construction and demolition activities, road construction, bulk materials storage, paved and unpaved roads, carryout and track out, landfill operations, etc.

Rule 4101 (Visible Emissions). This rule prohibits emissions of visible air contaminants to the atmosphere and applies to any source operation that emits or may emit air contaminants.

Rule 9510 (Indirect Source Review). Rule 9510, also known as the Indirect Source Rule, is intended to reduce or mitigate construction and operational emissions of NO_x and PM_{10} generated by new development, either directly and/or by payment of off-site mitigation fees. Construction emissions of NO_x and PM_{10} exhaust must be reduced by 20% and 45%, respectively. Operational emissions of NO_x and PM_{10} must be reduced by 33.3% and 50%, respectively. All projects subject to Rule 9510 are required to submit an Air Impact Assessment to the SJVAPCD.

Rule 9510 applies to projects of a land use not otherwise identified in the rule that involve 9,000 square feet or more of building space.However, development projects that have a mitigated baseline emissions below two tons per year of NO_x and two tons per year of PM_{10} are exempt from the requirements in Sections 6.0 and 7.0 of the rule, which involve general mitigation requirements and the off-site emission reduction fee.

Environmental Impacts and Mitigation Measures

a) Air Quality Plan Consistency.

In 2015, the SJVAPCD adopted a revised Guide for Assessing and Mitigating Air Quality Impacts. The Guide defines an analysis methodology, thresholds of significance, and mitigation measures for the assessment of air quality impacts for land development projects within SJVAPCD's jurisdiction. Table 3-2 shows the CEQA thresholds for significance for pollutant emissions within the SJVAPCD.

TABLE 3-2
SJVAPCD SIGNIFICANCE THRESHOLDS AND
PROJECT AIR POLLUTANT EMISSIONS

	ROG	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
SJVAPCD Significance Thresholds[1]	**10**	**10**	**100**	**27**	**15**	**15**
Construction Emissions[2]	0.02	0.12	0.20	<0.01	5.61	1.17
Above Threshold?	*No*	*No*	*No*	*No*	*No*	*No*

Note: All figures are in tons per year.
Sources: Road Construction Emissions Model Version 9.0.0, SJVAPCD 2015.

The Road Construction Emissions Model (RCEM) was used to estimate the total pollutant emissions that would result from project construction. Although originally developed for road projects, the RCEM has been modified to provide emission estimates for projects that are linear in character, such as pipeline installation. The full RCEM results are shown in Appendix A of this document, and a summary is presented in Table 3-2 above. As indicated in Table 3-2, project construction emissions would be substantially below the significance thresholds established by SJVAPCD for criteria pollutant emissions. As the significance thresholds were established in part to ensure consistency with the objectives of air quality

attainment plans adopted by the SJVAPCD, project construction emissions would not conflict with these plans.

While project construction emissions would not be significant, the project would still be required to comply with applicable SJVAPCD rules and regulations, which would further reduce potential air quality impacts. As noted, SJVAPCD Regulation VIII contains measures to reduce fugitive dust emissions during construction. Dust control provisions are routinely included in site improvement plans and specifications, along with construction contracts. After construction work is completed, the project would not generate any air pollutant emissions. Project impacts related to air quality plans would be less than significant.

b) Cumulative Emissions.

As noted in a) above, the project would not generate any emissions once construction work is completed. Future attainment of federal and State ambient air quality standards is a function of successful implementation of the SJVAPCD's attainment plans. Consequently, the application of significance thresholds for criteria pollutants is relevant to the determination of whether a project's individual emissions would have a cumulatively significant impact on air quality. Pursuant to the SJVAPCD's guidance, if project-specific emissions would be less than the thresholds of significance for criteria pollutants, the project would not be expected to result in a cumulatively considerable net increase of any criteria pollutant for which the SJVAPCD is in nonattainment under applicable federal or State ambient air quality standards. As the project would not generate any operational emissions, it would not result in a cumulatively considerable net increase of any criteria pollutant and therefore would have no impact on this issue.

c) Exposure of Sensitive Receptors.

As defined in the Guide for Assessing and Mitigating Air Quality Impacts, "sensitive receptors" include residences, schools, parks and playgrounds, day care centers, nursing homes, and hospitals (SJVAPCD 2015). Potential sensitive receptors near the project alignment include rural residences along Jack Tone Road.

Project construction emissions could affect these residences, which are adjacent to the project alignment. However, potential exposure of any individual residence to these emissions would last a few days at most and would cease once construction work is completed. In addition, as described in a) above, dust control measures would be applied, reducing the amount of dust to which sensitive receptors may be exposed. Project operations would not generate any air pollutant emissions. Project impacts on sensitive receptors would be less than significant.

d) Odors and Other Emissions.

The project does not involve any features that would generate any substantial or noticeable odors during either construction or operation. Construction equipment could generate exhaust that would be considered odorous. However, as noted, exposure would be limited

in intensity, of short duration, and the exhaust emissions would quickly dissipate. Project operations would not generate any odors.

Residences adjacent to the project alignment could be exposed to diesel particulate matter generated by project construction. As noted, diesel particulate matter is considered a TAC. However, emissions would have adverse effects on residents only with long-term exposure, and potential exposure of any individual residence to these emissions would be for a few days at most. Diesel particulate emissions would cease once construction work is completed. No long-term diesel particulate emissions would be generated by project operations. The project would have no impact related to odors or other emissions.

3.4 BIOLOGICAL RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Adversely impact, either directly or through habitat modifications, any endangered, rare, or threatened species, as listed in Title 14 of the California Code of Regulations (Sections 670.2 or 670.5) or in Title 50, Code of Federal Regulations (Sections 17.11 or 17.12)?			✓	
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 Wildlife or U.S. Fish and Wildlife Service?				✓
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				✓
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 Conservation Community Plan, or other approved local, regional, or state habitat conservation plan?				✓

Information in this section is based upon a Biological Assessment prepared by Moore Biological Consultants. Appendix B contains a copy of this report. Preparation of the report involved a search of California Department of Fish and Wildlife's (CDFW) California Natural Diversity Database (CNDDB), production of the United States Fish and Wildlife Service (USFWS) IPaC Trust Resource Report, review of critical habitat and National Wetland Inventory maps, and field surveys of the project site.

Environmental Setting

Vegetation and Wildlife

Land uses in this portion of San Joaquin County are primarily agricultural and residential. There are leveled fields adjacent to the alignment that primarily consist of irrigated pasture and orchards, with lesser amounts of row crops and fallow fields. Habitats in and near the alignment are highly disturbed.

The California annual grassland series best describes the ruderal grassland vegetation found along portions of the alignment, as well as in the large field near River Road. Oats, soft brome, foxtail barley, and perennial ryegrass are the dominant grass species on the site. Other species, such as prickly lettuce, yellow star thistle, bindweed, filaree, and common mallow are intermixed with the grasses. There are numerous trees near the alignment, most of which are orchard trees or landscape trees associated with nearby residences. The most notable trees in parcels along the alignment are some large valley oaks, redwoods, blue gum, and deodar cedar.

Several bird species were observed during the field survey, all of which are common species found in agricultural areas of San Joaquin County. Turkey vulture, red-tailed hawk, mourning dove, California scrub jay, northern mockingbird, European starling, and Brewer’s blackbird are representative of the avian species observed in the site.

No mammals were observed in the site during the field surveys, and the potential for intensive use of the project site by mammals is low. Common mammals such as coyote, raccoon, striped skunk, desert cottontail, black-tailed hare, Virginia opossum, and Botta’s pocket gopher may occur on the hay field where the north pump station may be constructed and on the fallow field near River Road. No California ground squirrels, or their burrows, were observed on the site. Small rodents, including mice and voles may occur on or adjacent to the site.

Due to lack of suitable habitat, few amphibians and reptiles are expected to use habitats on the site, and none were observed. The lack of aquatic habitat in the site reduces the probability for the site to be utilized by amphibians. The site is within the range of common reptiles such as western fence lizard, western skink, western terrestrial garter snake, and common king snake; these and other common amphibian and reptile species may occur in the site.

Waters of the U.S. and Waters of the State

Waters of the U.S., including wetlands, are broadly defined under 33 Code of Federal Regulations 328 to include navigable waterways, their tributaries, and adjacent wetlands. Jurisdictional wetlands are vegetated areas that meet specific vegetation, soil, and hydrologic criteria defined by the U.S. Army Corps of Engineers' *Wetlands Delineation Manual* and Regional Supplement. Jurisdictional wetlands and Waters of the U.S. include, but are not limited to, perennial and intermittent creeks and drainages; lakes, seeps, and springs; emergent marshes; riparian wetlands; and seasonal wetlands. Section 404 of the Clean Water Act requires that a permit be secured prior to the discharge of dredged or fill materials into any Waters of the U.S.

The only potentially jurisdictional Waters of the U.S. on the site are a series of SSJID irrigation canals and pipelines, all of which are part of SSJID's existing irrigation network. An open trapezoidal canal parallels the east side of Jack Tone Road just south of East Louise Avenue, then is piped under the road and underground to the west of the road. The other two open canals, which are approximately 650 feet north of Leroy Avenue and approximately 1,330 feet north of Graves Road, are aboveground waterways both to the east and west of Jack Tone Road and are piped under the road. There are also several entirely underground SSJID irrigation pipelines that cross under Jack Tone Road along the alignment. The SSJID canals and pipelines are mapped as "blueline" streams on the USGS topographic map and are depicted as "Riverine" features on the National Wetland Inventory map. No other potentially jurisdictional Waters of the U.S. or wetlands were observed on the site.

In April 2019, the SWRCB adopted the State Wetland Definition and Procedures for Discharges of Dredged or Fill Materials to Waters of the State. When the program is implemented, the Regional Water Quality Control Board (RWQCB) is expected to require issuance of Waste Discharge Requirements that authorize the impacts of filling isolated wetlands that are not subject to Section 404 permitting, or in some cases granting a waiver. No State-protected wetlands were identified on the project site. There are no areas on the site meeting the criteria of Waters of the State, including wetlands.

Special-Status Species

"Special-status species" are plant and wildlife species that are legally protected under the federal and/or California Endangered Species Acts. They also include other species that are considered rare enough by the scientific community and trustee agencies to warrant special consideration, particularly with regard to protection of isolated populations, nesting or denning locations, communal roosts, and other essential habitats. In addition, special-status plants include species considered rare or endangered under the conditions of CEQA Guidelines Section 15380, such as those plant species identified on Lists 1A, 1B and 2 in the Inventory of Rare and Endangered Vascular Plants of California, maintained by the California Native Plant Society. They also may include other species that are considered sensitive or of special concern due to limited distribution or lack of adequate information to permit listing or rejection for state or federal status, such as those included on CNPS List 3.

Table 3 of the biological resource report in Appendix B lists the special-status species that either have been documented or for which there is potentially suitable habitat in the greater project vicinity. This table also includes an assessment of the likelihood of occurrence of each of these species in the site. The evaluation of the potential for occurrence of each species is based on the distribution of regional occurrences if any, habitat suitability, and field observations. As indicated in Table 3 of the biological resource report, six special-status plant species and 23 special-status wildlife species were identified as potentially occurring in the project area.

Environmental Impacts and Mitigation Measures

a) Special-Status Species.

As noted, six special-status plant species were identified as potentially occurring in the project vicinity, However, Delta button celery is the only special-status plant species documented within 5 miles of the site. No special-status plants or potentially suitable habitat for special-status plants was observed on the site. Special-status plants generally occur in relatively undisturbed areas in vegetation communities such as vernal pools, marshes and swamps, seasonal wetlands, riparian scrub, and areas with unusual soils. By contrast, the project site and the potential staging areas have been substantially disturbed.

The Biological Assessment states that, while the project site may have provided habitat for special-status wildlife species at some time in the past, farming and development have substantially modified natural habitats in the greater project vicinity, including those on the site. The potential for intensive use of habitats within the project site by special-status wildlife species is extremely low. Swainson's hawk and burrowing owl are the only special-status species that were identified as potentially occurring on the project site on more than a transitory or occasional basis.

- *Swainson's hawk* is a migratory hawk listed by the State of California as a threatened species and is protected year-round, as are their nests during the nesting season (March 1 through September 15). Swainson's hawk is found in the Central Valley primarily during their breeding season. The project site is within a few miles of recorded Swainson's hawk nesting sites, and the nearest recorded site is a cluster of trees at the corner of Jack Tone Road and East Louise Avenue. There are several large trees located in close proximity to the site that are potentially suitable for nesting raptors, including Swainson's hawk. The two potential pump station sites and open fields and cropland in the project vicinity also provide foraging habitat for Swainson's hawk.

- *Burrowing owl*, a State Species of Concern, is a year-long resident in a variety of grasslands as well as scrub lands that have a low density of trees and shrubs with low growing vegetation; burrowing owls that nest in the Central Valley may winter elsewhere. The primary habitat requirement of the burrowing owl is small mammal burrows for nesting, usually abandoned ground squirrel burrows. The nearest record of nesting burrowing owl is more than five miles away. The intensity of development surrounding the project site reduces the likelihood of burrowing owls using the site for nesting, and no burrowing owls or ground squirrel burrows were

observed. However, burrowing owls could potentially nest near the site if burrow habitat becomes available.

The project would be required to participate in the San Joaquin County Multi-Species Open Space and Habitat Conservation Plan (SJMSCP), a comprehensive plan for assessing and mitigating the biological impacts of converting open space or biologically sensitive lands to urban development in San Joaquin County and its incorporated cities. The SJMSCP contains Incidental Take Minimization Measures for both Swainson's hawk and burrowing owl, which are designed to reduce potential take of these species. These include pre-construction surveys for nesting Swainson's hawks within one-half mile of the site for construction activities between March 1 and September 15, and preconstruction surveys for nesting burrowing owls within 250 feet of the site for construction activities commencing from February 1 through August 31. If active nests are found, temporal restrictions on construction may be required (SJCOG 2000).

It is assumed that the San Joaquin Council of Governments (SJCOG), which administers the SJMSCP, would require the implementation of Incidental Take Minimization Measures for both Swainson's hawk and burrowing owl. Implementation of these measures would reduce project impacts on these two special-status species to a level that would be less than significant.

b) Riparian and Other Sensitive Natural Communities.

There are no streams on or near the project site, so no riparian vegetation exists there. The Biological Assessment did not identify any sensitive natural communities on the project site. The project would have no impact on riparian or other sensitive natural communities.

c) State and Federally Protected Wetlands.

As noted, the only potentially jurisdictional Waters of the U.S. identified on the project site are the SSJID irrigation facilities. The proposed pipelines would be installed above or below the SJJID canals and pipelines, thereby avoiding direct impact on these facilities. Because of this, no Section 404 permit would be required for project work. No State-protected wetlands were identified by the biological resources report. The project would have no impact on State or federally protected wetlands.

d) Fish and Wildlife Movement.

As there are no streams or channels on or near the project site, the project would have no impact on migration routes for fish. However, the biological resources report noted that trees and grasslands on and near the project site could be used by birds protected by the Migratory Bird Treaty Act and/or the California Fish and Game Code. Mitigation described below would avoid impacts on migratory bird nests, thereby reducing project impacts on migratory species to a level that would be less than significant.

Level of Significance: Potentially significant

Mitigation Measures:

BIO-1: If vegetation removal or project construction commences during the nesting season for raptors (January 1 through July 31), a pre-construction survey for nesting raptors shall be conducted within one-quarter mile of the project site. If vegetation removal or project construction commences during the general avian nesting season (March 1 through July 31), a pre-construction survey for nesting birds shall be conducted on and within 500 feet of the project site. If active nests are found, work in the vicinity of the nest shall be delayed until the young fledge. A qualified wildlife biologist shall determine if temporal restrictions on construction are required.

Significance After Mitigation: Less than significant

e) Local Biological Requirements.

Neither the City of Ripon nor San Joaquin County has any local biological resource ordinances or other requirements applicable to the project. San Joaquin County Code Chapter 9-1505 contains provisions intended to preserve Native Oak Trees and Heritage Oak Trees to the extent feasible. No oak trees would be removed by the project, so this code chapter would not apply. The project would have no impact on local biological requirements.

f) Conflict with Habitat Conservation Plans.

Both the City and the County participate in the SJMSCP. As such, the project would comply with applicable provisions and measures of the SJMSCP, as determined by SJCOG. No other habitat conservation plans apply to the project site. The project would have no impact related to conflict with habitat conservation plans.

3.5 CULTURAL RESOURCES

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 pursuant to Section 15064.5?			✓	
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?		✓		
c) Disturb any human remains, including those interred outside of formal cemeteries?			✓	

Information in this section is based primarily upon a cultural resource report prepared by Natural Investigations Company. Appendix C contains a copy of this report. Information provided for the report came from a search of historical and archaeological records within the California Historical Resources Information System (CHRIS), additional archival research, and a pedestrian field survey of the potential project alignments.

Environmental Setting

The project area is within territory claimed by the Northern Valley Yokut. Section 3.18, Tribal Cultural Resources, discusses the Northern Valley Yokut in more detail.

The initial European American settler in Ripon was William Hiller Hughes, who in 1857 secured 160 acres of public land near the Stanislaus River in Dent Township, San Joaquin County. The Hughes family journeyed to California in 1853, initially mining in Sonora before acquiring land near Ripon in 1857 to cultivate wheat and barley. Over the years, William Hughes expanded his holdings significantly, accumulating about 2,300 acres by 1875.

In 1870, William Hughes facilitated the establishment of a Southern Pacific railroad depot on his land, later renamed Ripon. A.B. Crooks, arriving from Wisconsin, opened the town's first store in 1874 and subsequently petitioned for a post office, becoming Ripon's inaugural postmaster. By 1884, Ripon boasted significant development, including a hotel, schools, stores, churches, and warehouses.

The region's agriculture initially focused on dry farming, primarily for drought-resistant crops like grain and cattle grazing. However, in 1895, irrigation systems like the Stanislaus and San Joaquin Water Company enabled the cultivation of fruit and nuts. The arrival of the SSJID in 1909 led to the subdivision of large landholdings into smaller farms, transitioning Ripon towards row irrigated crops and dairy farming.

Environmental Impacts and Mitigation Measures

a) Historical Resources.

A CHRIS search was conducted for the project site by the North Central Information Center, based at California State University, Sacramento. The results of the search found two historical resources on record – Canal T and Canal R, both owned and operated by SSJID and both crossing beneath Jack Tone Road. Natural Investigations Company evaluated both resources for potential listing in the National Register of Historic Places (NRHP) and the California Register of Historical Resources (CRHR). Both resources do not retain integrity or visual linkage to the pioneering settlement pattern in the SSJID; neither meet the criteria for inclusion in the NRHP or the CRHR.

Seven new historic resources were recorded as a result of the survey. All these resources were roadway segments on or adjoining the project site, including a 4.5-mile segment of Jack Tone Road. None of these resources retain integrity or visual linkage to the pioneering settlement pattern in the area, and none meet the criteria for inclusion in the NRHP or the CRHR.

Natural Investigations Company determined that a finding of No Historic Properties Affected is appropriate for the project. None of the identified historical resources are considered historical resources under CEQA. Therefore, project impacts on historical resources would be less than significant.

b) Archaeological Resources.

The CHRIS search conducted for the project site included a search for records of any prehistoric resources. During the pedestrian survey, all visible ground surface within the project area was carefully examined for cultural material (e.g., flaked stone tools, tool-making debris, stone milling tools, or fire-affected rock) and for soil discoloration that might indicate the presence of a cultural midden.

No archaeological resources within the project site were recorded in CHRIS. No new prehistoric sites, features or ethnographic sites were recorded during the survey. The project rests upon the Modesto Formation, consisting of geologically recent sediments. However, due to the highly disturbed nature of the proposed pipeline corridor, the likelihood of uncovering undisturbed subsurface archaeological deposits through project implementation was considered low.

However, the Natural Investigations Company report noted that it is possible to inadvertently uncover cultural resources during ground-disturbing project activities. Because of this, the report recommended that certain precautions be taken if any archaeological resources are encountered. These procedures are specified in the mitigation measure below, which would reduce any potential impacts on archaeological resources to a level that would be less than significant.

Mitigation Measure:

CULT-1: If any subsurface cultural resources are encountered during construction of the project, all construction activities within 30 feet of the encounter shall be halted until a qualified archaeologist can examine these materials, determine their significance, and if significant recommend treatment of the resource. Recommended treatment could include, but are not limited to, 1) preservation in place, or 2) excavation, recovery, and curation by qualified professionals. The treatment would be determined in consultation with the project applicant, San Joaquin County, appropriate tribes, and any other relevant regulatory agencies or interested parties as appropriate. Construction activities shall not resume in the area of the find until the find is appropriately treated. The City of Ripon Planning Department shall be notified, and the project developer shall be responsible for retaining qualified professionals, implementing recommended mitigation measures, and documenting mitigation efforts in a written report to the City's Planning Department, consistent with the requirements of the CEQA Guidelines.

c) Human Burials.

The Natural Investigations Company report did not indicate the presence of any human burials within the project area. However, the report also stated that, although unlikely, the discovery of human remains during construction is always a possibility.

CEQA Guidelines Section 15064.5(e), California Public Resources Code Section 5097.98, and California Health and Safety Code Section 7050.5 describe the procedure to be followed when human remains are uncovered in a location outside a dedicated cemetery. The San Joaquin County Sheriff/Coroner shall be contacted immediately. If it is determined that the remains are Native American in origin, then the County Sheriff/Coroner shall contact the Native American Heritage Commission, which in turn shall appoint a Most Likely Descendant to act as a tribal representative. The Most Likely Descendant shall develop a plan for the proper treatment of remains and associated funerary objects.

Compliance with the CEQA Guidelines and the applicable State codes would ensure that any human remains and associated grave goods encountered during project construction would be treated with appropriate dignity. Project impacts on human remains would be less than significant.

3.6 ENERGY

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Result in potentially significant environmental impacts 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?				✓

Environmental Setting

Electricity and natural gas are major energy sources for residences and businesses in California. In San Joaquin County, electricity consumption in 2022 totaled approximately 5,608 million kilowatt-hours (kWh), of which approximately 3,483 million kWh were consumed by non-residential uses and the remainder by residential uses (CEC 2023a). In San Joaquin County, natural gas consumption in 2022 totaled approximately 186 million therms, of which approximately 96 million therms were consumed by non-residential uses and the remainder by residential uses (CEC 2023b). Motor vehicle use accounts for substantial energy usage. The SJCOG estimated countywide vehicle miles traveled (VMT) in 2016 was approximately 6.2 billion miles, which led to the consumption of approximately 471 million gallons of gasoline and diesel fuel (SJCOG 2022).

a) Project Energy Consumption.

Project construction would involve fuel consumption and use of other non-renewable resources. Construction equipment used for trenching and other outdoor activities typically runs on diesel fuel or gasoline. The same fuels typically are used for vehicles that transport equipment and workers to and from a construction site. However, construction-related fuel consumption would be finite, short-term, and consistent with construction activities of a similar character. This energy use would not be considered wasteful, inefficient, or unnecessary.

Project operations would consume minimal energy resources. No pumps or other facilities requiring significant energy use would be installed. Project impacts related to energy consumption are less than significant.

b) Consistency with Energy Plans.

No energy efficiency or renewable energy plans are applicable to this project. The project would have no impact on this issue.

3.7 GEOLOGY AND SOILS

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special 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 strata or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site			✓	

landslide, lateral spreading, subsidence, liquefaction or collapse?				
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code, creating substantial direct or indirect risks to life or property?				✓
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?				✓
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?			✓	

Environmental Setting

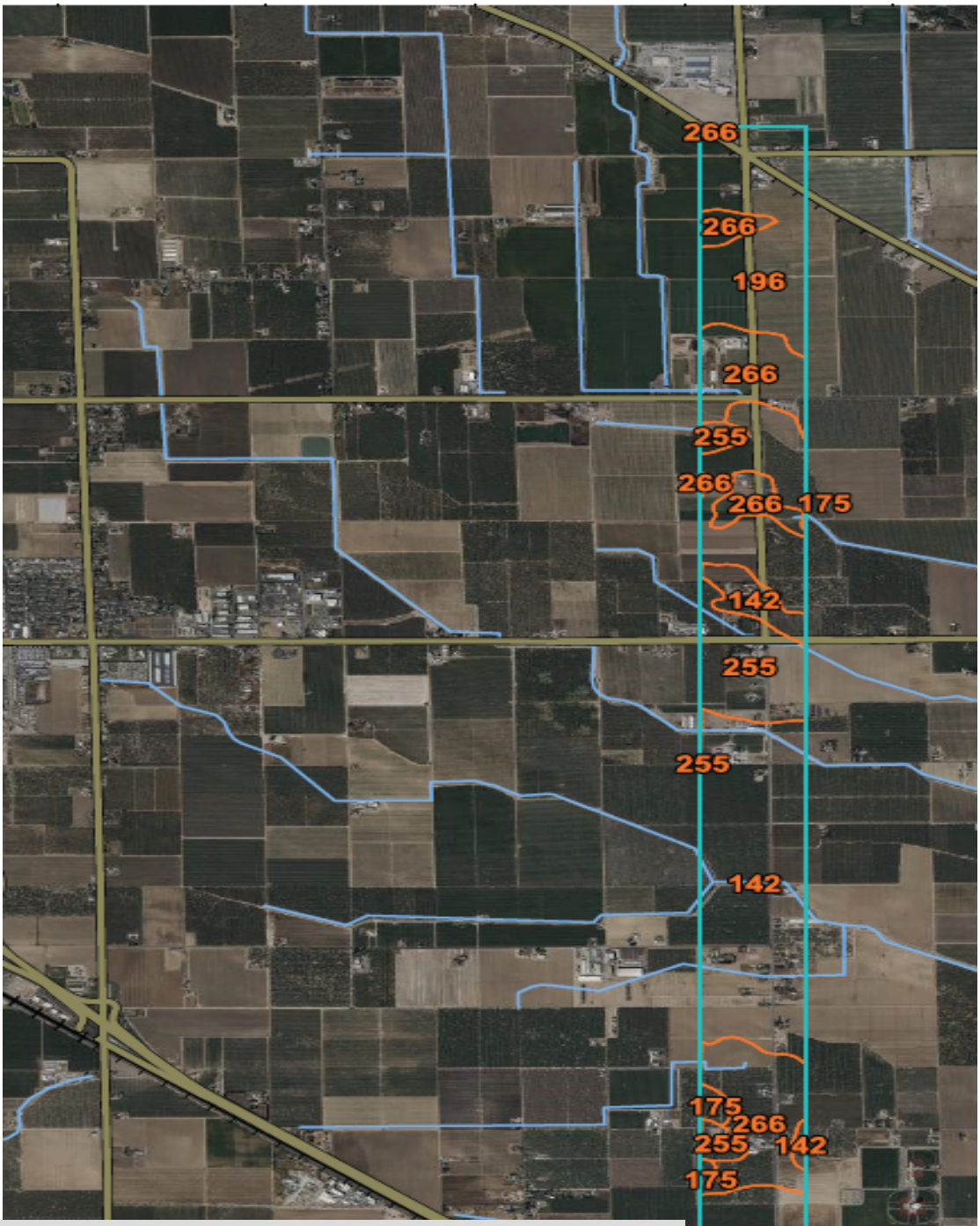
The City of Ripon is located near the northern end of the San Joaquin Valley, part of California's Great Valley geomorphic province. Geologically, the Great Valley is a northwest-trending, sediment-filled trough which extends more than 400 miles from the Tehachapi Mountains on the south, to the Cascade Range on the north. The sediments that fill the Valley consist of sequences of marine and continental deposits of clay, silt, sand, and gravel up to six miles thick. The Geologic Map of the San Francisco – San Jose Quadrangle (Wagner et al. 1991) designates the underlying geology of the project site as the Modesto Formation, consisting of Quaternary (geologically recent) sediments. The topography of the project site is essentially flat.

A variety of soils underlie the project site (Figure 3-1). According to a custom soil survey for the project site, these soils include (SCS 1992, NRCS 2023):

- Delhi loamy sand, 0 to 2 percent slopes (142 on Figure 3-1) – A very deep, somewhat excessively drained, nearly level soil formed in wind-modified alluvium derived from granitic rock sources. The water erosion hazard of this soil is slight, but the hazard of soil blowing is severe. The expansive (shrink-swell) potential of this soil is low.

- Honcut sandy loam, 0 to 2 percent slopes (175 on Figure 3-1) – A very deep, well drained, nearly level soil formed in alluvium derived from granitic rock sources. The water erosion hazard is slight, but the hazard of soil blowing is moderate. The expansive potential of this soil is low.

- Manteca fine sandy loam, 0 to 2 percent slopes (196 on Figure 3-1) – A moderately well drained, nearly level soil, moderately deep to a hardpan, that was formed in alluvium derived from mixed rock sources. The water erosion hazard is slight, but the hazard of soil blowing is moderate. The expansive potential of this soil is low.



Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
142	Delhi loamy sand, 0 to 2 percent slopes, MLRA 17	309.4	30.7%
175	Honcut sandy loam, 0 to 2 percent slopes	121.6	12.1%
196	Manteca fine sandy loam, 0 to 2 percent slopes	158.5	15.7%
255	Tinnin loamy coarse sand, 0 to 2 percent slopes	220.4	21.9%
266	Veritas fine sandy loam, 0 to 2 percent slopes	197.6	19.6%
Totals for Area of Interest		**1,007.6**	**100.0%**

SOURCE: USDA NRCS

Figure 3-1
SOIL TYPES ON PROJECT SITE

- Tinnin loamy coarse sand, 0 to 2 percent slopes (255 on Figure 3-1) – A very deep, well drained, nearly level soil formed in alluvium derived from granitic rock sources. The water erosion hazard is slight, but the hazard of soil blowing is severe. The expansive potential of this soil is low.

- Veritas fine sandy loam, 0 to 2 percent slopes (266 on Figure 3-1) – A moderately well drained, nearly level soil, deep to a hardpan, that was formed in alluvium derived from mixed rock sources. The water erosion hazard is slight, but the hazard of soil blowing is moderate. The expansive potential of this soil is low.

There are no active or potentially active faults in the Ripon vicinity. Active and potentially active faults associated with the better-known San Andreas system are located 60 miles west of the project site in the Coast Range area. The City of Ripon is subject to relatively low seismic hazards compared to other parts of California but may nonetheless be subject to relatively intense seismic shaking.

The San Joaquin Valley contains exceptionally productive Pliocene-age (approximately 2 to 4.5 million years old) fossil-bearing beds, particularly in the western portions of the region. A record search of the Museum of Paleontology at the University of California in Berkeley indicated that 97 paleontological finds have been made in San Joaquin County (UCMP 2020). Most specimens from the county have been found in rock formations in the foothills of the Diablo Mountain Range. However, remains of extinct animals, such as mammoth, may be found in the predominant Modesto Formation but may also be found virtually anywhere in the County, especially along watercourses such as the San Joaquin River and its tributaries (San Joaquin County 2016a).

Environmental Impacts and Mitigation Measures

a-i) Fault Rupture Hazards.

As noted, no active or potentially active faults have been identified in the Ripon area. The project site is not on or near a known earthquake fault, according to the criteria of Alquist-Priolo Special Studies Zones Act or as delineated on a seismic hazard zone map prepared under the Seismic Hazards Mapping Act. The project would have no impact related to fault rupture hazards.

a-ii) Seismic Ground Shaking.

As noted, the Ripon area is subject to ground shaking from faults outside San Joaquin County. Proposed water system improvements would incorporate engineering design features that would be in accordance with the standard engineering practices and the adopted California Building Code, which contains design criteria for seismic shaking. Project impacts related to ground shaking would be less than significant.

a-iii) Other Seismic Hazards.

Earthquake-related hazards can include secondary effects, such as liquefaction. Liquefaction is a phenomenon primarily associated with saturated, cohesionless soil layers located close to the ground surface. During liquefaction, soils lose strength and ground

failure may occur. No generalized liquefaction studies have been completed for San Joaquin County. However, based on known information, the Delta and other areas of the County with groundwater less than 50 feet from ground surface in unconsolidated sediment are susceptible to liquefaction (San Joaquin County 2016b). The most recent available information indicates that groundwater at the project site is more than 50 feet below ground surface (San Joaquin County FCWCD 2022). Therefore, liquefaction at the project site is unlikely. The project would have no impact related to other seismic hazards.

a-iv) Landslides.

The project area is in a topographically flat area, which is not subject to landslides. The project would have no impact related to landslides.

b) Soil Erosion.

The soils on the project site have a relatively low potential for water erosion. However, project construction activities would temporarily loosen soils within the construction area, leaving them exposed to potential water and wind erosion. Of particular concern are the Tujunga soils, which are limited in area on the project site but have a high wind erosion potential.

Project design and specifications would include requirements for placement and compaction of excavated soils following construction. Required compliance with SJVAPCD Regulation VIII, which is discussed in Section 3.3, Air Quality, would also reduce potential erosion impacts, particularly wind erosion.

Also, since the project would disturb one acre of land or more, it would be required to obtain a Construction General Permit from the SWRCB. The Construction General Permit requirements include preparation and implementation of a Storm Water Pollution Prevention Plan (SWPPP) to address potential water quality issues. The SWPPP would include Best Management Practices to avoid or minimize adverse water quality impacts. Best Management Practices fall within the categories of Temporary Soil Stabilization, Temporary Sediment Control, Wind Erosion Control, Tracking Control, Non-Storm Water Management, and Waste Management and Materials Pollution Control. Only Best Management Practices applicable to the project would become part of the SWPPP. In accordance with the requirements of the anticipated SWPPP, the City has prepared an Erosion Control Plan, which is described in Chapter 2.0, Project Description.

In general, the potential for soil erosion on the project site would be minimal, other than wind erosion on Tujunga soil. Compliance with contract specifications, regulations, Construction General Permit requirements, and the Erosion Control Plan would minimize project impacts related to soil erosion to a level that would be less than significant.

c) Unstable Soils.

The soils underlying the sites where the facilities would be constructed have not been identified as inherently unstable or prone to failure. However, since the project would likely involve trenching in soils with a sandy component, there is concern about the ability of the soils to maintain stability during pipeline installation. Both the Hanford and Tujunga soils

have been rated as "moderately limited" for shallow excavations by the Natural Resources Conservation Service. This indicates that the soils have features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. As noted, project design and specifications would include requirements for placement and compaction of excavated soils following construction. Project impacts related to soil stability would be less than significant.

d) Expansive Soils.

As noted, the expansive potential of all the soils on the project site is low. Therefore, it is not expected that the pipelines would be exposed to potential damage from expansive soils. The project would have no impact related to expansive soils.

e) Adequacy of Soils for Wastewater Disposal.

The project would not use, and does not propose to install, any septic systems. The project would have no impact related to adequacy of soils for wastewater disposal.

f) Paleontological Resources and Unique Geologic Features.

Natural Investigations Company conducted a paleontological investigation of the project site, in conjunction with its cultural resource evaluation (see Appendix C). The results of the investigation indicate that no unique geologic features, fossil-bearing strata, or paleontological sites have been recorded within the project site. The underlying metavolcanic rocks mapped in the project site are considered unlikely to contain fossilized remains. The Natural Investigations Company report concluded that the paleontological resource sensitivity within the project site would be low. Based on this information, project impacts on paleontological resources would be less than significant.

3.8 GREENHOUSE GAS EMISSIONS

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?				✓

Environmental Setting

Background

Greenhouse gases (GHGs) are gases that absorb and emit radiation within the thermal infrared range, trapping heat in the earth's atmosphere. GHGs are both naturally occurring and are emitted by human activity. GHGs include carbon dioxide, the most abundant GHG, as well as methane, nitrous oxide, and other gases.

The State of California has prepared Climate Change Assessments that provide scientific assessments on the potential impacts of climate change in California by region. Potential climate change impacts occurring in the San Joaquin Valley and adjacent areas include the following (Westerling et al. 2018):

- Acceleration of warming across the region and state.
- More intense and frequent heat waves.
- Higher frequency of catastrophic floods.
- More intense and frequent drought.
- More severe and frequent wildfires.

Unlike the criteria air pollutants described in Section 3.3, Air Quality, GHGs have no "attainment" standards established by the federal or State government. In fact, GHGs are not generally thought of as traditional air pollutants because their impacts are global in nature, while air pollutants mainly affect the general region of their release to the atmosphere (SJVAPCD 2015). Nevertheless, the U.S. Environmental Protection Agency (EPA) has found that GHG emissions endanger both the public health and public welfare under Section 202(a) of the Clean Air Act due to their impacts associated with climate change (EPA 2009).

GHG emissions in California in 2019, the most recent year for which data are available, were estimated at approximately 418.2 million metric tons carbon dioxide equivalent (CO2e) – a decrease of approximately 14.6% from the peak level in 2004. Transportation was the largest contributor to GHG emissions in California, with almost 40% of total emissions. Other significant sources include industrial activities, with approximately 21% of total emissions, and electric power generation, both in-state and imported, with approximately 14% of total emissions (ARB 2021). No data on GHG emissions in Ripon are available.

GHG Emission Reduction Plans

The State of California has implemented GHG emission reduction strategies through AB 32, the Global Warming Solutions Act of 2006, which requires total statewide GHG emissions to reach 1990 levels by 2020, or an approximately 29% reduction from 2004 levels. The 2019 state GHG emissions were almost 13 million metric tons CO_2e below the 2020 target established by AB 32 (ARB 2021).

In 2016, Senate Bill (SB) 32 was enacted. SB 32 extends the GHG reduction objectives of AB 32 by mandating statewide reductions in GHG emissions to levels that are 40% below 1990 levels by the year 2030. The State adopted an updated Scoping Plan in 2017 that sets forth strategies for achieving the SB 32 target. The updated Scoping Plan continues many of the programs that were part of the previous Scoping Plans, including the cap-and-trade program, low-carbon fuel standards, renewable energy, and methane reduction strategies. It also addresses, for the first time, GHG emissions from the natural and working lands of California, including the agriculture and forestry sectors (ARB 2017). The 2017 Scoping Plan is being updated, and adoption of the updated Scoping Plan is anticipated in the fall of 2022.

The SJVAPCD adopted a Climate Change Action Plan in 2008 and issued guidance for development project compliance with the plan in 2009. The guidance adopted an approach that relies on the use of Best Performance Standards to reduce GHG emissions. Projects implementing Best Performance Standards would be determined to have a less than cumulatively significant impact. For projects not implementing Best Performance Standards, demonstration of a 29% reduction in project-specific (i.e., operational) GHG emissions from business-as-usual conditions is required to determine that a project would have a less than cumulatively significant impact (SJVAPCD 2009).

Cities and counties throughout California have prepared Climate Action Plans that outline how the local government will reduce GHG emissions, which are typically related to the 2020 emission reduction target set in the State's Climate Change Scoping Plan. Neither the City of Ripon nor San Joaquin County currently has a Climate Action Plan or other GHG reduction plan.

Environmental Impacts and Mitigation Measures

a) Project GHG Emissions.

Based on results from the RCEM run (see Section 3.3, Air Quality), potential construction GHG emissions would amount to approximately 40.7 metric tons CO_2e for the construction period. SJVAPCD has not established quantitative significance thresholds for GHG emissions. However, the nearby Sacramento Metropolitan Air Quality Management District has established a quantitative threshold of 1,100 metric tons CO_2e to determine significance of project GHG emissions for CEQA purposes (SMAQMD 2021). This threshold applies to both construction and operational emissions. CEQA Guidelines Section 15064.7 allows for the use of significance thresholds established by other agencies.

The GHG construction emissions of the proposed project are well below this threshold of 1,100 metric tons CO_2e. Based on this threshold, project GHG construction emissions are less than significant. Construction emissions would be limited to a defined period and would cease once work is completed. Upon completion of construction work, the project would not generate any GHG emissions, either directly or indirectly. Project impacts on GHG emissions would be less than significant.

b) Consistency with GHG Reduction Plans.

As noted in a) above, upon completion of construction work, project operations would not generate new GHG emissions. As a result, the project would not conflict with the GHG reduction objectives of the State's Climate Change Scoping Plan and the SJVAPCD's Climate Change Action Plan. The project would have no impact on this issue.

3.9 HAZARDS AND HAZARDOUS MATERIALS

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 or excessive noise for people residing or working in the project area?				✓
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?		✓		
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?				✓

Environmental Setting

This section focuses on hazards associated with hazardous materials, proximity to airports, and wildfires. Geologic and soil hazards are addressed in Section 3.7, Geology and Soils,

and potential flooding hazards are addressed in Section 3.10, Hydrology and Water Quality.

Data on hazardous material sites are kept in the GeoTracker database, maintained by the SWRCB, and in the EnviroStor database, maintained by the California Department of Toxic Substances Control (DTSC). Both GeoTracker and EnviroStor provide the names and addresses of hazardous material sites, along with their cleanup status. A search of both GeoTracker and EnviroStor indicated no record of hazardous material sites on or adjacent to the project site (SWRCB 2023, DTSC 2023).

Environmental Impacts and Mitigation Measures

a) Hazardous Materials Transportation, Use, and Disposal.

The project would not require any use of hazardous materials upon completion of construction work. Therefore, no hazardous materials would need to be transported or stored for project operations. The project would have no impact on hazardous materials transportation, use, or disposal.

b) Release of Hazardous Materials by Upset or Accident.

Project construction activities may involve the use of hazardous materials such as fuels and solvents, and thus create a potential for hazardous material spills. Construction and maintenance vehicles would transport and use fuels in ordinary quantities. Fuel spills, if any occur, would be minimal and would not have significant adverse effects. Potential hazardous materials spills during construction are addressed in the required SWPPP, described in Chapter 9.0, Geology. In accordance with SWPPP requirements, contractors have absorbent materials at construction sites to clean up minor spills. Other substances used in the construction process would be stored in approved containers and used in relatively small quantities, in accordance with the manufacturers' recommendations and/or applicable regulations.

As noted in a) above, the project will not involve the use of hazardous materials after project completion. Overall, project impacts related to releases of hazardous materials would be less than significant.

c) Hazardous Material Emissions near Schools.

There are no schools within one-quarter mile of the project site. The nearest school is Park View Elementary School, more than one-half mile east of the southern end of the project site in Ripon. As noted, the project would not involve the use of hazardous materials when completed. The project would have no impact related to hazardous material emissions near schools.

d) Hazardous Materials Sites.

As previously noted, a search of the GeoTracker and EnviroStor databases did not identify any hazardous material sites on or near the project site. Land adjacent to some of the project alignment is used for agriculture. Agricultural operations may involve the use of pesticides

and herbicides whose residues may have accumulated in the soil. However, the project proposes to be constructed within existing rights-of-way and would not encroach upon agricultural lands. The project is not expected to expose construction workers to substantial environmental contamination. Project impacts related to hazardous material sites would be less than significant.

e) Airport Operations.

There are no airports in or near the City of Ripon. The nearest public airport is the Stockton Metropolitan Airport, approximately 6.5 miles to the northwest at its closest to the project site. Given this distance, the project would not expose anyone to safety hazards or excessive noise from operations at this airport. The project would have no impact related to public airport operations.

f) Emergency Response and Evacuation.

Construction of the project would involve work adjacent to Jack Tone Road. This road is used by emergency vehicles and may be a potential evacuation route. The project would involve work within road rights-of-way, and construction activities could potentially obstruct traffic and emergency vehicle access to adjacent rural residences.

Construction work would be of temporary duration, and project operations would not obstruct any roads. Nevertheless, mitigation presented below would ensure that adequate emergency access is maintained during project construction, thereby reducing potential impacts to a level that would be less than significant.

Level of Significance: Potentially significant

Mitigation Measures:

HAZ-1: Prior to the start of project construction, the contractor shall develop and implement a Traffic Control Plan. The Traffic Control Plan shall include such items as traffic control requirements, resident notification of access closure, and daily access restoration. The contractor shall specify dates and times of road or access closures or restrictions, if any, and shall ensure that adequate access will be provided for emergency vehicles and residents. The Traffic Control Plan shall be reviewed and approved by the City Department of Public Works and shall be coordinated with the Ripon Consolidated Fire District, the Lathrop-Manteca Fire District, and the San Joaquin County Sheriff's Department.

Significance After Mitigation: Less than significant

g) Wildland Fire Hazards.

The project would occur in an area of rural, agricultural land. It is not located adjacent to any significant natural open spaces where wildland fires may occur. Agricultural land, due to its cultivated character and typical irrigation, does not involve an accumulation of fuel or otherwise create a significant fire hazard. The project would not involve any substantial

changes to fuel conditions or introduce new ignition sources. Because of this, the project would have no impact related to wildland fire hazards. Refer to Section 3.20, Wildfire, for more detailed information on wildfire hazards.

3.10 HYDROLOGY AND WATER QUALITY

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 substantial erosion or siltation on- or offsite?				✓
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?				✓
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?			✓	

Environmental Setting

There are no natural surface waters on or near the project site. Surface waters in the area consist of canals operated seasonally by the SSJID. SSJID Laterals Q, R, Rc, T, and Ta, along with SSJID Drain 13, traverse the project alignment.

The project site is within the Eastern San Joaquin County Groundwater Subbasin of the San Joaquin Valley Groundwater Basin. According to the most recent information available, and as noted in Section 3.7, Geology and Soils, groundwater at the project site is more than 50 feet below ground surface (San Joaquin County FCWCD 2022). The City currently obtains its drinking water from groundwater wells. The Stanislaus River and surface water from the mountains and the hills to the east all play a role in recharging the local aquifers (City of Ripon 2006).

In 2014, the State enacted the Sustainable Groundwater Management Act. This act requires the formation of local groundwater sustainability agencies that must assess conditions in their local water basins and adopt locally based Groundwater Sustainability Plans for sustainable use of groundwater and avoidance of overdraft. Plans for "critically overdrafted" basins were required to be completed and adopted by January 31, 2020, while plans for high- and medium-priority basins have an adoption deadline of January 31, 2022. The Eastern San Joaquin Subbasin is designated a critically overdrafted basin.

The City is a member of the South San Joaquin Groundwater Sustainability Agency, together with the City of Escalon and SSJID. This agency, in collaboration with the other agencies, prepared a Groundwater Sustainability Plan for the Subbasin and submitted it to the Department of Water Resources in 2020. To achieve sustainability in the Subbasin, a series of projects and management actions were identified. These include water supply projects that either replace groundwater use or supplement groundwater supplies to attain the current estimated pumping offset and/or recharge need. A final list of 23 potential projects is included in the Groundwater Sustainability Plan, representing a variety of project types, including direct and in-lieu recharge, intra-basin water transfers, demand conservation, water recycling, and stormwater reuse (ESJGA 2022). One of these projects is the City of Ripon Surface Water Supply project, which proposes in-lieu recharge through connection to surface water treated by SSJID, including construction of a pipeline such as the one proposed by this project.

Based on Flood Insurance Rate Maps prepared for the project area by the Federal Emergency Management Agency (FEMA), the project site lies within an area designated Zone X. Zone X denotes areas determined to be of minimal flood hazard. They are outside the 100-year annual floodplain, which is the flood hazard area of concern (San Joaquin County 2016b). A review of the California Department of Water Resources website indicates that no portion of the project site is within the 200-year floodplain, the designation of which is required by SB 5 and companion bills (DWR 2023).

Environmental Impacts and Mitigation Measures

a) Violation of Water Quality Standards.

The potential water quality impacts of the project are related primarily to erosion and sedimentation resulting from project construction potentially entering surface waters; project operations would not affect either surface water or groundwater quality. While the project area does not contain soils that are highly erodible, there remains the potential that sediment from the site could be transported off the site during a storm event. As discussed in Section 3.7, Geology and Soils, the project would be required to obtain a Construction

General Permit from the SWRCB. The Construction General Permit would require preparation and implementation of a SWPPP that would limit soil erosion. Implementation of the conditions of the Construction General Permit would minimize potential surface water quality impacts.

As noted, several SSJID facilities traverse the project site. Without established erosion and sediment controls, loose soils could enter these laterals, thereby adversely affecting water quality. However, the project proposes to install the pipelines underneath these facilities using a bore-and-jack method. No trenching within these SSJID facilities would occur and, therefore, the project would not involve a water quality impact mechanism. With the proposed installation and implementation of the SWPPP, project impacts related to potential violation of surface water quality standards would be less than significant.

As noted, groundwater levels at the project site are more than 50 feet below ground surface. Project construction would involve excavation and trenching of the ground surface for pipeline installation. However, these activities would not occur at a level deep enough to intercept any groundwater. Therefore, project construction would have no impacts on groundwater quality. Overall, project impacts related to potential violation of water quality standards would be less than significant.

b) Groundwater Supplies and Recharge.

The project is the installation of two water pipelines that would connect to an existing SSJID water main that provides drinking water. This would supplement the use of groundwater wells by the City's water system, thereby reducing existing demand on local aquifers. This would be considered a beneficial impact of the project. The project would not add impervious surfaces within the project site, so the existing recharge capability of the project site and area would remain as it is today. Project impacts related to groundwater supplies and recharge would be less than significant.

c-i, ii, iii) Drainage Patterns and Runoff.

The project involves the installation of underground water infrastructure in existing road rights-of-way and developed areas, which would be restored to their existing condition after construction. Because of this, the project would not substantially affect existing surface drainage patterns within the alignment area. As noted in b) above, the project would not add impervious surfaces, so there would be no increase in the amount of runoff from existing conditions. The project would have no impact on drainage patterns or runoff.

c-iv) Flood Flows.

The project is not located within an area susceptible to 100-year flooding; it is within an area of minimal flood hazard. The project also would not involve construction of any aboveground structures that could potentially impede or redirect any flood flows. The project would have no impact on flood flows.

d) Release of Pollutants in Flood Zone.

As noted, the project site is within an area of minimal flood hazard. The project is in a topographically flat area that is distant from large bodies of water; therefore, the project would not experience seiche or tsunami hazards. The project site would be exposed to flooding in the event of a catastrophic failure of the New Melones Dam on the Stanislaus River (San Joaquin County 2016b). However, aside from risk of dam failure being considered low, the project would not involve the placement of any materials that could pollute flood waters if released. The project consists of the installation of underground water pipelines, and as discussed in Section 3.9, Hazards and Hazardous Materials, project operations would not involve substantial use of any hazardous materials. The project would have no impact related to the release of pollutants during any flood inundation.

e) Conflict with Water Quality or Sustainable Groundwater Plans.

As the project is the installation of water pipelines, it is not expected to interfere with the attainment of the objectives of applicable water quality plans. It also will not interfere with attainment of but rather further the objectives of the Groundwater Sustainability Plan for the Eastern San Joaquin Subbasin, as it would implement one of the proposed projects. As noted in b) above, the net results of the project on groundwater resources would be beneficial if any. Project impacts on water quality or sustainable groundwater plans would be less than significant.

3.11 LAND USE AND PLANNING

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?			✓	

Environmental Setting

The proposed project is within the unincorporated area of San Joaquin County, except for the southern end, which is within the Ripon city limits. The project alignment follows Jack Tone Road, along which are agricultural lands and rural residences. A fruit stand located at the intersection of Jack Tone Road and SR 120 is the only land use along the alignment that is not agricultural or rural residential.

The current San Joaquin County General Plan was adopted in 2016. The County General Plan is a legal document that serves as the County's guide for all future land use, development, preservation, and resource conservation decisions. The horizon year for the

General Plan, except for the Housing Element, is 2035, which reflects the 20-year planning period for the General Plan (San Joaquin County 2016a). The County General Plan has designated the portion of the project alignment in the County as A/G – General Agriculture.

The San Joaquin County Development Code (San Joaquin County Code Title 9) applies to lands in unincorporated San Joaquin County. The Development Code designates zoning districts that are distinguished by the allowable land uses in each district. It also specifies development standards for each zoning district, along with more generalized standards such as height of structures, yards, and infrastructure standards. As noted in Section 3.2, Agriculture and Forestry Resources, most of the project site is in an area zoned AG-40, General Agriculture, 40-acre minimum. A portion of the alignment near Ripon is zoned AU-20, Agriculture Urban Reserve, 20-acre minimum.

Environmental Impacts and Mitigation Measures

a) Division of Established Communities.

The project proposes the installation of water pipelines that would be placed underground. These improvements would not interfere with the functions of, or physically divide, existing residential communities. In fact, the project is intended to enhance the provision of water service to existing communities. The project would have no impact related to the division of established communities.

b) Conflict with Applicable Plans, Policies and Regulations Avoiding or Mitigating Environmental Effects.

The project proposes to install water pipelines that would connect to the City's water system for the purpose of improving drinking water quantity and quality. It would not conflict with existing or future land use plans related to the area along the project alignment, as the project would not affect existing land uses nor lead to any changes in existing land use designations. The project would be constructed either within existing developed areas or existing rights-of-way; no additional lands would be acquired. As such, the project is not expected to conflict with General Plan policies or with City or County ordinances designed to avoid or mitigate environmental effects, since very few such effects are expected. This IS/MND analyzes the potential environmental effects of the project, and no significant effects have been identified that cannot be mitigated to a level that would be less than significant.

In summary, the project would not conflict with applicable plans, policies and regulations avoiding or mitigating environmental effects. Project impacts would be less than significant.

3.12 MINERAL RESOURCES

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?				✓

Environmental Setting

San Joaquin County has several mineral resources including natural gas, borates, sand and gravel, limestone, clay, building stone, and pumice. However, neither the City of Ripon nor the unincorporated lands along the project alignment have any notable mineral resources or mining operations (San Joaquin County 2016b). The area along the project alignment has no active oil or natural gas fields (DOGGR 2023).

Environmental Impacts and Mitigation Measures

a, b) Loss of Mineral Resource Availability.

There are no identified mineral resources areas, including oil and gas fields, on or along the project alignment. The project would have no effect on the availability of or access to locally designated or known mineral resources. The project would have no impact on mineral resources.

3.13 NOISE

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?

Environmental Setting

Assessment of noise impacts focuses on the “ambient" noise level, which is the general noise level in a project area. The existing ambient noise environment along the project alignment is defined primarily by traffic on Jack Tone Road, although agricultural activities in the adjacent agricultural lands produce intermittent localized noise during the growing season.

Most of the project site is in unincorporated San Joaquin County. County Code Chapter 9-1025.9 establishes standards for maximum allowable exposure of noise-sensitive land uses to noise from stationary sources. “Noise-sensitive land uses,” as defined by the County in Table 9-1025.9, include residential development, educational services, religious assemblies, lodging, libraries, medical services, and professional services, among others. In addition, County Code Chapter 9-1025.9 exempts noise sources associated with construction from regulation, provided such activities do not take place before 6:00 a.m. or after 9:00 p.m. on any day.

Environmental Impacts and Mitigation Measures

a) Exposure to Noise Exceeding Local Standards.

The project, once completed, would not generate any noise, as the pipelines would be underground and water flow would be inaudible. However, construction activities associated with the project could expose noise-sensitive land uses in the immediate project vicinity to short-term noise impacts. Noise-sensitive uses would consist of existing residences along the pipeline alignment.

TABLE 3-3
CONSTRUCTION EQUIPMENT NOISE LEVELS

Type of Equipment	Maximum Level (dBA at 50 feet)
Auger Drill Rig	84
Backhoe	78
Compactor	83
Compressor (air)	78
Concrete Saw	90
Dozer	82
Dump Truck	76

Excavator	81
Generator	81
Jackhammer	89
Paver	77
Pneumatic Tools	85

Source: FHWA 2006.

Table 3-3 shows noise levels generated by various construction equipment. Earthmoving and excavation would be the primary construction activities; therefore, equipment likely to be used would include trucks, backhoes and excavators. Based on the equipment anticipated to be used, construction of proposed facilities and improvement may generate maximum noise levels ranging from 78 to 81 A-weighted decibels (dBA) at a reference distance of 50 feet (FHWA 2006).

Construction noise is a short-term occurrence that does not result in significant or long-term effects, provided that sleep interruption is not involved. County Code Chapter 9-1025.9 limits on construction noise would avoid noise during nighttime hours, when people would be most sensitive to noise. Residences near the pipeline alignment would most likely be exposed to elevated noise levels resulting from project construction, of relatively short duration as construction proceeds along Jack Tone Road. As a result, construction noise would be considered a less than significant impact.

Level of Significance: Less than significant

Mitigation Measures: None required

Significance After Mitigation: Less than significant

b) Groundborne Vibration.

Groundborne vibration is not a common environmental problem. Some common sources are trains, buses on rough roads, and construction activities such as blasting, pile driving, and operating heavy earth-moving equipment. Construction vibration impacts include human annoyance and building structural damage. Human annoyance occurs when construction vibration rises significantly above the threshold of perception.

The project would likely use excavation and trenching equipment during construction, which are not typically associated with significant vibration effects. Given this and the short duration of construction work at any point along the project alignment, impacts related to groundborne vibrations are considered less than significant.

c) Exposure to Airport/Airstrip Noise.

As noted in Section 3.9, Hazards and Hazardous Materials, there are no public airports within two miles of the project site; the nearest public airport is approximately 6.5 miles to the northwest from the northern end of the project. No private airstrips have been identified in the vicinity. In any case, the project would not place any residents or employees on the

project site that could be potentially exposed to noise from airports or airstrips. The project would have no impact related to airport or airstrip noise.

3.14 POPULATION AND HOUSING

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 people or housing, necessitating the construction of replacement housing elsewhere?				✓

Environmental Setting

According to the 2020 U.S. Census, the population of Ripon was 16,013 - an increase from its 2010 U.S. Census population of 14,297. The number of housing units in Ripon in 2020 was 5,658. According to estimates from the California Department of Finance, as of January 1, 2024, approximately 80.8% of housing units in the City were single-family detached units (California Department of Finance 2024).

As of the 2020 U.S. Census, the population of unincorporated San Joaquin County was 164,214 – an increase from the 2010 U.S. Census population of 118,118. An estimated 54,105 housing units were in unincorporated San Joaquin County as of January 1, 2024 – an increase from the 2010 total of 48,231. Total single-family detached units at the beginning of 2024 were 45,074 - approximately 83.3% of total housing units in the unincorporated County (California Department of Finance 2024).

Environmental Impacts and Mitigation Measures

a) Unplanned Population Growth.

The project would not directly induce population growth, as no housing or employment centers would be constructed in conjunction with the project. The project would improve the availability of potable water in the City, which would support planned development and associated population growth. However, additional infrastruction improvements would be necessary to support this additional growth. In addition, future growth would occur in accordance with the adopted Ripon General Plan. The project would not encourage development and subsequent population growth not otherwise planned for in the City's General Plan.

While most of the project would be in unincorporated San Joaquin County, the predominantly agricultural land uses along the project alignment would remain unchanged, as would the agricultural land use designations set forth in the County General Plan. Therefore, the project is not expected to induce unplanned population growth in the area of unincorporated San Joaquin County that is along the project alignment. Project impacts on potential unplanned population growth are considered less than significant.

b) Displacement of Housing and People.

The project would not displace or otherwise affect existing housing in the vicinity; therefore, the project would also not displace people. The project would have no impact on this issue.

3.15 PUBLIC SERVICES

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

Environmental Setting

The project alignment is mostly within the jurisdiction of San Joaquin County, but the southernmost portion is within the City of Ripon. Fire protection services in the area are provided mostly by the Ripon Consolidated Fire District; however, land along the western side of a portion of the project alignment is served by the Lathrop-Manteca Fire District. Police protection services are provided by the Ripon Police Department or the San Joaquin County Sheriff's Department, depending on the jurisdiction.

The project alignment is mostly within the boundaries of the Ripon Unified School District; however, land along the western side of a portion of the project alignment is within the boundaries of the Manteca Unified School District. Park and recreation services are provided by the City and the County (see Section 3.16 below). Other public services include the Ripon Memorial Library, a branch of the Stockton-San Joaquin County Library.

a-i) Fire Protection.

The project is the installation of water supply pipelines. As discussed in Section 3.14, Population and Housing, the project is not expected to generate population growth. As such, demand for fire protection services would not increase, and no new or expanded fire protection facilities would be required. The project would have no impact on fire protection services.

a-ii) Police Protection.

The project is not expected to generate population growth. As such, demand for police protection services would not increase, and no new or expanded police protection facilities would be required. The project would have no impact on police protection services.

a-iii) Schools.

The project is not expected to generate population growth. As such, demand for school services would not increase, and no new or expanded school facilities would be required. The project would have no impact on school services.

a-iv) Parks.

The project is not expected to generate population growth. As such, demand for parks would not increase, and no new or expanded park facilities would be required. The project would have no impact on parks. See Section 3.16, Recreation, for more detail.

a-v) Other Public Facilities.

The project is not expected to generate population growth. As such, the project is not expected to generate demand for other public services or facilities, such as community centers and libraries. The project would have no impact on other public services.

3.16 RECREATION

	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?	☐	☐	☐	✓

Environmental Setting

Park and recreation services within the Ripon City limits are provided by the City of Ripon. The City Parks and Recreation Department manages 22 parks and six recreational facilities. The southern portion of the project alignment is adjacent to Mistlin Sports Park. Mistlin Sports Park is a 120-acre community park that has baseball and softball diamonds, soccer fields, a covered picnic area, an interactive water feature, and an expansive turf area.

The San Joaquin County Parks and Recreation Department manages 20 parks and recreational facilities that offer a wide range of activities. There are no County parks or recreational facilities in the vicinity of the project site; the nearest County park is Raymus Village Park, a 1.6-acre neighborhood park northeast of Manteca.

Environmental Impacts and Mitigation Measures

a, b) Recreational Facilities.

The project is the installation of water pipelines. As discussed in Section 3.14, Population and Housing, the project is not expected to result in any direct effects on parks or recreation or to generate population growth. As such, demand for parks and recreational services would not increase, and no new or expanded parks or recreational facilities would be required. The project would have no impact on recreational facilities.

3.17 TRANSPORTATION

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Conflict with an applicable program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?				✓
b) Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?				✓
c) Substantially increase hazards 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?		✓		

Environmental Setting

The project alignment is located along Jack Tone Road, which extends north from the City of Ripon to the rural communities of northern San Joaquin County. Throughout the project alignment, Jack Tone Road is a two-lane road that primarily serves adjoining land uses but also is a significant north-south route in the County. It has a federal classification as a Major Collector (Rural) and a local classification as a Collector Residential. Several driveways provide direct access to Jack Tone Road from adjacent private residences and businesses.

Along the project alignment, Jack Tone Road intersects SR 120, an east-west State highway that traverses southern San Joaquin County and is a major road to accessing Yosemite National Park. The northern end of the alignment is near French Camp Road, an east-west County road that extends from southwestern Stockton to SR 120 west of Escalon. The south end is at River Road, which traverses northern Ripon and extends eastward into the unincorporated County, generally along the Stanislaus River.

No public transit routes run on Jack Tone Road along the project alignment, and no bikeways have been designated, although a Class 3 bike route (i.e., routes designated by sign only) has been proposed along Jack Tone Road (San Joaquin County 2016b). No sidewalks have been installed along Jack Tone Road.

Recently, Section 15064.3 was added to the CEQA Guidelines. Section 15064.3 states that VMT is the preferred metric for evaluating transportation impacts, rather than the Level of Service metric commonly used but limited to motor vehicle traffic. VMT accounts for the total environmental impact of transportation associated with a project, including use of travel modes such as buses or bicycles. Section 15064.3(b) sets forth the criteria for analyzing transportation impacts using the preferred VMT metric.

Environmental Impacts and Mitigation Measures

a) Conflict with Transportation Plans, Ordinances, and Policies.

The project is the installation of water pipelines, which would not generate traffic other than temporary traffic during construction. The project, once completed, would not contribute any new traffic nor increase traffic volumes on the adjacent Jack Tone Road. As the pipelines would be installed underground, the project would not interfere with any future changes to Jack Tone Road, including potential installation of facilities such as bikeways or sidewalks. The project would have no impact on applicable transportation plans, ordinances, and policies.

b) Conflict with CEQA Guidelines Section 15064.3(b).

As noted in a) above, the project would not generate traffic. Because of this, the project would not increase VMT and therefore would not conflict with the objectives of CEQA Guidelines Section 15064.3(b). The project would have no impact on this issue.

c) Traffic Hazards.

Other than temporary effects during construction, the project would not alter Jack Tone Road such that it would introduce traffic hazards. The existing design features of Jack Tone Road adjacent to the project alignment would not change. The existing traffic mix on Jack Tone Road would not change; the project would not introduce any new traffic, including any that could be potentially incompatible with the existing mix. The project would have no impact on traffic hazards.

d) Emergency Access.

As noted in c) above, existing design features of Jack Tone Road adjacent to the project alignment would not change with project completion. Existing emergency access would be maintained. As discussed in Section 3.9, Hazards and Hazardous Materials, the project may have a temporary impact on emergency vehicle access during construction. Implementation of Mitigation Measure HAZ-1 would reduce potential impacts to a level that would be less than significant.

Level of Significance: Potentially significant

Mitigation Measures: Implementation of Mitigation Measure HAZ-1.

Significance After Mitigation: Less than significant

3.18 TRIBAL CULTURAL RESOURCES

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

Information in this section is based primarily upon a cultural resource report prepared by Natural Investigations Company, a copy of which is available in Appendix C.

Environmental Setting

As noted, in Section 3.5, Cultural Resources, the project site lies within the traditional territory of the Northern Valley Yokut (Wallace 1978). Prior to Euro-American contact, the Northern Valley Yokut resided in the lower San Joaquin River watershed and its tributaries extending from Calaveras River in the north to approximately the large bend of the San Joaquin River eastward near Mendota. The lower San Joaquin River meanders through the territory making bends, sloughs, and marshes full of tule reeds as it meanders. Farther from the rivers and marshes, the valley floor would have been dry and sparely vegetated (Wallace 1978; Kroeber 1925).

Northern Valley Yokut habitation areas were most commonly situated in close proximity to rivers and tributaries, more often on the east side of the river (Kroeber 1925). Yokut populations and habitation areas were generally concentrated near the San Joaquin River, and in the foothills to the east. This focus on waterways can also be seen in their dietary resources, which included various fish, waterfowl, antelope, elk, acorns, tule roots, and various seeds. In particular, salmon was an abundant food during the fall spawning and in springtime. A focus on fishing is also seen in the material culture consisting of net sinkers and harpoons, likely used from rafts constructed from tule reed bundles (Wallace 1978).

Traditional larger habitation areas were often situated upon mounds, on or near riverbanks. Northern Valley Yokut dwellings were constructed of tule reed woven mats placed over a pole frame oval or round structure. These structures were generally from 25 to 40 feet in diameter, and typically housed a single family (Wallace 1978). This is in contrast to the larger multifamily dwellings erected sometimes by the Southern Yokuts. In addition to dwellings, earth covered ceremonial sweat lodges were constructed. While there were permanent, or semi-permanent, habitation areas in association with riverine resources, peripheral camps used when gathering, hunting, and processing resources such as acorns and seeds were common (Gayton 1948; Kroeber 1925).

The Northern Valley Yokuts saw sharp and devastating decline from disease and relocation to coastal mission nearly immediately after Spanish contact (Osbourne 1992). This served to further increase with the large influx of cattle ranching, agriculture, and Anglos Americans after the gold rush (Osbourne 1992, Cook 1976a). Despite this, the Yokuts tribe continues to exist today; the Nototomne/North Valley Yokut Tribe, Inc., represents the Northern Valley Yokuts in the region.

In 2014, the California Legislature enacted AB 52, which focuses on consultation with Native American tribes on land use issues potentially affecting the tribes. The intent of this consultation is to avoid or mitigate potential impacts on "tribal cultural resources," which are defined as "sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe." Under AB 52, when a tribe requests consultation with a CEQA lead agency on projects within its traditionally and culturally affiliated geographical area, the lead agency must provide the tribe with notice of a

proposed project within 14 days of a project application being deemed complete or when the lead agency decides to undertake the project if it is the agency's own project. The tribe has up to 30 days to respond to the notice and request consultation; if consultation is requested, then the local agency has up to 30 days to initiate consultation.

Environmental Impacts and Mitigation Measures

a-i, ii) Tribal Cultural Resources.

As noted in Section 3.5, Cultural Resources, no archaeological resources have been recorded on the project site. Natural Investigation Company requested a search of the Native American Heritage Commission Sacred Lands File for records of potential tribal sacred land on the project site. The Commission reported a negative result, indicating no sacred lands have been recorded on or near the project site.

Natural Investigations Company sent letters to representatives of nine tribes inviting the tribes to consult on the project per AB 52. The letters were followed up with telephone calls to the tribal representatives. A response was received from only one tribe – the Confederated Villages of Lisjan Nation. The Confederated Villages did not request AB 52 consultation on the project; however, the tribe wished to be contacted should any cultural resources be encountered. None of the contacted tribes indicated the presence of any cultural resources pertaining to them on the project site.

As noted in Section 3.5, project construction could potentially uncover previously unknown archaeological resources, including those of Native American origin. Mitigation Measure CULT-1 would require construction work to stop at an uncovered resource site until an archaeologist can evaluate the resource and give recommendations for its disposition. If potential tribal cultural resources or burials are encountered, the appropriate tribal representative would be contacted to evaluate the find and make recommendations on its disposition. Implementation of Mitigation Measure CULT-1 would reduce potential impacts on tribal cultural resources to a level that would be less than significant.

Mitigation Measures: Implementation of Mitigation Measure CULT-1.

3.19 UTILITIES AND SERVICE SYSTEMS

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 facilities or storm 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 determined 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?				✓

Environmental Setting

Outside the Ripon city limits, there are few organized water, sewer, or storm drainage systems. Water for land uses in unincorporated San Joaquin County is provided by groundwater wells, and wastewater disposal is provided by individual septic systems. Stormwater drainage either percolates into the ground or is collected in ditches along Jack Tone Road. In a few places, storm drainage enters SSJID laterals, but this is incidental drainage and not as part of a drainage system.

Within the City of Ripon, all potable water is provided by five municipal groundwater wells. In 2020, annual water production was 4,524 acre-feet. The City also has three wells that produce non-potable water at a capacity of 3,130 gallons per minute. The water capacity of all eight wells is 8,640 gallons per minute. Water is distributed through the City's distribution system that consists of 72 miles of potable water main and 22 miles of non-potable water main (Christiana Giedd electronic mail).

The City provides wastewater treatment and collection services to residential, commercial, and industrial land uses within the City limits. The City maintains a network of storm drains and detention basins that collect storm water runoff from existing urbanized areas.

Solid waste collected within the County is transported and disposed of primarily at three landfills: the North County Landfill on East Harney Lane, with available capacity to the year 2048, and the Foothill Sanitary Landfill on North Waverly Road, with available capacity to 2082 (CalRecycle 2019). The Forward Landfill on Austin Road near Stockton was to have reached its capacity in 2020; however, the County Board of Supervisors recently approved an expansion of Forward Landfill that would extend its life to 2036 (Crunden 2020).

Solid waste collection services in Ripon are provided by Gilton Solid Waste Management, which operates under a City franchise. Solid waste from the City is taken to the McClure Transfer Station in Modesto, which in turn is sent to the Fink Road Sanitary Landfill in southwestern Stanislaus County. The Fink Road Landfill has a maximum permitted

capacity of 28,289,900 cubic yards and currently has a remaining capacity of 18,993,322 cubic yards. The facility is expected to remain open until 2050 (CalRecycle 2024).

Environmental Impacts and Mitigation Measures

a) Construction or Relocation of Infrastructure.

The project involves the installation of water pipelines that would connect the City's water system to the potable water supply provided by SSJID. The potential environmental effects of the proposed work are addressed throughout this IS/MND. The IS/MND evaluated potential project impacts on the environment and identified issues for which the implementation of mitigation measures would avoid or minimize potential impacts to a level that would be less than significant. For other environmental issues, the project would have no impact or would have impacts that are less than significant.

The project is not expected to require the relocation of existing infrastructure on or adjacent to the project alignment. Existing infrastructure that would be encountered by the project would consist of SSJID laterals. As discussed in Chapter 2.0, Project Description, the water pipelines would go underneath the laterals; there would be no direct impact on them. Based on this, project impacts related to construction or relocation of infrastructure would be less than significant.

b) Water Supply.

The project would supply the City’s potable water system with water treated by the SSJID. This water would supplement the City's existing supply from groundwater wells. The City has existing rights to SSJID water. The project, being the installation of water pipelines, by itself would not use this water or other City water supplies. Project impacts on water supply would be beneficial.

c) Wastewater Treatment Capacity.

The project does not propose any new structures or operations that would generate additional wastewater; as such, the project would not require the use of any onsite wastewater treatment systems or any of the existing capacity at the City’s wastewater treatment plant. The project would have no impact on wastewater treatment capacity.

d, e) Solid Waste Services.

As the project is the installation of water pipelines, it would not generate any substantial amounts of solid waste that would require collection or the need for landfill capacity. It also would not affect compliance with applicable federal, State, or local solid waste regulations. The project would have no impact on solid waste services.

3.20 WILDFIRE

If located in or near state responsibility areas or lands classified as Very High Fire Hazard Severity Zones, 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 downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?				✓

Environmental Setting

Wildland fires are an annual hazard in San Joaquin County. Wildland fires burn natural vegetation on undeveloped lands and include rangeland, brush, and grass fires. Long, hot, and dry summers with temperatures often exceeding 100°F add to the county's fire hazard. Human activities are the major causes of wildland fires, while lightning causes the remaining wildland fires. High hazard areas for wildland fires are the grass-covered areas in the east and the southwest foothills of the county (San Joaquin County 2016b). As noted in Section 3.9, Hazards and Hazardous Materials, the project is in an area of agricultural development. It is not located adjacent to any significant natural open spaces where wildland fires may occur.

The California Department of Forestry and Fire Protection's Fire and Resource Assessment Program identifies fire threat based on a combination of two factors: 1) fire frequency, or the likelihood of a given area burning, and 2) potential fire behavior. These two factors are combined in determining the following Fire Hazard Severity Zones: Moderate, High, and Very High. These zones are mapped for State Responsibility Areas, where the State of California is financially responsible for the prevention and suppression of wildfires. The project site and surrounding lands are not within a State Responsibility Area and have not been placed in a Fire Hazard Severity Zone (Cal Fire 2022).

a) Emergency Response and Emergency Evacuation Plans.

As discussed in Section 3.9, Hazards and Hazardous Materials, the project could temporarily interfere with emergency vehicle access, but no interference would occur after project completion, and no emergency vehicle access or evacuation issues related to wildfires would occur. The project would have no impact related to emergency response plans or emergency evacuation plans as they pertain to wildfires.

b) Exposure of Project Occupants to Pollutants.

The project site is not within a State Responsibility Area, and the site has not been designated by Cal Fire as being within a Fire Hazard Severity Zone. The project site is within an area of agricultural lands, which are not prone to wildfires. Moreover, the project is the installation of water pipelines. No structures that would be occupied would be constructed. The project would have no impact related to exposure of project occupants to pollutants.

c) Installation and Maintenance of Infrastructure.

The project proposes the installation of water pipelines in an area not classified as being in a Fire Hazard Severity Zone. It would not require the installation or maintenance of associated infrastructure that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment. The project would have no impact on this issue.

d) Risks from Runoff, Post-Fire Slope Instability, or Drainage Changes.

The project site is in a relatively flat area that is not classified as being in a Fire Hazard Severity Zone. In addition, as noted in b) above, the project would not construct any structures that would be occupied. Because of this, the project would not expose people or structures to downslope or downstream flooding or landslides, post-fire slope instability, or drainage changes. The project would have no impact on this issue.

3.21 MANDATORY FINDINGS OF SIGNIFICANCE

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or	☐	✓	☐	☐

eliminate important examples of the major periods of California history or prehistory?				
b) Does the project have impacts that are individually limited, but cumulatively considerable? "Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?				✓
c) Does the project have environmental effects which would cause substantial adverse effects on human beings, either directly or indirectly?			✓	

a) Findings on Biological and Cultural Resources.

The project's potential biological resource and cultural resource impacts were described in Sections 3.4 and 3.5, respectively. Potentially significant environmental effects on biological and cultural resources were identified, but implementation of mitigation measures that would be incorporated within the project would reduce these effects to a level that would be less than significant. The mitigation measures are described in Sections 3.4 and 3.5 and are listed in Table 1-1.

b) Findings on Cumulatively Considerable Impacts.

As described in this IS/MND, the potential environmental effects of the project would either be less than significant, or the project would have no impact at all, when compared to baseline conditions. Where the project involves potentially significant effects, these effects would be reduced to a less-than-significant level with proposed mitigation measures and compliance with required permits and applicable regulations.

The potential environmental effects identified in this IS/MND have been considered in conjunction with each other as to their potential to generate other potentially significant effects. The various potential environmental effects of the project would not combine to generate any potentially significant cumulative effects. There are no other known, similar projects with which the project might combine to produce adverse cumulative impacts.

The cumulative impacts of all elements of the South County Surface Water Supply Project, including the extension of potable water supply to the City of Ripon, were analyzed in an EIR prepared by the South San Joaquin Irrigation District. This EIR was certified by SSJID in 2000, and the primary elements of project were subsequently implemented.

c) Findings on Adverse Effects on Human Beings.

Potential adverse effects on human beings were discussed in Section 3.3, Air Quality (TACs); Section 3.7, Geology and Soils (seismic hazards); Section 3.9, Hazards and Hazardous Materials; Section 3.10, Hydrology and Water Quality (flooding); Section 3.17, Transportation/Traffic (traffic hazards); and Section 3.20, Wildfire. No significant adverse

effects were identified in these sections that could not be mitigated to a level that would be less than significant. Project impacts related to potential adverse effects on human beings would be less than significant.

4.0 REFERENCES

4.1 DOCUMENT PREPARERS

This IS/MND was prepared by BaseCamp Environmental, Inc. for use by and under the supervision of the City of Ripon. The following persons were involved in preparation of the IS/MND:

BaseCamp Environmental, Inc.

Charlie Simpson, Principal
Terry Farmer, AICP, Senior Environmental Planner
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Rayanna Beck, Editor/Document Production

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4.3 PERSONS CONSULTED

Christiana Giedd. Engineer, City of Ripon.

Kevin Werner. City Manager/City Engineer, City of Ripon.

5.0 NOTES ON 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 a project-specific screening analysis).

2) All answers must take account of the whole action involved, including off-site as well as on-site, 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 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 "Earlier Analyses," as described in (5) below, 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 [CEQA Guidelines Section 15063(c)(3)(D)]. In this case, a brief discussion should identify the following:

    a) Earlier Analyses 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 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, zoning ordinances). 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 checklist in CEQA Guidelines Appendix G is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.

9) 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.

APPENDIX A
AIR QUALITY MODELING RESULTS

Road Construction Emissions Model, Version 9.0.1

Daily Emission Estimates for -> Ripon Water Pipeline

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	0.77	3.65	5.88	200.18	0.18	200.00	41.76	0.16	41.60	0.01	938.73	0.28	0.01	948.30
Grading/Excavation	0.43	6.27	3.49	200.11	0.11	200.00	41.69	0.09	41.60	0.01	1,321.48	0.27	0.07	1,349.64
Drainage/Utilities/Sub-Grade	0.43	6.27	3.49	200.11	0.11	200.00	41.69	0.09	41.60	0.01	1,321.48	0.27	0.07	1,349.64
Paving	0.44	6.11	2.94	0.10	0.10	0.00	0.09	0.09	0.00	0.01	997.52	0.29	0.01	1,009.04
Maximum (pounds/day)	0.77	6.27	5.88	200.18	0.18	200.00	41.76	0.16	41.60	0.01	1,321.48	0.29	0.07	1,349.64
Total (tons/construction project)	0.02	0.20	0.12	5.61	0.00	5.61	1.17	0.00	1.17	0.00	40.74	0.01	0.00	41.53

Notes:

Project Start Year ->	2026
Project Length (months) ->	3
Total Project Area (acres) ->	2
Maximum Area Disturbed/Day (acres) ->	0
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	0	0	0	0	20	0
Grading/Excavation	213	0	110	0	30	0
Drainage/Utilities/Sub-Grade	213	0	110	0	30	0
Paving	0	20	0	10	20	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 -> Ripon Water Pipeline

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	0.01	0.02	0.66	0.00	0.66	0.14	0.00	0.14	0.00	3.10	0.00	0.00	2.84
Grading/Excavation	0.01	0.08	0.05	2.64	0.00	2.64	0.55	0.00	0.55	0.00	17.44	0.00	0.00	16.16
Drainage/Utilities/Sub-Grade	0.01	0.07	0.04	2.31	0.00	2.31	0.48	0.00	0.48	0.00	15.26	0.00	0.00	14.14
Paving	0.00	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.94	0.00	0.00	4.53
Maximum (tons/phase)	0.01	0.08	0.05	2.64	0.00	2.64	0.55	0.00	0.55	0.00	17.44	0.00	0.00	16.16
Total (tons/construction project)	0.02	0.20	0.12	5.61	0.00	5.61	1.17	0.00	1.17	0.00	40.74	0.01	0.00	37.67

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 B
BIOLOGICAL RESOURCE REPORT

MOORE BIOLOGICAL CONSULTANTS

March 28, 2024

Mr. Charlie Simpson
BaseCamp Environmental
802 West Lodi Avenue
Lodi, CA 95240

Subject: "RIPON WATER SUPPLY PIPELINE" PROJECT, SAN JOAQUIN COUNTY, CALIFORNIA: BIOLOGICAL ASSESSMENT

Dear Charlie:

Thank you for asking Moore Biological Consultants to prepare a biological assessment for this water pipeline project in and near Ripon, in San Joaquin County, California (Figure 1). The purposes of this assessment are to describe existing biological resources in the project site, identify potentially significant impacts to biological resources from the proposed project, and provide recommendations for how to reduce those impacts to a less-than-significant level. The work involved reviewing databases, aerial photographs, and documents, and conducting field surveys to document vegetation communities, potentially jurisdictional Waters of the U.S. and/or wetlands, and potentially suitable habitat for or presence of special-status species. This report details the methodology and results of our investigation.

Project Overview

The project involves installation of a pair of closely situated water pipelines along approximately 4 miles of Jack Tone Road, originating at the Five Corners intersection and ending near the River Road intersection. Up to two pump stations may also be constructed, with one being at the north end of the pipelines

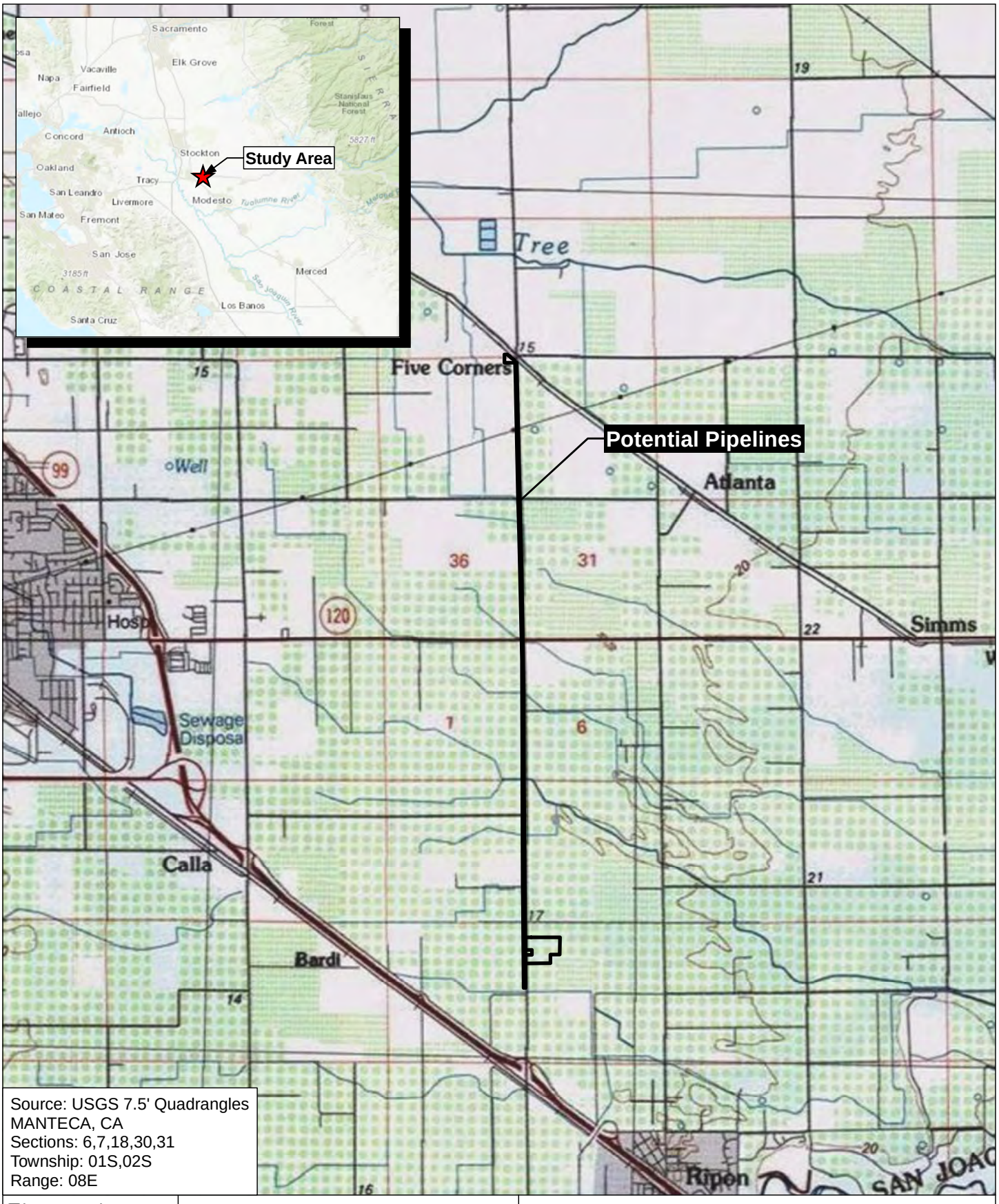

Figure 1

USGS

Ripon Water Supply Pipeline

San Joaquin County, CA

Moore Biological Consultants

Map Date: 01/26/2024

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and the second in a field near the south end of the pipelines (Figures 2, 3, and 4). Project staging will also likely occur in the field near the south end of the alignment. The exact locations of the pump station(s) and staging area have yet to be determined. Similarly, it has not been determined if the pair of pipelines will be located along the east road shoulder, along the west road shoulder, or will switch sides one or more times along the length of the alignment.

Methods

Prior to the field surveys, we conducted a search of California Department of Fish and Wildlife's (CDFW) California Natural Diversity Database (CNDDB, 2024). The CNDDB search encompassed the USGS 7.5-minute Stockton East, Peters, Manteca, Avena, Ripon, and Salida topographic quadrangles, which is an area of approximately 360+/- square miles surrounding the site (Attachment A). The United States Fish and Wildlife Service (USFWS*)* IPaC Trust Resource Report of Federally Threatened and Endangered species that may occur in or be affected by projects in the project vicinity was also reviewed. This information was used to identify wildlife and plant species that have been documented in the project vicinity or that may have the potential to occur if suitable habitat is present.

The National Marine Fisheries Service (NMFS) and USFWS on-line-maps of designated critical habitat and the National Wetland Inventory (NWI) were also reviewed. Finally, we reviewed San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (HCP) (SJCOG, 2000) maps and the 2024 fee schedule.

Biologists Diane Moore, M.S. and Colleen A. Laskowski, M.S. conducted field surveys on January 12 and 25, 2024. The surveys consisted mostly of driving along the alignment and walking through several areas making observations of habitat conditions, noting surrounding land uses, habitat types, and plant and wildlife species, and taking representative photographs.

Figure 2

Potential Pipelines

0 500 1,000
Feet

N
W E
S

Map Date: 01/26/2024
Aerial Source: Maxar (05-21-2021)

Moore Biological Consultants

AERIAL

Ripon Water Supply Pipeline

San Joaquin County, CA

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Figure 3

Potential Pipelines

0 500 1,000
Feet

N
W E
S

AERIAL

Ripon Water Supply Pipeline

San Joaquin County, CA

Moore Biological Consultants

Map Date: 01/26/2024
Aerial Source: Maxar (05-21-2021)

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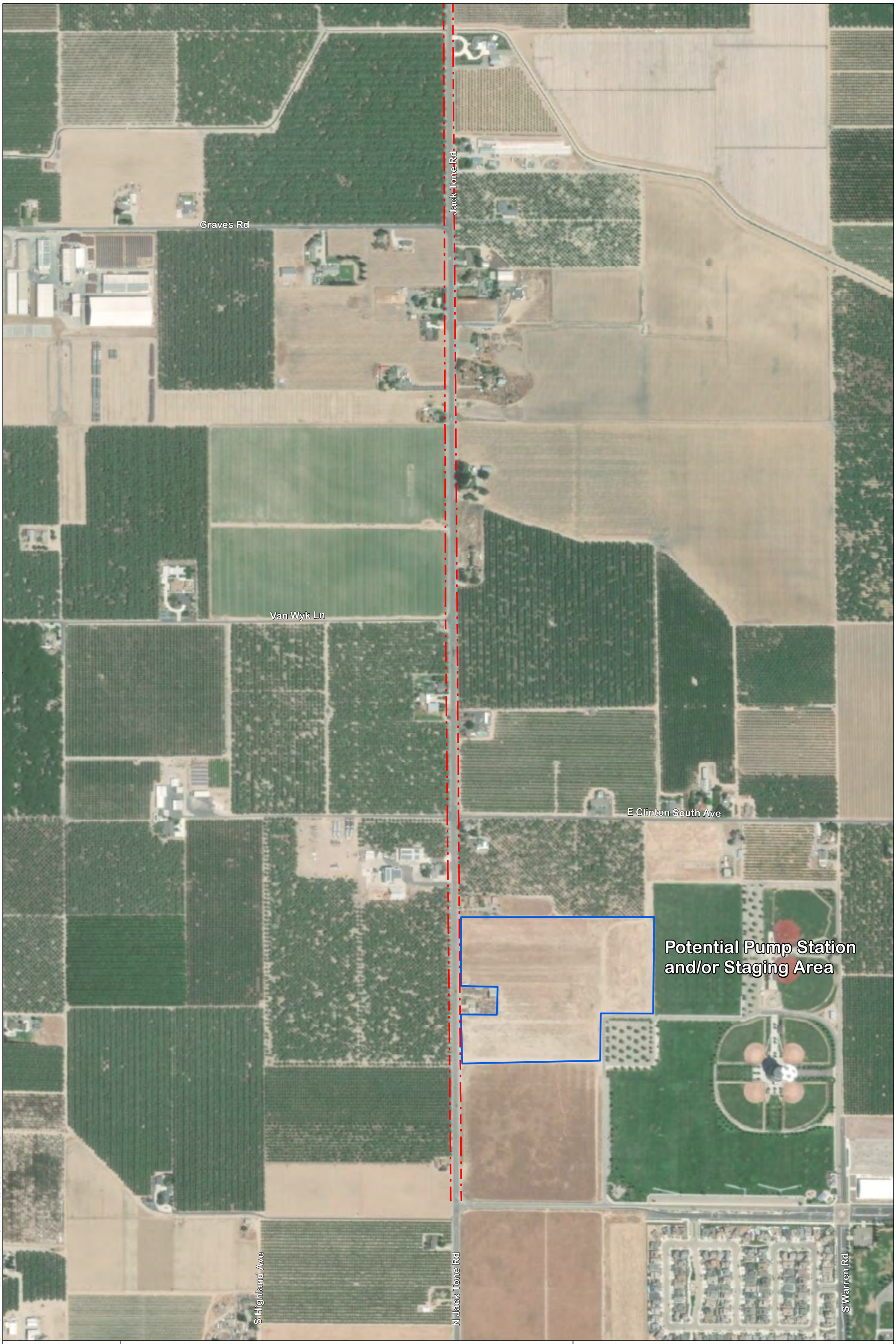

Figure 4

Potential Pipelines

0 500 1,000
Feet

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W E
S

AERIAL

Ripon Water Supply Pipeline

San Joaquin County, CA

Moore Biological Consultants

Map Date: 01/26/2024
Aerial Source: Maxar (05-21-2021)

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The surveys included an assessment of the site for potentially jurisdictional Waters of the U.S. (a term that includes wetlands) as defined by the ACOE, 1987; 2008) and/or Waters of the State, including wetlands.

The site was for searched for special-status species and potentially suitable habitat for special-status species (e.g., areas with unusual soils, vernal pools, blue elderberry shrubs). Additionally, trees in and near the site were assessed for the potential use by nesting raptors, especially Swainson's hawk (*Buteo swainsoni*). The grassland areas in the site were searched for burrowing owls (*Athene cunicularia*) or ground squirrel burrows with evidence of past occupancy.

A table of "Special-Status Species" pursuant to the California Environmental Quality Act (CEQA) was compiled from the results of the database searches. Special-status species include species that are currently listed as threatened or endangered, or species that are candidates for listing at the state or federal level, rare plants, and animals considered sensitive by CDFW, as described above. Common species identified in the CNDDB were not included the Special-Status Species table.

Results

GENERAL SETTING: The project alignment, potential pump stations, and staging area are in and near Ripon, in San Joaquin County, California; these areas are cumulatively referred to as the "Project Site" below. The site is in Sections 24, 25, and 36 in Township 1 South (T1S), Range 7 East (R7E), Sections 30 and 31 in T1S, Range 8 East (R8E), Sections 1, 12, and 13 in Township 2 South (T2S), R7E, and Sections 6, 7, and 18 in T2S, R8E of the USGS 7.5-minute Manteca topographic quadrangle (Figure 1). The site is essentially level and is at an elevation of approximately 60 feet above mean sea level. The pipelines will be installed in graveled and dirt road shoulders adjacent to Jack Tone Road (Figures 2 through 4 and photographs in Attachment B).

Land uses in this portion of San Joaquin County are primarily agricultural and residential. There are leveled fields adjacent to the alignment that primarily consist of irrigated pasture and orchards, with lesser amounts of row crops and fallow fields. There are residences and agricultural shops and facilities fronting Jack Tone Road along the length of the alignment.

VEGETATION: Habitats in and near the alignment are highly disturbed. The California annual grassland series (Sawyer and Keeler-Wolf, 1995) best describes the ruderal grassland vegetation found along portions of the alignment, as well as in the large field near River Road. Oats (*Avena sp*.), soft brome (*Bromus hordeaceus*), foxtail barley (*Hordeum murinum*), and perennial ryegrass (*Lolium perenne*) are dominant grass species in the site. Other grassland species such as prickly lettuce (*Lactuca serriola*), yellow star thistle (*Centaurea solstitialis*), bindweed (*Convolvulus arvensis*), filaree (*Erodium botrys*) and common mallow (*Malva neglecta*) are intermixed with the grasses. Table 1 is a list of plant species observed in the site.

There are numerous trees in close proximity to the alignment, most of which are orchard trees or landscape trees associated with nearby residences. The most notable trees in parcels along the alignment are some large valley oaks (*Quercus lobata*), redwoods (*Sequoia sempervirens*), blue gum (*Eucalyptus sp*.), and deador cedar (*Cedrus deodara*). No blue elderberry shrubs (*Sambucus nigra ssp. caerulea*) were observed in or adjacent to the project site.

WILDLIFE: Several bird species were observed during the field survey, all of which are common species found in agricultural areas of San Joaquin County (Table 2). Turkey vulture (*Cathartes aura*), red-tailed hawk (*Buteo jamaicensis*), mourning dove (*Zenaida macroura*), California scrubjay (*Aphelocoma californica*), northern mockingbird (*Mimus polyglottos*), European starling (*Sturnus vulgaris*), and Brewer's blackbird (*Euphagus cyanocephalus*) are representative of the avian species observed in the site.

TABLE 1
PLANT SPECIES OBSERVED IN THE PROJECT SITE

Albutilon theophrasti	velvetleaf
Avena fatua	oats
Brassica nigra	black mustard
Bromus diandrus	ripgut brome
Bromus hordeaceus	soft brome
Capsella bursa-pastoris	shepherd's purse
Centaurea solstitialis	yellow star thistle
Convolvulus arvensis	field bindweed
Cynodon dactylon	Bermuda grass
Epilobium brachycarpum	fireweed
Erigeron bonariensis	hairy fleabane
Erigeron canadensis	Candian horseweed
Erodium botrys	filaree
Helianthus annuus	common sunflower
Heterotheca grandiflora	telegraphweed
Hordeum murinum	foxtail barley
Grindelia camporum	gumplant
Lactuca serriola	prickly lettuce
Lolium perenne	perennial ryegrass
Malva neglecta	common mallow
Poa annua	annual blue grass
Salsola tragus	Russian thistle

Most of the trees in close proximity to the alignment are too small to support nesting raptors. However, there are some relatively large trees near the alignment that are potentially suitable for nesting raptors and it is likely some raptors nest in trees near Jack Tone Road. Smaller birds, such as songbirds, may nest in smaller trees and shrubs near the alignment. Ground-nesting songbirds such as killdeer (*Charadrius vociferous*) may nest on the ground in and near the site and the grassland vegetation in parts of the site may be suitable for grassland-nesting species, such as red-winged blackbird (*Agelaius phoeniceus*).

TABLE 2
WILDLIFE SPECIES DOCUMENTED IN THE PROJECT SITE

Turkey vulture	*Cathartes aura*
Red-tailed hawk	*Buteo jamaicensis*
American kestrel	*Falco sparverius*
Killdeer	*Charadrius vociferus*
Common snipe	*Gallinago gallinago*
Western gull	*Larus occidentalis*
Rock dove	*Columba livia*
Mourning dove	*Zenaida macroura*
California scrub jay	*Aphelocoma californica*
American crow	*Corvus brachyrhynchos*
American robin	*Turdus migratorius*
Northern mockingbird	*Mimus polyglottos*
European starling	*Sturnus vulgaris*
White-crowned sparrow	*Zonotrichia leucophrys*
Western meadowlark	*Sturnella neglecta*
Brewer's blackbird	*Euphagus cyanocephalus*
Brown-headed cowbird	*Molothrus ater*
House finch	*Haemorhous mexicanus*
House sparrow	*Passer domesticus*

No mammals were observed in the site during the field surveys and the potential for intensive use of the project site by mammals is low. Common mammals such as coyote (*Canis latrans*), raccoon (*Procyon lotor*), striped skunk (*Mephitis mephitis*), desert cottontail (*Sylvilagus audubonii*), black-tailed hare (*Lepus californicus*), Virginia opossum (*Didelphis virginiana*), and Botta's pocket gopher (*Thomomys bottae*) may occur the hay field where the north pump station may be constructed and the fallow field near River Road. No California ground squirrels (*Otospermophilus beecheyi*) or their burrows were observed in the site. Small rodents including mice (*Mus musculus, Reithrodontomys megalotis,* and *Peromyscus maniculatus*) and voles (*Microtus californicus*) may occur in or adjacent to the site.

Due to lack of suitable habitat, few amphibians and reptiles are expected to use habitats in the site and none were observed. The lack of aquatic habitat in the site reduces the probability for the site to be utilized by amphibians. The site is within the range of common reptiles such as western fence lizard (*Sceloporus occidentalis*), western skink (*Eumeces skiltonianus*), western terrestrial garter snake (*Thamnophis elegans*), and common king snake (*Lampropeltis getulus*); these and other common amphibian and reptile species may occur in the site.

AQUATIC RESOURCES: Waters of the U.S., including wetlands, are defined under 33 Code of Federal Regulations (CFR) 328 to include navigable waterways, their tributaries, and adjacent wetlands. State and federal agencies regulate these habitats and Section 404 of the Clean Water Act requires that a permit be secured prior to the discharge of dredged or fill materials into any Waters of the U.S. The California Regional Water Quality Control Board (RWQCB) implements Section 401 of the Clean Water Act by issuing 401 Certification in support of 404 permits. Many jurisdictional Waters of the U.S. in California are also Waters of the State, and also fall under the jurisdiction of CDFW.

"Waters of the U.S.", as defined in 33 CFR 328.4, encompasses Territorial Seas, Tidal Waters, and Non-Tidal Waters; Non-Tidal Waters includes interstate and intrastate rivers and streams, their tributaries, and their adjacent wetlands. The limit of federal jurisdiction of Non-Tidal Waters of the U.S. extends to the "ordinary high water mark" (OHWM). The OHWM is established by physical characteristics such as a natural water line impressed on the bank, presence of shelves, destruction of terrestrial vegetation, or the presence of litter and debris.

Wetlands are vegetated areas that meet specific vegetation, soil, and hydrologic criteria defined by the ACOE *Wetlands Delineation Manual* and Regional Supplement (ACOE, 1987; 2008). Wetlands that are adjacent to and hydrologically very closely associated with jurisdictional lakes, rivers, streams, and tributaries can also fall under ACOE jurisdiction as "adjacent wetlands". Pursuant to a May 2023 Supreme Court decision, adjacent wetlands must have a

continuous surface connection with a jurisdictional Water of the U.S. such that the wetland is indistinguishable from the adjacent water. Geographically and hydrologically isolated wetlands are outside federal jurisdiction, but are regulated by RWQCB as a “Water of the State”.

Jurisdictional Waters of the U.S. and wetlands include, but are not limited to, most perennial and intermittent creeks and lakes, as well as adjacent wetlands such as riparian wetlands along the edges of rivers. Waters of the U.S., wetlands, and other aquatic habitats provide critical habitat components, such as nest sites and a reliable source of water, for a wide variety of wildlife species.

The only potentially jurisdictional Waters of the U.S. in the site are a series of San Joaquin Irrigation District (SSJID) irrigation canals and pipelines, all of which are part of SSJID’s existing irrigation network. An open trapezoidal canal parallels the east side of Jack Tone Road, just south of E. Louise Avenue, is piped under road, and is piped underground to the west of the road (Figure 2). The other two open canals, which are approximately 650 feet north of Leroy Avenue and approximately 1,330 feet north of Graves Road, are above-ground waterways both to the east and west of Jack Tone Road and are piped under the road (Figures 3 and 4). There are also several entirely underground SSJID irrigation pipelines that cross under Jack Tone Road along the alignment.

The SSJID canals and pipelines are mapped as “blue-line” streams on the USGS topographic map (Figure 1) and are depicted as “Riverine” features on the NWI map (Attachment C).

Water in the SSJID’s irrigation network is derived via gravity from the Stanislaus River many miles southeast of the site. The irrigation lines eventually drain back in to the San Joaquin River to the west of the site. This gravity-based hydrological regime renders the SSJID laterals and pipelines as potentially jurisdictional Waters of the U.S., despite being constructed, managed, and maintained irrigation facilities. The proposed pipelines will be installed above or

below the SJJID canals and pipelines, which will be fully avoided by project construction.

No other potentially jurisdictional Waters of the U.S. or wetlands were observed in the site. There are also no areas in the site meeting the criteria of Waters of the State, including wetlands.

SPECIAL-STATUS SPECIES: Special-status species are plants and animals that are legally protected under the state and/or federal Endangered Species Act or other regulations. The Federal Endangered Species Act (FESA) of 1973 declares that all federal departments and agencies shall utilize their authority to conserve endangered and threatened plant and animal species. The California Endangered Species Act (CESA) of 1984 parallels the policies of FESA and pertains to native California species.

Special-status species also include other species that are considered rare enough by the scientific community and trustee agencies to warrant special consideration, particularly with regard to protection of isolated populations, nesting or denning locations, communal roosts, and other essential habitats. The presence of species with legal protection under the Endangered Species Act often represents a constraint to development, particularly when the species are wide-ranging or highly sensitive to habitat disturbance and where proposed development would result in a take of these species.

Special-status plants are those, which are designated rare, threatened, or endangered and candidate species for listing by the USFWS. Special-status plants also include species considered rare or endangered under the conditions of Section 15380 of the California Environmental Quality Act Guidelines, such as those plant species identified on Lists 1A, 1B and 2 in the Inventory of Rare and Endangered Vascular Plants of California (CNPS, 2024). Finally, special-status plants may include other species that are considered sensitive or of special

concern due to limited distribution or lack of adequate information to permit listing or rejection for state or federal status, such as those included on CNPS List 3.

The likelihood of occurrence of listed, candidate, and other special-status species in the site is generally low. Table 3 provides a summary of the listing status and habitat requirements of special-status species that have been documented in the greater project vicinity or for which there is potentially suitable habitat in the greater project vicinity. This table also includes an assessment of the likelihood of occurrence of each of these species in the site. The evaluation of the potential for occurrence of each species is based on the distribution of regional occurrences (if any), habitat suitability, and field observations.

SPECIAL-STATUS PLANTS: A total of six species of special-status plants were identified in the CNDDB (2024) search area, most of which are several miles from the site (Table 3 and Attachment A). Delta button celery (*Eryngium racemosum*) is the only special-status plant species documented in the CNDDB within 5 miles of the site. No special-status plants are identified on the USFWS IPaC Trust Report.

No special-status plants or potentially suitable habitat for special-status plants was observed in the site. Special-status plants generally occur in relatively undisturbed areas in vegetation communities such as vernal pools, marshes and swamps, seasonal wetlands, riparian scrub, and areas with unusual soils. In contrast, the pipelines will be installed in heavily trafficked road shoulders that do not provide suitable habitat for any of the special-status plants in Table 3 or any other special-status plant species. The hay field where the north pump station may be constructed and the fallow field near River Road are also highly disturbed and do not provide suitable habitat for special-status plants. Due to lack of suitable habitat, it is unlikely that special-status plants occur in the site.

SPECIAL-STATUS WILDLIFE: The potential for intensive use of habitats within the project site by special-status wildlife species is extremely low. A total of nineteen

TABLE 3

SPECIAL-STATUS PLANT AND WILDLIFE SPECIES DOCUMENTED OR POTENTIALLY-OCCURRING IN THE PROJECT VICINITY

Common Name	Scientific Name	Federal Status[1]	State Status[2]	CNPS List[3]	Habitat	Potential for Occurrence in the Project Site
PLANTS						
Lesser saltscale	*Atriplex minuscula*	None	None	1B	Chenopod scrub, playas, valley and foothill grassland; in sandy alkaline soils.	Unlikely: the site does not provide suitable habitat for lesser saltscale. The nearest occurrence of this species in the CNDDB (2024) search area is over 5 miles from the site.
Recurved larkspur	*Delphinium recurvatum*	None	None	1B	Chenopod scrub in alkaline soils.	Unlikely: the site does not provide suitable habitat for recurved larkspur. The nearest occurrence of this species in the CNDDB (2024) search area is over 5 miles from the site.
Delta button-celery	*Eryngium racemosum*	None	E	1B	Seasonally inundated (usually floodplain) riparian scrub with a clay substrate.	Unlikely: the site does not provide suitable habitat for delta button-celery. The nearest occurrence of delta button celery in the CNDDB (2024) search area is approximately 4.5 miles southwest of the site.
Alkali-sink goldfields	*Lasthenia chrysantha*	None	None	1B	Vernal pools.	Unlikely: there are no vernal pools in the site. The nearest occurrence this species in the CNDDB (2024) search area is over 5 miles from the site.
California alkali grass	*Puccinellia simplex*	None	None	1B	Chenopod scrub, meadows and seeps, valley and foothill grassland, vernal pool habitats; in alkaline, vernally mesic sinks, flats, and lake margins.	Unlikely: the site does not provide suitable habitat for California alkali grass. The nearest occurrence of this species in the CNDDB (2024) search area is over 5 miles from the site.
Greene's tuctoria	*Tuctoria greenei*	E	R	1B	Vernal pools within the Central Valley.	Unlikely: there are no vernal pools in the site. The nearest occurrence of Greene's tuctoria in the CNDDB (2024) search area is over 5 miles from the site.
WILDLIFE						
Birds						
Tricolored blackbird	*Agelaius tricolor*	None	T	N/A	Open water and protected nesting substrate, usually cattails and riparian scrub with surrounding foraging habitat.	Unlikely: there is no suitable nesting habitat for this species in or near the site. The nearest occurrence of tricolored blackbird in the CNDDB (2024) search area is approximately 4.5 miles southwest of the site.

TABLE 3

SPECIAL-STATUS PLANT AND WILDLIFE SPECIES DOCUMENTED OR POTENTIALLY-OCCURRING IN THE PROJECT VICINITY

Common Name	Scientific Name	Federal Status[1]	State Status[2]	CNPS List[3]	Habitat	Potential for Occurrence in the Project Site
Swainson's hawk	*Buteo swainsoni*	None	T	N/A	Breeds in stands of tall trees in open areas. Requires adjacent suitable foraging habitats such as grasslands or alfalfa fields supporting rodents.	High: annual cropland and open grassland near the pipeline alignment provides foraging habitat for Swainson's hawks and there are trees near the site suitable for nesting. Swainson's hawk likely nests in the project vicinity. There is a 2009 record of nesting Swainson's hawk at the intersection of Jack Tone Road and Louise Avenue near the north end of the alignment (CNDDB, 2024).
Western yellow-billed cuckoo	*Coccyzus americanus occidentalis*	T	E	N/A	Nests in riparian forests, along the broad, lower flood-bottoms of larger river systems.	Unlikely: there is no riparian forest habitat in or near the site. There are no occurrences of western yellow-billed cuckoo in the CNDDB (2024) search area. The site is not within designated suitable habitat for this species (USFWS, 2021).
Least Bell's vireo	*Vireo bellii pusillus*	E	E	N/A	Nests in willow thickets and other shrubs, primarily in southern California riparian forests.	Unlikely: there is no suitable habitat near the site to support least Bell's vireo. Further, this species is known to occur primarily in southern California. There are no occurrences of this species in the CNDDB (2024) search area. The site is not within designated suitable habitat for least Bell's vireo (CFR, 1994).
Burrowing owl	*Athene cunicularia*	None	SC	N/A	Open, dry annual or perennial grasslands, deserts and scrublands characterized by low-growing vegetation.	Unlikely: no burrowing owls or ground squirrel burrows that could support burrowing owl were observed in or near the project site. The nearest occurrence of burrowing owl in the CNDDB (2024) search area is over 5 miles from the site.
Mammals						
Riparian brush rabbit	*Sylvilagus bachmani riparius*	E	E	N/A	Dense riparian thickets along large rivers in Stanislaus and southern San Joaquin Counties.	Unlikely: there is no suitable riparian habitat in or near the site to support riparian brush rabbit. The nearest occurrence of this species in the CNDDB (2024) search area is approximately 4.5 miles southwest of the site.
Riparian (=San Joaquin Valley) woodrat	*Neotoma fuscipes riparia*	E	SC	N/A	Dense riparian woodlands and scrub along major Central Valley rivers.	Unlikely: there is no suitable riparian habitat in or near the site to support riparian woodrat. The nearest occurrence of this species in the CNDDB (2024) search area is approximately 4.5 miles southwest of the site.

TABLE 3

SPECIAL-STATUS PLANT AND WILDLIFE SPECIES DOCUMENTED OR POTENTIALLY-OCCURRING IN THE PROJECT VICINITY

Common Name	Scientific Name	Federal Status[1]	State Status[2]	CNPS List[3]	Habitat	Potential for Occurrence in the Project Site
Pallid bat	*Antrozous pallidus*	None	SC	N/A	Open and dry habitats with rocky areas for roosting.	Unlikely: the site does not provide suitable habitat for pallid bat. The nearest record of this species in the CNDDB (2024) search area is over 5 miles from the site.
Reptiles & Amphibians						
Giant garter snake	*Thamnophis gigas*	T	T	N/A	Freshwater marsh and low gradient streams; also uses drainage canals and irrigation ditches for dispersal or migration.	Unlikely: there is no suitable habitat for giant garter snake in or near the site. The nearest record of this species in the CNDDB (2024) search area is over 5 miles from the site.
California tiger salamander	*Ambystoma californiense*	T	T	N/A	Seasonal water bodies without fish (i.e., vernal pools and stock ponds) and grassland/ woodland habitats with summer refugia (i.e., burrows).	Unlikely: there is no suitable habitat in or near the site for California tiger salamander. The nearest occurrence of this species in the CNDDB (2024) search area is approximately 2 miles southeast of the site. The site is not in designated critical habitat for California tiger salamander (USFWS, 2005a).
Western pond turtle	*Emys marmorata*	PT	SC	N/A	Marshes, creeks and ditches with aquatic vegetation.	Unlikely: there is no suitable aquatic habitat in or near the site to support western pond turtle. There are no records of this species in the CNDDB (2024) search area.
Western spadefoot	*Spea hammondii*	PT	SC	N/A	Breeds and lays eggs in seasonal water bodies such as deep vernal pools or stock ponds.	Unlikely: there is no suitable aquatic habitat in or near the site to support western spadefoot. The nearest occurrence of this species in the CNDDB (2024) search area is over 5 miles from the site.
Northern California legless lizard	*Anniella pulchra*	None	SC	N/A	Sandy or loose loamy soils under sparse vegetation.	Unlikely: the project site does not provide high quality habitat for northern California legless lizard; grassland areas along the alignment are highly disturbed. The nearest occurrence of this species in the CNDDB (2024) search area is over 5 miles from the site.
Fish						
Central Valley steelhead	*Oncorhynchus mykiss irideus pop.11*	T	None	N/A	Riffle and pool complexes with adequate spawning substrates in Central Valley drainages.	None: there is no aquatic habitat in the site. The CNDDB (2024) depicts Central Valley steelhead in the Stanislaus River approximately 2.5 miles south of the site. The Stanislaus River is designated critical habitat for this species (NOAA, 2005).

TABLE 3

SPECIAL-STATUS PLANT AND WILDLIFE SPECIES DOCUMENTED OR POTENTIALLY-OCCURRING IN THE PROJECT VICINITY

Common Name	Scientific Name	Federal Status[1]	State Status[2]	CNPS List[3]	Habitat	Potential for Occurrence in the Project Site
Green sturgeon	*Acipenser medirostris*	T	None	N/A	Freshwater and saltwater habitats; spawn in freshwater rivers.	Unlikely: there is no aquatic habitat in the site. The CNDDB (2024) depicts green sturgeon in the Stanislaus River approximately 2.5 miles south of the site. The site is not in designated critical habitat for green sturgeon (NOAA, 2009).
Hardhead	*Mylopharodon conocephalus*	None	SC	N/A	Clear, deep pools with sand and gravel bottoms in tributaries to the San Joaquin and Sacramento River.	Unlikely: there is no aquatic habitat in the site. The nearest occurrence of hardhead in the CNDDB (2024) search area is approximately 4.5 miles southwest of the site in the Stanislaus River.
Invertebrates						
Valley elderberry longhorn beetle	*Desmocerus californicus dimorphus*	T	None	N/A	Elderberry shrubs, usually in Central Valley riparian habitats.	Unlikely: no blue elderberry shrubs were observed in or adjacent to the project site. The nearest occurrence of this species in the CNDDB (2024) search area is over 5 miles from the site. The site is not in designated critical habitat for this species (USFWS, 1980).
Vernal pool fairy shrimp	*Branchinecta lynchi*	T	None	N/A	Vernal pools.	Unlikely: there are no vernal pools in the site. The nearest occurrence of vernal pool fairy shrimp in the CNDDB (2024) search area is over 5 miles from the site. The site is not in designated critical habitat for this species (USFWS, 2005b).
Conservancy fairy shrimp	*Branchinecta conservatio*	E	None	N/A	Vernal pools.	Unlikely: there are no vernal pools in the site. The nearest occurrence of Conservancy fairy shrimp in the CNDDB (2024) search area is over 5 miles from the site. The site is not in designated critical habitat for this species (USFWS, 2005b).
Vernal pool tadpole shrimp	*Lepidurus packardi*	E	None	N/A	Vernal pools.	Unlikely: there are no vernal pools in the site. The nearest occurrence of vernal pool tadpole shrimp in the CNDDB (2024) search area is over 5 miles from the site. The site is not in designated critical habitat for this species (USFWS, 2005b).

TABLE 3

SPECIAL-STATUS PLANT AND WILDLIFE SPECIES DOCUMENTED OR POTENTIALLY-OCCURRING IN THE PROJECT VICINITY

Common Name	Scientific Name	Federal Status[1]	State Status[2]	CNPS List[3]	Habitat	Potential for Occurrence in the Project Site
Crotch bumble bee	*Bombus crotchii*	None	CE	N/A	Open grassland and scrub habitats mainly in coastal or southern California; rarely found in the Central Valley.	Unlikely: Crotch bumble bee could fly over the site, but is not be expected to intensively utilize habitats in or near the site. The nearest record of this species in the CNDDB (2024) search area is over 5 miles from the site.
Western bumble bee	*Bombus occidentalis*	None	CE	N/A	Meadows and grasslands with abundant floral resources, current range indicates its a higher elevation species; rarely found in the Central Valley.	Unlikely: this species could fly over the site, but is not be expected to intensively utilize habitats in or near the site due to a lack of floristic resources. The nearest occurrence of Western bumble bee in the CNDDB (2024) search area is approximately 1.5 miles east of the site.
Monarch butterfly	*Danaus plexippus*	C	None	N/A	Variety of habitats in California, primarily in coastal areas; larvae dependent on milkweed.	Unlikely: the site does not provide suitable habitat for monarch butterfly and no milkweed was not observed in the site. There are no occurrences of Monarch butterfly in the CNDDB (2024) within the search area.

1 T= Threatened; E = Endangered; C = Candidate for Listing; PT = Proposed for Threatened Status.

2 T = Threatened; E = Endangered; CE = Candidate for Endangered Status; SC = State of California Species of Special Concern; R = Rare.

3 CNPS List 1B includes species that are rare, threatened, or endangered in California and elsewhere.

(19) special-status wildlife species are recorded in the CNDDB (2024) query, 10 of which have been found within 5 miles of the site (Table 3 and Attachment A). These species include: Swainson's hawk, tricolored blackbird (*Agelaius tricolor*), California tiger salamander (*Ambystoma californiense*), riparian woodrat (*Neotoma fuscipes riparia*), riparian brush rabbit (*Sylvilagus bachmani riparius*), green sturgeon (*Acipenser medirostris*), hardhead (*Mylopharodon conocephalus*), Central Valley steelhead (*Oncorhynchus mykiss irideus*), valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*), and western bumble bee (*Bombus occidentalis*).

The USFWS IPaC Trust Report includes a few of these same species found in the CNDDB (2024) query and also includes least Bell's vireo (*Vireo bellii pusillus*), western yellow-billed cuckoo (*Coccyzus americanus occidentalis*), western pond turtle (*Emys marmorata),* vernal pool fairy shrimp (*Branchinecta lynchi*), Conservancy fairy shrimp (*Branchinecta conservatio*), vernal pool tadpole shrimp (*Lepidurus packardi*), and monarch butterfly (*Danaus plexippus*) (Attachment A).

While the project site may have provided habitat for special-status wildlife species at some time in the past, farming and development have substantially modified natural habitats in the greater project vicinity, including those in the site. Swainson's hawk could nest in trees in close proximity to the site and could be disturbed by construction; burrowing could nest in burrows, if available, in or near the site. These birds are discussed further below. Due to a lack of suitable habitat, the remaining wildlife species in Table 3 have essentially no potential to occur in or near the site on more than a transitory basis.

SWAINSON'S HAWK: The Swainson's hawk is a migratory hawk listed by the State of California as a Threatened species. The Migratory Bird Treaty Act (MBTA) and Fish and Game Code of California (FGCC) protect Swainson's hawks year-round, as well as their nests during the nesting season (March 1 through

September 15). Swainson's hawk are found in the Central Valley primarily during their breeding season, a population is known to winter in the San Joaquin Valley.

Swainson's hawks prefer nesting sites that provide sweeping views of nearby foraging grounds consisting of grasslands, irrigated pasture, hay, and wheat crops. Most Swainson's hawks are migratory, wintering in Mexico and breeding in California and elsewhere in the western United States. This raptor generally arrives in the Central Valley in mid-March, and begins courtship and nest construction immediately upon arrival at the breeding sites. The young fledge in early July, and most Swainson's hawks leave their breeding territories by late August.

The site is within the nesting range of Swainson's hawks and the CNDDB (2024) contains a few records of nesting Swainson's hawks in the greater project vicinity, several of which are within a few miles of the alignment (Attachment A). The nearest record of Swainson's hawk in the CNDDB (2024) search area is in a cluster of trees at the corner of Jack Tone Road and E. Louise Avenue, adjacent to the alignment (Attachments A and B). As this species is known to display high nest site affinity, Swainson's hawks may still nest in this same territory.

There are several large trees located in close proximity to the site that are potentially suitable for nesting raptors, including Swainson's hawk. The two potential pump station sites and open fields and cropland in the project vicinity also provide foraging habitat for Swainson's hawk.

The project will participate in the San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (HCP) (SJCOG, 2000), which is the City is signatory to. The HCP involves payment of fees and compliance with standard Incidental Take Minimization Measures (ITMMs) that will be issued for the project. Pursuant to the HCP, if construction is scheduled to commence during the nesting season (i.e., between February 15 through August 31), and Swainson's hawks are nesting in or near the site, a construction setback of twice

the diameter of the drip-line of the nest tree (as measured from under the nest) would be required until nesting is complete.

BURROWING OWL: The MBTA and FGCC protect burrowing owls year-round, as well as their nests during the nesting season (February 1 through August 31). Burrowing owls are a year-long resident in a variety of grasslands as well as scrub lands that have a low density of trees and shrubs with low growing vegetation; burrowing owls that nest in the Central Valley may winter elsewhere.

The primary habitat requirement of the burrowing owl is small mammal burrows for nesting. The owl usually nests in abandoned ground squirrel burrows, although they have been known to dig their own burrows in softer soils. In urban areas, burrowing owls often utilize artificial burrows including pipes, culverts, and piles of concrete pieces. This semi-colonial owl breeds from March through August, and is most active while hunting during dawn and dusk. The nearest record of nesting burrowing owl in the CNDDB (2024) search area is over 5 miles from the site.

The intensity of development surrounding the site reduces the likelihood of burrowing owls using the site for nesting. No burrowing owls or ground squirrel burrows were located along the alignment or at the two potential pump station sites. However, if burrow habitat becomes available in the future, burrowing owls may utilize habitats in close proximity to the site in the future.

Standard ITMMs under the HCP outline protective measures for burrowing owl. While there is currently no potential burrowing owl habitat (i.e., burrows) in the site, SJCOG may still issue ITMMs for burrowing owl. If construction is scheduled to commence outside the nesting season (i.e., if construction starts between September 1 and January 31) and burrowing owls are present on-site, they can be passively relocated. In the event that construction commences during the nesting season and burrowing owls are present on-site, a 250-foot construction setback from the natal burrow would be required until nesting is complete.

OTHER SPECIAL-STATUS SPECIES: The site does not provide even moderately suitable habitat for the other special-status wildlife species in Table 3. Other special-status birds may fly over the area on occasion, but would not be expected to nest or roost in or immediately adjacent to the project site, primarily due to lack of habitat. For example, the site does not contain emergent wetland vegetation or riparian vegetation that would provide suitable nesting habitat for tricolored blackbird, western yellow-billed cuckoo, or least Bell's vireo.

There is no riparian habitat in or near the site for riparian brush rabbit or riparian woodrat. While pallid bat (*Antrozous pallidus*), and a few common bats may fly over or forage in the site, there is no highly suitable habitat in or immediately adjacent to the site for special-status bats.

The site does not provide aquatic habitat for California tiger salamander, giant garter snake (*Thamnophis gigas*), western pond turtle, or western spadefoot (*Spea hammondii*). The site also does not provide suitable habitat for northern California legless lizard (*Anniella pulchra*).

The site does not provide aquatic habitat for Central Valley steelhead, hardhead, green sturgeon, or other special-status fish.

There are no vernal pools or seasonal wetlands in the site for vernal pool fairy shrimp, vernal pool tadpole shrimp, or Conservancy fairy, other listed vernal pool branchiopods. Monarch butterfly may fly over the site during its migration, but this species is more known to occur in coastal environments and would not be expected to utilize the site for overwintering. The site lacks the floristic requirements for intensive use by special-status bee species, including western bumble bee, which its current range is also restricted to higher elevations. Finally, Crotch bumble bee (*Bombus crotchii*) is more commonly found in more natural habitats in southern California and is not be expected to occur in or near the project site. There are no blue elderberry shrubs in the site, precluding the potential occurrence of valley elderberry longhorn beetle.

CRITICAL HABITAT: The site is not within designated critical habitat for least Bell's vireo (CFR, 1994), western yellow-billed cuckoo (USFWS, 2021), California tiger salamander (USFWS, 2005a), federally listed vernal pool shrimp or plants (USFWS, 2005b), valley elderberry longhorn beetle (USFWS, 1980), green sturgeon (NOAA, 2009), Central Valley steelhead (NOAA, 2005), or other federally listed species (Attachment D).

WILDLIFE MOVEMENT CORRIDORS: Well-developed riparian corridors are often utilized for movement by wildlife species such as deer, coyote, red fox (*Vulpes vulpes*), and bobcat (*Felis rufus*), as well as a variety of amphibians, reptiles, and fish. There are no wildlife movement corridors in or adjacent to the site.

SAN JOAQUIN COUNTY MULTI-SPECIES HABITAT CONSERVATION AND OPEN SPACE PLAN (HCP): The project will participate in the HCP (SJCOG, 2000). The HCP involves the payment of fees and implementation of ITMMs to avoid impacts on nesting birds and other special-status species. The specific ITMMs that will be required will not be known until a biologist prescribes the ITTMs a few months prior to the start of construction. Due to most of the site being well outside of City limits, San Joaquin Council of Governments (SJCOG) Habitat Technical Advisory Committee (HTAC) will first need to approve the project for "participation" in the HCP. Seeking participation from the HTAC is a routine process accomplished for usually at least a couple of projects at each month's HTAC meeting.

Conclusions and Recommendations

- The site consists of disturbed areas along the edges of a heavily trafficked road, a hay field, and a fallow grassland field; on-site habitats are biologically unremarkable.

- There are a few SSJID irrigation canals and underground pipelines that parallel and/or cross under Jack Tone Road. The SSJID facilities are the only potentially jurisdictional Waters of the U.S. in the site. The proposed

pipelines will be installed above or below the SJJID canals and pipelines, which will be fully avoided by project construction. There are no areas in the site meeting the criteria of Waters of the State, including wetlands.

- There are no riparian habitats or other wildlife movement corridors, or native wildlife nursery sites in the site.

- Due to a lack of suitable habitat, it is unlikely that special-status plants occur in the site. No special-status plants were observed and none are expected to occur in the site.

- No special-status wildlife species were observed during the field survey. Due to a lack of suitable habitat, special-status wildlife species are not expected to occur in or near the site on more than a very occasional or transitory basis.

- Swainson’s hawk and burrowing owl could potentially nest in close proximity to the site.

- The project will participate the San Joaquin County HCP, which involves the payment of fees and implementation of ITMMs to avoid impacts on nesting birds and other special-status species.

- Standard Take Avoidance measures outlined in the HCP for nesting Swainson's hawks and burrowing owl will be required, if identified necessary by SJCOG in the ITMMs. These will include pre-construction surveys for nesting Swainson’s hawks within 0.5 miles of the site for construction activities between March 1 and September 15 and pre-construction surveys for nesting burrowing owls within 250 feet of the site for construction activities commencing from February 1 through August 31. If active nests are found, temporal restrictions on construction may be required.

- The site is not within designated critical habitat for any federally listed species.

- The trees and grasslands in the site could be used by birds protected by the MBTA or FGCC. If vegetation removal or construction commences during the nesting season of raptors (January 1 through July 31), a pre-construction survey for nesting raptors is recommended. If vegetation removal or construction commences during the general avian nesting season (March 1 through July 31), a pre-construction survey for all species of nesting birds is recommended. If active nests are found, work in the vicinity of the nests should be delayed until the young fledge.

We hope this information is useful. Please call me at (209) 745-1159 with any questions.

Sincerely,

Diane S. Moore, M.S.
Principal Biologist

References and Literature Consulted

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Attachment A

CNDDB Summary Report and Exhibits & USFWS

IPaC Trust Report

Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: Quad IS (Stockton East (3712182) OR Peters (3712181) OR Manteca (3712172) OR Avena (3712171) OR Ripon (3712162) OR Salida (3712161))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Acipenser medirostris pop. 1 green sturgeon - southern DPS	AFCAA01031	Threatened	None	G2T1	S1	
Agelaius tricolor tricolored blackbird	ABPBXB0020	None	Threatened	G1G2	S2	SSC
Ambystoma californiense pop. 1 California tiger salamander - central California DPS	AAAAA01181	Threatened	Threatened	G2G3T3	S3	WL
Anniella pulchra Northern California legless lizard	ARACC01020	None	None	G3	S2S3	SSC
Antrozous pallidus pallid bat	AMACC10010	None	None	G4	S3	SSC
Athene cunicularia burrowing owl	ABNSB10010	None	None	G4	S2	SSC
Atriplex minuscula lesser saltscale	PDCHE042M0	None	None	G2	S2	1B.1
Bombus caliginosus obscure bumble bee	IIHYM24380	None	None	G2G3	S1S2	
Bombus crotchii Crotch bumble bee	IIHYM24480	None	Candidate Endangered	G2	S2	
Bombus occidentalis western bumble bee	IIHYM24252	None	Candidate Endangered	G3	S1	
Bombus pensylvanicus American bumble bee	IIHYM24260	None	None	G3G4	S2	
Branchinecta conservatio Conservancy fairy shrimp	ICBRA03010	Endangered	None	G2	S2	
Branchinecta lynchi vernal pool fairy shrimp	ICBRA03030	Threatened	None	G3	S3	
Branchinecta mesovallensis midvalley fairy shrimp	ICBRA03150	None	None	G2	S2S3	
Branta hutchinsii leucopareia cackling (=Aleutian Canada) goose	ABNJB05035	Delisted	None	G5T3	S3	WL
Buteo swainsoni Swainson's hawk	ABNKC19070	None	Threatened	G5	S4	
Coccyzus americanus occidentalis western yellow-billed cuckoo	ABNRB02022	Threatened	Endangered	G5T2T3	S1	
Delphinium recurvatum recurved larkspur	PDRAN0B1J0	None	None	G2?	S2?	1B.2
Desmocerus californicus dimorphus valley elderberry longhorn beetle	IICOL48011	Threatened	None	G3T3	S3	

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Elderberry Savanna Elderberry Savanna	CTT63440CA	None	None	G2	S2.1	
Eryngium racemosum Delta button-celery	PDAPI0Z0S0	None	Endangered	G1	S1	1B.1
Falco columbarius merlin	ABNKD06030	None	None	G5	S3S4	WL
Great Valley Cottonwood Riparian Forest Great Valley Cottonwood Riparian Forest	CTT61410CA	None	None	G2	S2.1	
Great Valley Mixed Riparian Forest Great Valley Mixed Riparian Forest	CTT61420CA	None	None	G2	S2.2	
Great Valley Valley Oak Riparian Forest Great Valley Valley Oak Riparian Forest	CTT61430CA	None	None	G1	S1.1	
Lasthenia chrysantha alkali-sink goldfields	PDAST5L030	None	None	G2	S2	1B.1
Lepidurus packardi vernal pool tadpole shrimp	ICBRA10010	Endangered	None	G3	S3	
Linderiella occidentalis California linderiella	ICBRA06010	None	None	G2G3	S2S3	
Lytta moesta moestan blister beetle	IICOL4C020	None	None	G2	S2	
Mylopharodon conocephalus hardhead	AFCJB25010	None	None	G3	S3	SSC
Neotoma fuscipes riparia riparian (=San Joaquin Valley) woodrat	AMAFF08081	Endangered	None	G5T1	S1	SSC
Oncorhynchus mykiss irideus pop. 11 steelhead - Central Valley DPS	AFCHA0209K	Threatened	None	G5T2Q	S2	
Puccinellia simplex California alkali grass	PMPOA53110	None	None	G2	S2	1B.2
Rhaphiomidas trochilus San Joaquin Valley giant flower-loving fly	IIDIP05010	None	None	G1	S1	
Spea hammondii western spadefoot	AAABF02020	Proposed Threatened	None	G2G3	S3S4	SSC
Sylvilagus bachmani riparius riparian brush rabbit	AMAEB01021	Endangered	Endangered	G5T1	S2	
Thamnophis gigas giant gartersnake	ARADB36150	Threatened	Threatened	G2	S2	
Tuctoria greenei Greene's tuctoria	PMPOA6N010	Endangered	Rare	G1	S1	1B.1

Record Count: 38

CNDDB - PLANT

Ripon Water Supply Pipeline

San Joaquin County, CA

Moore Biological Consultants

Map Date: 01/26/2024
Source: CDFW, USA Topo Maps (2023)

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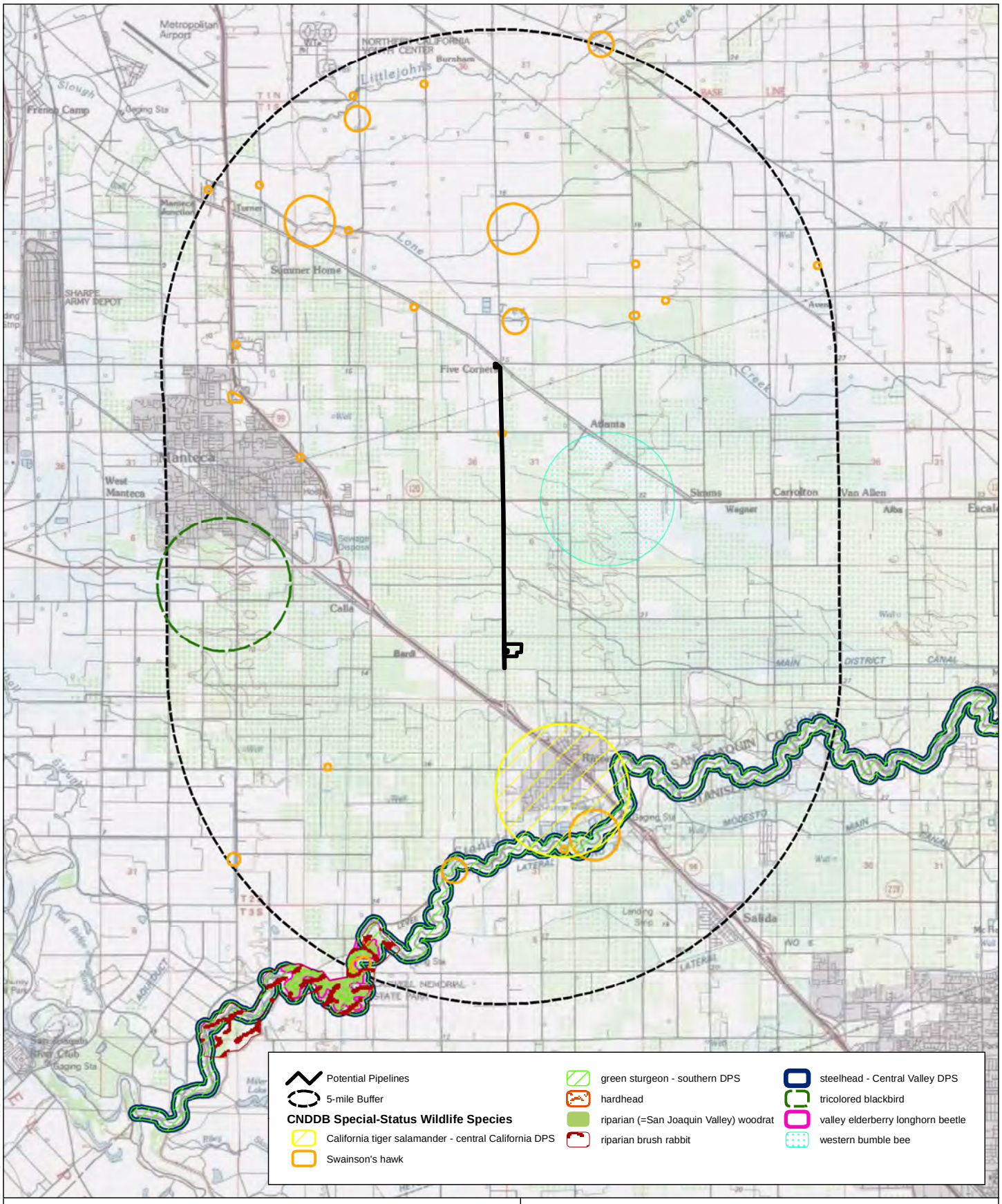

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CNDDB - WILDLIFE

Ripon Water Supply Pipeline

San Joaquin County, CA

Moore Biological Consultants

Map Date: 01/26/2024
Source: CDFW, USA Topo Maps (2023)

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IPaC **U.S. Fish & Wildlife Service**

IPaC resource list

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

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

Location

San Joaquin County, California

Local office

Sacramento Fish And Wildlife Office

(916) 414-6600
(916) 414-6713

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

Endangered species

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

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

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

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

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

Listed species[1] and their critical habitats are managed by the Ecological Services Program of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries[2]).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact NOAA Fisheries for species under their jurisdiction.

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1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the listing status page for more information. IPaC only shows species that are regulated by USFWS (see FAQ).

2. 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.

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

Mammals

NAME	STATUS
Riparian Brush Rabbit Sylvilagus bachmani riparius Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/6189	Endangered
Riparian Woodrat (=san Joaquin Valley) Neotoma fuscipes riparia Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/6191	Endangered

Birds

NAME	STATUS
Least Bell's Vireo Vireo bellii pusillus Wherever found There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/5945	Endangered
Yellow-billed Cuckoo Coccyzus americanus There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/3911	Threatened

Reptiles

NAME	STATUS
Northwestern Pond Turtle Actinemys marmorata Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/1111	Proposed Threatened

Amphibians

NAME	STATUS
California Tiger Salamander Ambystoma californiense There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/2076	Threatened

Insects

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

Crustaceans

NAME	STATUS
Conservancy Fairy Shrimp Branchinecta conservatio Wherever found There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/8246	Endangered
Vernal Pool Fairy Shrimp Branchinecta lynchi Wherever found There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/498	Threatened
Vernal Pool Tadpole Shrimp Lepidurus packardi Wherever found There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/2246	Endangered

Critical habitats

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

There are no critical habitats at this location.

You are still required to determine if your project(s) may have effects on all above listed species.

Bald & Golden Eagles

Bald and golden eagles are protected under the Bald and Golden Eagle Protection Act[1] and the Migratory Bird Treaty Act[2].

Any person or organization who plans or conducts activities that may result in impacts to bald or golden eagles, or their habitats[3], should follow appropriate regulations and consider implementing appropriate conservation measures, as described in the links below. Specifically, please review the "Supplemental Information on Migratory Birds and Eagles".

Additional information can be found using the following links:

- Eagle Management https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide conservation measures for birds https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf
- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action

There are bald and/or golden eagles in your project area.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the PROBABILITY OF PRESENCE SUMMARY below to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON

Bald Eagle Haliaeetus leucocephalus — Breeds Jan 1 to Aug 31

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

Golden Eagle Aquila chrysaetos — Breeds Jan 1 to Aug 31

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.
https://ecos.fws.gov/ecp/species/1680

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "Supplemental Information on Migratory Birds and Eagles", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

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

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.

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

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

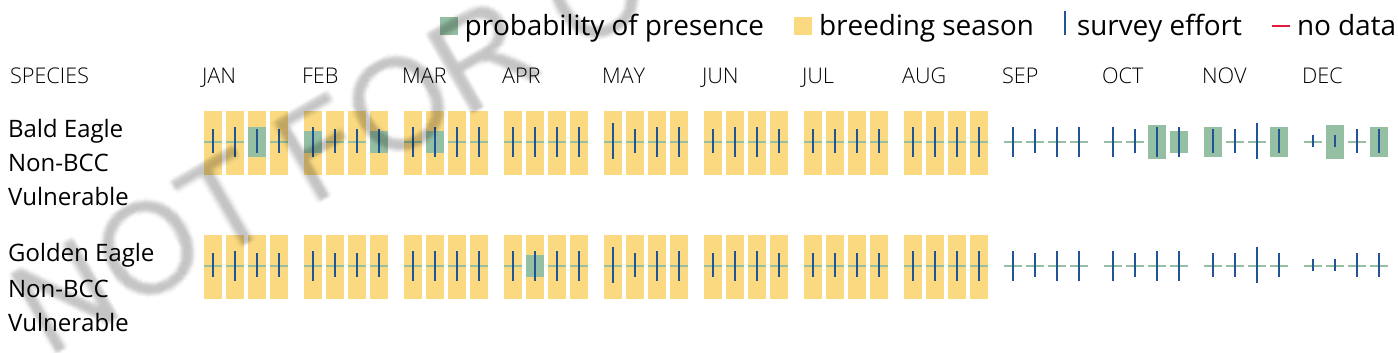
Breeding Season (▪)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

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

No Data (–)
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



What does IPaC use to generate the potential presence of bald and golden eagles in my specified location?

The potential for eagle presence is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply). To see a list of all birds potentially present in your project area, please visit the Rapid Avian Information Locator (RAIL) Tool.

What does IPaC use to generate the probability of presence graphs of bald and golden eagles in my specified location?

The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the Rapid Avian Information Locator (RAIL) Tool.

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the Eagle Act should such impacts occur. Please contact your local Fish and Wildlife Service Field Office if you have questions.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats[3] should follow appropriate regulations and consider implementing appropriate conservation measures, as described in the links below. Specifically, please review the "Supplemental Information on Migratory Birds and Eagles".

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.

Additional information can be found using the following links:

- Eagle Management https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide conservation measures for birds https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf
- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action

The birds listed below are birds of particular concern either because they occur on the USFWS Birds of Conservation Concern (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ below. This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the E-bird data mapping tool (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found below.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the PROBABILITY OF PRESENCE SUMMARY below to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle *Haliaeetus leucocephalus* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.	Breeds Jan 1 to Aug 31
Belding's Savannah Sparrow *Passerculus sandwichensis beldingi* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/8	Breeds Apr 1 to Aug 15
Black Tern *Chlidonias niger* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/3093	Breeds May 15 to Aug 20
Bullock's Oriole *Icterus bullockii* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds Mar 21 to Jul 25
California Gull *Larus californicus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Mar 1 to Jul 31

California Thrasher Toxostoma redivivum — Breeds Jan 1 to Jul 31
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Cassin's Finch Carpodacus cassinii — Breeds May 15 to Jul 15
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9462

Common Yellowthroat Geothlypis trichas sinuosa — Breeds May 20 to Jul 31
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/2084

Golden Eagle Aquila chrysaetos — Breeds Jan 1 to Aug 31
This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.
https://ecos.fws.gov/ecp/species/1680

Lawrence's Goldfinch Carduelis lawrencei — Breeds Mar 20 to Sep 20
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9464

Marbled Godwit Limosa fedoa — Breeds elsewhere
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9481

Nuttall's Woodpecker Picoides nuttallii — Breeds Apr 1 to Jul 20
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/9410

Oak Titmouse Baeolophus inornatus — Breeds Mar 15 to Jul 15
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9656

Olive-sided Flycatcher Contopus cooperi — Breeds May 20 to Aug 31
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/3914

Short-billed Dowitcher Limnodromus griseus — Breeds elsewhere
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9480

Tricolored Blackbird Agelaius tricolor — Breeds Mar 15 to Aug 10
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/3910

Western Grebe aechmophorus occidentalis — Breeds Jun 1 to Aug 31
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/6743

Willet Tringa semipalmata — Breeds elsewhere
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Wrentit Chamaea fasciata — Breeds Mar 15 to Aug 10
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Yellow-billed Magpie Pica nuttalli — Breeds Apr 1 to Jul 31
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9726

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "Supplemental Information on Migratory Birds and Eagles", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

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

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

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

Breeding Season (▪)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

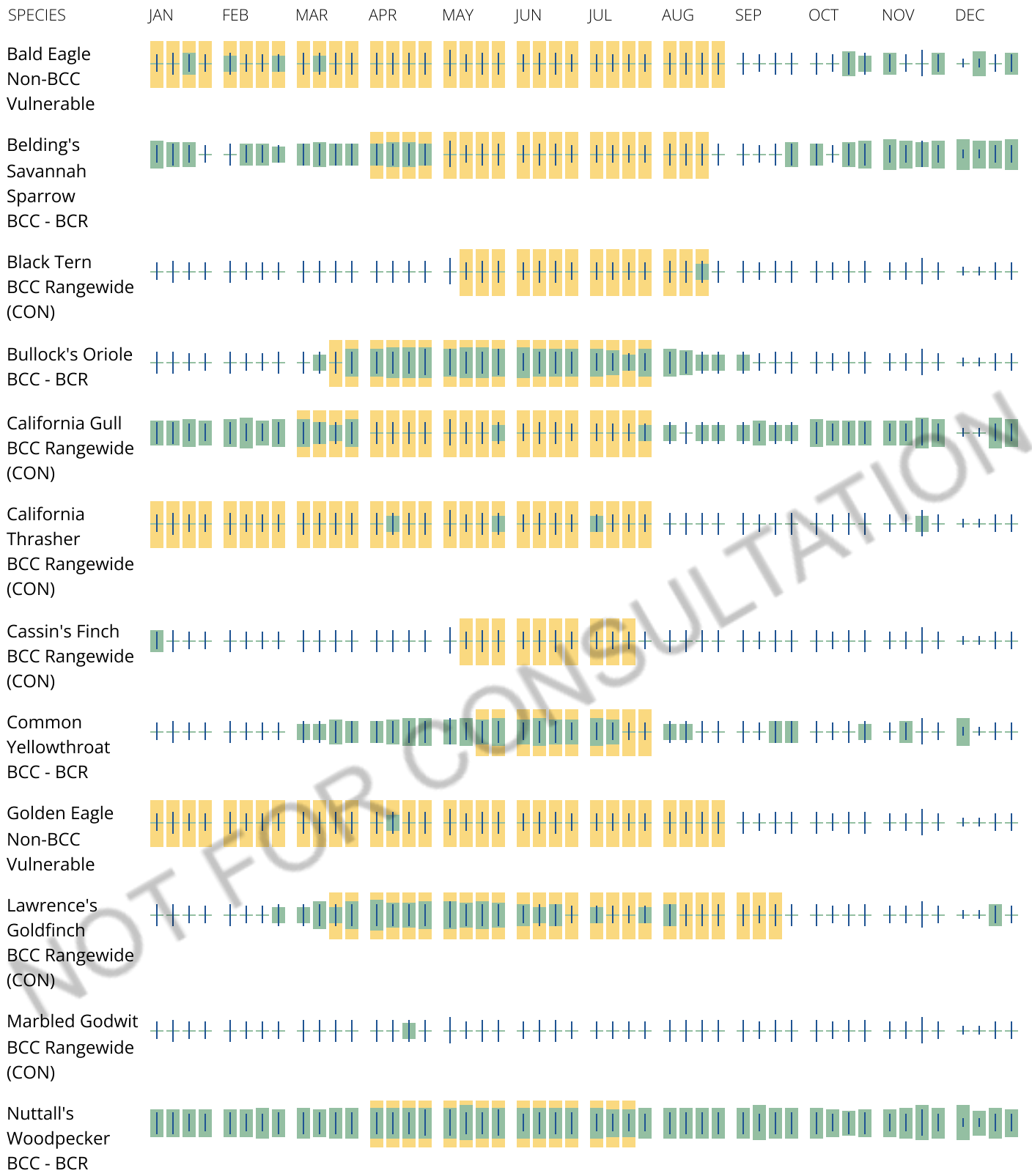
Survey Effort (|)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

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

No Data (–)
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.

▪ probability of presence ▪ breeding season | survey effort – no data



Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

Nationwide Conservation Measures describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. Additional measures or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the list of migratory birds that potentially occur in my specified location?

The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the Rapid Avian Information Locator (RAIL) Tool.

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

The probability of presence graphs associated with your migratory bird list are based on data provided by the Avian Knowledge Network (AKN). This data is derived from a growing collection of survey, banding, and citizen science datasets.

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering or migrating in my area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may query your location using the RAIL Tool and look at the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are Birds of Conservation Concern (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the Eagle Act requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the Diving Bird Study and the nanotag studies or contact

Caleb Spiegel or Pam Loring.

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Facilities

National Wildlife Refuge lands

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

There are no refuge lands at this location.

Fish hatcheries

There are no fish hatcheries at this location.

Wetlands in the National Wetlands Inventory (NWI)

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

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

Wetland information is not available at this time

This can happen when the National Wetlands Inventory (NWI) map service is unavailable, or for very large projects that intersect many wetland areas. Try again, or visit the NWI map to view wetlands at this location.

Data limitations

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

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

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

Data exclusions

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

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies.

Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate Federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

Attachment B

Photographs

North tip of the water line alignment, looking northwest from just west of Jack Tone Road; 01/12/24.

North part of the water line alignment, looking south from just south of the Five Corners intersection; 01/12/24.

Water line alignment, looking south from approximately 2,350 feet north of the Highway 120 intersection; 01/12/24.

Water line alignment, looking north from approximately 300 feet south of the Highway 120 intersection; 01/12/24.

Water line alignment, looking south from approximately 300 feet south of the Highway 120 intersection; 01/12/24.

Water line alignment, looking south from approximately 1,400 feet south of the Highway 120 intersection; 01/12/24.

One of the two SSJID canals along the water alignment, looking west from approximately 1,300 feet of Graves Road; 01/12/24.

Water line alignment, looking north from just south of the SSJID canal mentioned above; 01/12/24.

Water line alignment, looking south from approximately 1,300 feet north of Van Wyk Lane; 01/12/24.

Water line alignment, looking north from the south end of the alignment; 01/12/24.

Known Swainson's hawk nest territory near the water alignment, looking northeast from just south of the E. Louise intersection; 01/12/24.

Cluster of large trees near the water line alignment, looking north from approximately 650 feet north of Van Wyk Lane; 01/12/24. There are several trees near the alignment that are suitable for nesting raptors, including Swainson's hawk.

Winter wheat field, looking northwest from the north end of the alignment; 01/25/24. A pump station may be located in this field.

Winter wheat field, looking west from the north part of the alignment; 01/25/24. A pump station in support of the project may be located in this field.

Portion of the alignment where an SSJID canal parallels Jack Tone Road, looking south from approximately 1,000 feet south of E. Louise Avenue; 01/25/24.

SSJID canal, looking southeast from approximately 700 feet north of Leroy Avenue; 01/25/24.

SSJID canal where it abuts the east road shoulder, looking south from approximately 700 feet north of Leroy Avenue; 01/25/24.

East road shoulder, looking north from approximately 4,300 feet south of Highway 120; 01/25/24.

South end of the alignment, looking north from just north of River Road; 01/25/24.

Open field near the south end of the alignment, looking west from the southeast part of the field; 01/25/24. A portion of this field was being used as a farm equipment auction site on the day of the field survey.

East part of the open field near the south end of the alignment, looking northwest; 01/25/24. A new pump station may be located in this field and this field may also be used for construction staging.

Existing well site near the south end of the alignment, looking east; 01/15/24.

Appendix C

National Wetland Inventory

U.S. Fish and Wildlife Service
National Wetlands Inventory

Ripon Pipeline NWI 1

February 1, 2024

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

U.S. Fish and Wildlife Service
National Wetlands Inventory

Ripon Pipeline NWI 2

February 1, 2024

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

U.S. Fish and Wildlife Service
National Wetlands Inventory

Ripon Pipeline NWI 3

February 1, 2024

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

U.S. Fish and Wildlife Service
National Wetlands Inventory

Ripon Pipeline NWI 4

February 1, 2024

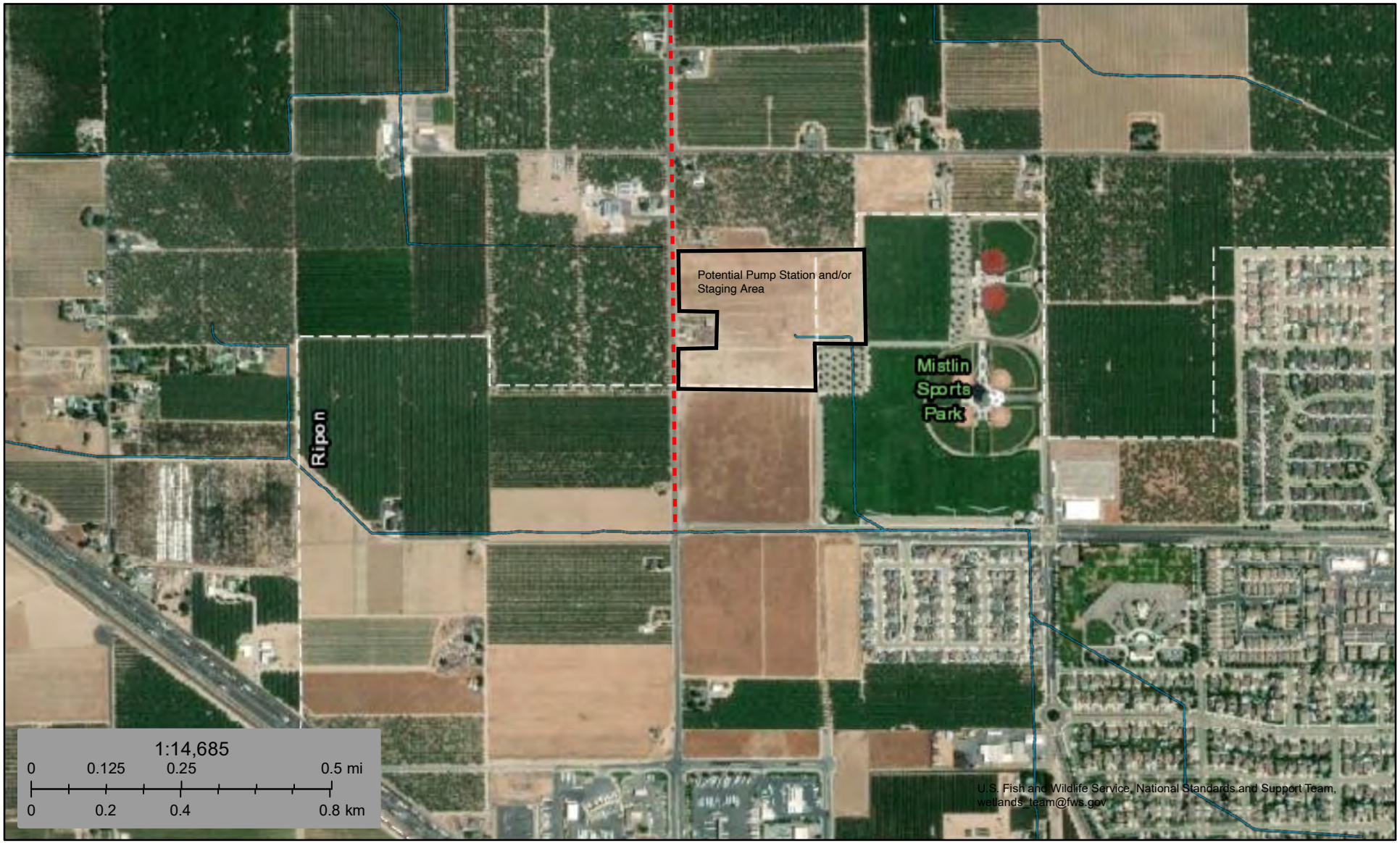
Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

U.S. Fish and Wildlife Service
National Wetlands Inventory

Ripon Pipeline NWI 5



February 1, 2024

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

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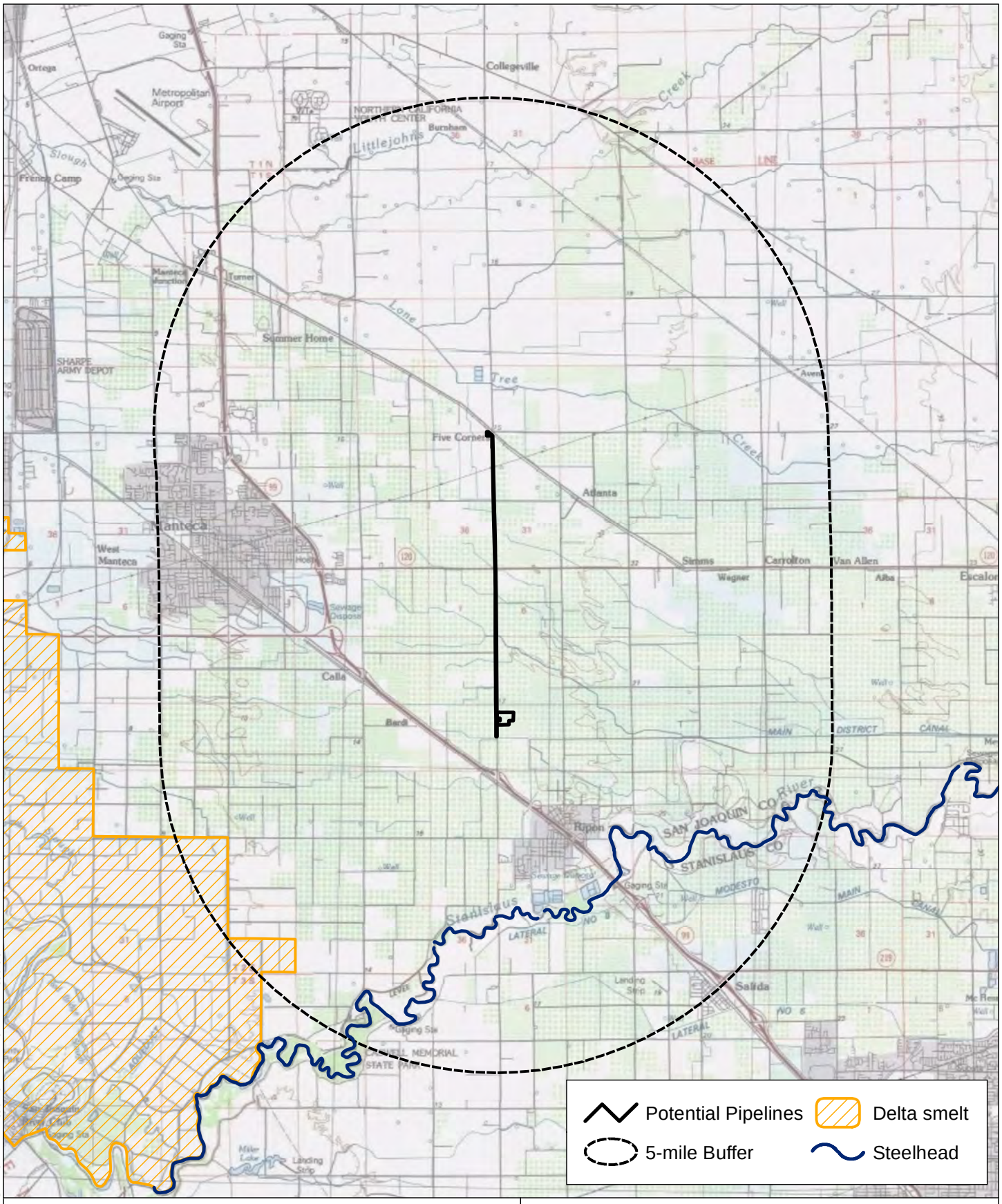
Appendix D

Designated Critical Habitat



CRITICAL HABITAT

Ripon Water Supply Pipeline

San Joaquin County, CA

Moore Biological Consultants

Map Date: 01/26/2024
Source: USFWS; NOAA (2023); USA Topo Maps (2023)

C:\EFC_INC\Projects\Moore Biological\Ripon Water Supply Pipeline\MXD\ripon_water_supply_pipeline_critical_habitat.mxd

APPENDIX C
CULTURAL RESOURCE REPORT

CULTURAL AND PALEONTOLOGICAL RESOURCES INVESTIGATIONS FOR THE JACK TONE PIPELINE PROJECT, SAN JOAQUIN COUNTY, CALIFORNIA

BaseCamp Environmental, Inc.
802 West Lodi Avenue
Lodi, CA. 95240

Prepared by:

Lori Harrington, M.A. RPA,
and
Dylan Stapleton, M.A. RPA

NATURAL INVESTIGATIONS COMPANY

3104 O Street, #221
Sacramento, CA 95816

USGS 7.5-Minute Quadrangle: Manteca 1952 (1987/1994 rev): Township 1S, Range 7E, Section 25,26. Township 1S, Range 8E, Section 30,31. Township 2S, Range 7E, Section 1, 12, 13.

Positive Records Search; Negative Sacred Lands File Search; Positive Pedestrian Survey; Negative Paleontological survey, Low Buried Archaeological Site Sensitivity; Inadvertent Discoveries Recommendation; San Joaquin County

April 2024

EXECUTIVE SUMMARY

Natural Investigations Company, Inc. (NIC) was retained to conduct cultural and paleontological resource investigations for a 4.5 (lineal) mile water installation pipeline in the City of Ripon and the unincorporated area of San Joaquin County. The investigations included a records search conducted by the North Central Information Center (NCIC) at Sacramento State University, a Sacred Lands File (SLF) search conducted by the Native American Heritage Commission (NAHC), geoarchaeological sensitivity analyses, paleontological resource analysis a pedestrian survey of the Project Area of Potential Effects (APE) and completion of a report[1] documenting the results of investigations for the Project that complies with Section 106 of the NHPA and CEQA PRC Section 21083.2(g).

Within the Project APE, nine cultural resources were identified: two previously recorded features P-39-000095 and 96; and newly recorded features NIC-2024-Jack Tone-01 through 07. These resources consist of infrastructure (canals and roads). Assessment of these resources finds that none are significant under any NRHP criteria or constitute historic properties as defined under NHPA Section 300308. Nor are they significant resources as defined under CEQA PRC Section 21083.2(g).

The SLF search for the Project was negative. Geoarchaeological analysis finds the sensitivity of the Project APE for the presence of undisturbed buried deposits of cultural resources is high. However, due to the highly disturbed nature of the APE (utility corridor), the likelihood of uncovering undisturbed subsurface archaeological deposits through Project implementation is low.

NIC has determined that no further cultural resources work is recommended at this time. Paleontological Resources in the Project APE were negative.

Consequently, Natural Investigations determined that a finding of *No Historic Properties Affected* pursuant to 36 CFR § 800.4 (d)(1) is appropriate for the Project. A finding of *Less Than Significant* is appropriate for the Project pursuant to CEQA. No mitigations are required.

[1] This report will be filed with BaseCamp Environmental, Inc, Loomis CA; the NCIC at California State University, Sacramento; and Natural Investigations Company in Sacramento. All field notes and other documentation related to the study are on file at the Sacramento office of Natural Investigations.

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LIST OF APPENDICES

INTRODUCTION

Natural Investigations Company, LLC (NIC) was retained by BaseCamp Environmental, Inc. to provide cultural and paleontological resource investigations for a 4.5 (lineal) mile water installation pipeline in the City of Ripon and the unincorporated area of San Joaquin County.

Natural Investigations Company, Inc. conducted cultural resource investigations (e.g., CHRIS records search, SLF search, geoarchaeological sensitivity analyses, and pedestrian surface survey) and paleontological research for the Project. The Project is subject to Section 106 of the National Historic Preservation Act 1966, as amended, and its implementing regulations.

PROJECT LOCATION AND DESCRIPTION

The project site is in the City of Ripon and the unincorporated area of San Joaquin County east of the City (see Figures 1 and 2). The project is mainly located along Jack Tone Road from East River Road in Ripon to Lone Tree Road. The project site is shown on the U.S. Geological Survey's Manteca, California, 7.5-minute quadrangle map along the boundary line between Range 7 East and Range 8 East, extending from Section 18 Township 2 South, Range 8 East to Section 30, Township 1 North, Range 8 East, Mt. Diablo Base, and Meridian. The latitude of the approximate center of the project site is 37° 47′ 42″ North, and the longitude is approximately 121° 08′ 37″ West.

The project proposes the installation of approximately 4.5 miles of a pair of new water pipelines along the right-of-way of Jack Tone Road (Figures 2-1A through 2-1D). The two pipelines would be of polyvinyl chloride, or PVC, and would be approximately 18 inches in diameter. At this time, it has not been decided on which side of Jack Tone Road the pipelines would be installed. However, both sides have similar adjacent land uses and have the same facilities crossing them, mainly SR 120 and other public roads, private driveways, farm roads, and SSJID laterals.

The northern terminus would tie into an existing SSJID pipeline, approximately 48 inches in diameter, conveying treated water from the Nick DeGroot Water Treatment Plant west of Woodward Reservoir in Stanislaus County. The tie-in would occur beneath Lone Tree Road, and the contractor would coordinate the tie-in with SSJID. Where the proposed pipelines would tie into the SSJID pipeline, an air release valve would be installed at the end of each pipeline (Figure 2-2). The air release valves ensure that any entrained air in the water pipelines is automatically released to maximize system performance. The valves would be installed below surface grade and would be connected to the proposed pipelines via a three-inch diameter pipe. The removed air would be released through an aboveground pipe connected to the valve.

The southern terminus of these pipelines would tie into the City's existing water storage and distribution facilities at Mistlin Park in north Ripon. At this time, no plans have been drafted for the tie-in to the Ripon facilities, although there is an existing 24-inch diameter water line beneath East River Road that extends to Jack Tone Road.

Along most of the project alignment, the pipelines would be installed within trenches. The pipelines would be covered by a minimum of four feet of backfill. Where the project crosses SR 120 and the SSJID laterals, the pipelines would be installed using trenchless methods such as bore-and-jack.

REGULATORY SETTING

Federal Regulations

The current Project was completed under the provisions of Section 106 of the National Historic Preservation Act (NHPA) of 1966 (as amended) (36 Code of Federal Regulations [CFR] 800). Cultural resources are considered during federal undertakings chiefly under Section 106 of the NHPA through one of its implementing regulations, 36 CFR 800 (Protection of Historic Properties), as well as the National Environmental Policy Act (NEPA). Properties of traditional religious and cultural importance to Native Americans are considered under Section 101(d)(6)(A) of NHPA.

Section 106 of the NHPA (16 United States Code [USC] 470f) requires federal agencies to take into account the effects of their undertakings on any district, site, building, structure, or object that is included in or eligible for inclusion in the National Register of Historic Places (NRHP) and to afford the Advisory Council on Historic Preservation (ACHP) a reasonable opportunity to comment on such undertakings (36 CFR 800.1). Under Section 106, the significance of any adversely affected cultural resource is assessed and mitigation measures are proposed to reduce any impacts to an acceptable level. Significant cultural resources are those resources that are listed in, or are eligible for listing on the NRHP per the criteria listed at 36 CFR 60.4 (Advisory Council on Historic Preservation 2000) below.

The quality of *significance* in American history, architecture, archaeology, engineering and culture is present in districts, sites, buildings, structures, and objects that possess *integrity* of location, design, setting, materials, workmanship, feeling and association and that:

A. Are associated with events that have made a significant contribution to the broad patterns of our history; or

B. Are associated with the lives of persons significant in our past; or

C. Embody the distinctive characteristics of a type, period, or method of installation, 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. Have yielded, or may be likely to yield, information important in prehistory or history.

Impacts to significant cultural resources that affect the characteristics of any resource that qualify it for the NRHP are considered a significant effect on the environment. Impacts to significant cultural resources from the proposed Project are thus considered significant if the Project physically destroys or damages all or part of a resource, changes the character of the use of the resource or physical feature within the setting of the resource which contribute to its significance, or introduces visual, atmospheric, or audible elements that diminish the integrity of significant features of the resource.

State Regulations

The Project was also completed under the provisions of CEQA. Section 21083.2 of the statute and Section 15064.5 of the CEQA Guidelines provide instructions for a lead agency to consider the effects of Projects on historical resources and cultural resources. A *historical resource* is a resource listed in, or determined to be eligible for listing in, the California Register of Historical Resources (CRHR) (Public Resources Code [PRC] Section 21084.1), a resource included in a local register of historical resources (PRC Section 15064.5[a][2]), or any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant (PRC Section 15064.5[a][3]).

PRC Section 5024.1 requires evaluation of historical resources to determine their eligibility for listing in the CRHR. The purpose of the register is to maintain listings of the State's historical resources and to indicate which properties are to be protected from substantial adverse change. The criteria for listing resources in the CRHR were expressly developed to be in accordance with previously established federal criteria for listing in the NRHP.

According to PRC Section 5024.1(c)(1–4), as well as Section 15064.5(a)(3)(A–D) of the revised CEQA guidelines, a resource is considered historically significant if it meets at least one of the following criteria:

> (1-A) It is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
>
> (2-B) It is associated with the lives of persons important in our past;
>
> (3-C) It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
>
> (4-D) It has yielded, or may be likely to yield, information important in prehistory or history.

In order to be listed in the CRHR, historical resources must meet at least one of the significance criteria. Resources that do not meet any of these criteria are viewed as not significant. In addition to meeting at least one of the significance criteria, historical resources must possess the quality of *integrity* (location, design, setting, materials, workmanship, feeling, and association). Historic resources must retain enough of their historic character or appearance to be recognizable as historical resources and to convey the reasons for their significance.

Impacts to significant cultural resources from a proposed Project are considered significant if the Project physically destroys or damages all or part of a resource, changes the character of the use of the resource or physical feature within the setting of the resource that contribute to its significance, or introduces visual, atmospheric, or audible elements that diminish the integrity of significant features of the resource.

Under CEQA, if an archaeological site is not a historical resource but meets the definition of a *unique archaeological resource* as defined in PRC Section 21083.2, then it should be treated in accordance with the provisions of that section. PRC Section 21083.2(g) defines a unique archeological resource to mean an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

(1) Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.

(2) Has a special and particular quality such as being the oldest of its type or the best example available of its type.

(3) Is directly associated with a scientifically recognized important prehistoric or historic event or person.

Should a site qualify as a unique archaeological resource, it is protected under CEQA. If it can be demonstrated that a Project will cause damage to a unique archaeological resource, the lead agency may require reasonable efforts be made to permit any or all of these resources to be preserved in place or left in an undisturbed state. To the extent that they cannot be left undisturbed, mitigation measures are required (PRC Sections 21083.2[a], [b], and [c]). If the agency determines the site does not qualify, then the site merits no further consideration.

Historical Resources

"Historical resources" is a term defined within PRC Section 21084.1 and CEQA Guidelines California Code of Regulations (CCR) Section 15064.5 (a). The term embraces any resource that is listed in or determined to be eligible for listing in the California Register of Historical Resources (CRHR), which is defined in PRC Section 5024.1 and CCR Section 4852. The CRHR includes resources listed in or formally determined to be eligible for listing in the National Register of Historic Places, as well as some California State Landmarks and Points of Historical Interest.

Pursuant to CCR Section 15064.5 (a)(3), a historical resource is any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California that may be considered to be an historical resource, provided that the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered to be historically significant by the lead agency if the resource meets the criteria for listing on the CRHR. The criteria are as follows:

> (A) Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.
>
> (B) Is associated with the lives of persons important in our past.
>
> (C) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.
>
> (D) Has yielded, or may be likely to yield, information important in prehistory or history.

"Effects on historical resources" are described at CEQA Guidelines Section 15064.5 (b) as:

(1) Substantial adverse change in the significance of an historical resource means physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired.

(2) The significance of an historical resource is materially impaired when a project:

> (A) Demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the California Register of Historical Resources; or
>
> (B) Demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in a local register of historical resources pursuant to section 5020.1(k) of the Public Resources Code or its identification in an historical resources survey meeting the requirements of section 5024.1(g) of the Public Resources Code, unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historically or culturally significant; or
>
> (C) Demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its eligibility for inclusion in the California Register of Historical Resources as determined by a lead agency for purposes of CEQA.

Tribal Cultural Resources

"Tribal cultural resources" is a term defined in PRC Section 21074. The stipulations of Assembly Bill (AB) 52 and its modifications to the PRC are the responsibility of the County. Tribal cultural resources are defined as follows:

(a) "Tribal cultural resources" are 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:
>
> > (A) Included or determined to be eligible for inclusion in the California Register of Historical Resources.
> >
> > (B) Included in a local register of historical resources as defined in subdivision (k) of Section 5020.1.
>
> (2) 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 Section 5024.1. In applying the criteria set forth in subdivision (c) of Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.

(b) A cultural landscape that meets the criteria of subdivision (a) is a tribal cultural resource to the extent that the landscape is geographically defined in terms of the size and scope of the landscape.

(c) A historical resource described in Section 21084.1, a unique archaeological resource as defined in subdivision (g) of Section 21083.2, or a "nonunique archaeological resource" as defined in subdivision (h) of Section 21083.2 may also be a tribal cultural resource if it conforms with the criteria of subdivision (a).

"Effects on tribal cultural resources" are described at PRC Section 21084.2. A project that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment. Therefore, Section 21084.3 states:

(a) Public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource.

(b) If the lead agency determines that a project may cause a substantial adverse change to a tribal cultural resource, and measures are not otherwise identified in the consultation process provided in Section 21080.3.2, the following are examples of mitigation measures that, if feasible, may be considered to avoid or minimize the significant adverse impacts:

> (1) Avoidance and preservation of the resources in place, including, but not limited to, planning and construction to avoid the resources and protect the cultural and natural context, or planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.
>
> (2) Treating the resource with culturally appropriate dignity taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following:
>
> > (A) Protecting the cultural character and integrity of the resource.
> >
> > (B) Protecting the traditional use of the resource.

(C) Protecting the confidentiality of the resource.

(3) Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places.

(4) Protecting the resource.

Unique Archeological Resources

"Unique archaeological resources" is a term defined in PRC Section 21083.2 (g). The term means an archaeological artifact, object, or site about which it can be clearly demonstrated that without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

1) Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.

2) Has a special and particular quality such as being the oldest of its type or the best available example of its type.

3) Is directly associated with a scientifically recognized, important prehistoric or historic event or person.

Mitigation of Impacts to Archaeological, Historical, and Tribal Cultural Resources

CCR Section 15064.5 (c) states that archaeological resources may qualify as historical resources as defined in subdivision (a) of the section. Treatment options under PRC Section 21083.2 (b) to mitigate impacts to archaeological resources include activities that preserve such resources in place in an undisturbed state. Examples of that treatment are as follows:

(1) Planning construction to avoid archaeological sites.

(2) Deeding archaeological sites into permanent conservation easements.

(3) Capping or covering archaeological sites with a layer of soil before building on the sites.

(4) Planning parks, greenspace, or other open space to incorporate archaeological sites.

(c) To the extent that unique archaeological resources are not preserved in place or not left in an undisturbed state, mitigation measures shall be required as provided in this subdivision.

(d) Excavation as mitigation shall be restricted to those parts of the unique archaeological resource that would be damaged or destroyed by the project.

For historic structures, CCR Section 15064.5, subdivision (b)(3), indicates that a project that follows the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings, or the Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings (1995) shall be considered as mitigating impacts to a less than significant level.

San Joaquin General Plan

San Joaquin County General Plan Cultural and Historic Resources.

As of June 2008, approximately 96,788 acres (11 percent of the County) in San Joaquin County have been surveyed for cultural resources. The County's cultural sites include 262 prehistoric archeological sites, 239 historic archeological sites, 14 multi-component archeological sites, and 4,338 historic buildings or structures that need to be preserved to share significance of cultural resources through interpretive education opportunities with the community and visitors. The County's many historical resources showcase the area's rich history and provide significant attractions for residents and visitors. Preserving these resources is important and their protection needs to be considered during the planning, permitting, and construction of any new development. The focus of this goal section is to identify ways to protect, preserve, and enhance the valuable cultural and historic resources that are vital to the character of the County.

Goal NCR-6: To protect San Joaquin County's valuable architectural, historical, archeological, and cultural resources.

NCR-6.1 Protect Historical and Cultural Resources
The County shall protect historical and cultural resources and promote expanded cultural opportunities for residents to enhance the region's quality of life and economy. (RDR).

NCR-6.3 Encourage Public and Private Preservation Efforts
The County shall continue to encourage efforts, both public and private, to preserve the historical and cultural heritage of San Joaquin County and its communities and residents. (PSP).

NCR-6.4 Registration of Historic Properties
The County shall encourage owners of eligible historic properties to apply for State and Federal registration, to participate in tax incentive programs for historical restoration, and to enter into Mills Act Contracts. (PSP).

NCR-6.5 Protect Archeological and Historical Resources
The County shall protect significant archeological and historical resources by requiring an archeological report be prepared by a qualified cultural resource specialist prior to the issuance of any discretionary permit or approval in areas determined to contain significant historic or prehistoric archeological artifacts that could be disturbed by project construction. (RDR/PSR).

NCR-6.6 Tribal Consultation
The County shall consult with Native American tribes regarding proposed development projects and land use policy changes consistent with the State's Local and Tribal Intergovernmental Consultation requirements. (RDR/IGC).

NCR-6.7 Adaptive Reuse of Historic Structures
The County shall encourage the adaptive reuse of architecturally significant or historic buildings if the original use of the structure is no longer feasible and the new use is allowed by the underlying land use designation and zoning district. (RDR).

NCR-6.8 Land Use and Development
The County shall encourage land uses and development that retain and enhance significant historic properties and sustain historical community character. (RDR).

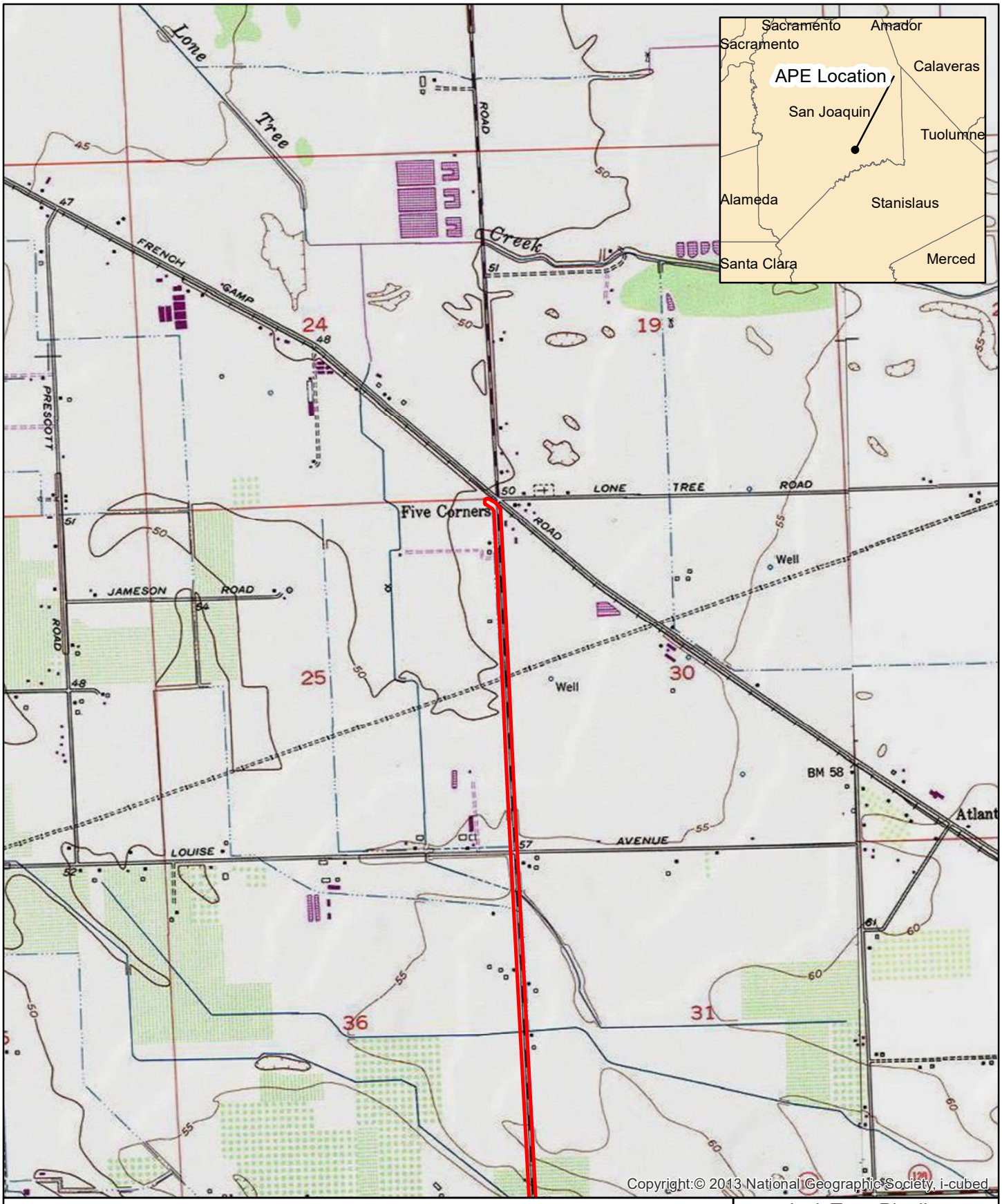
NCR-6.9 Educational Programs
The County shall support educational and outreach programs that promote public awareness of and support preservation of historical and cultural resources. (IGC/PI).

Paleontological Resources

Paleontological resources are limited, non-renewable resources of scientific, cultural, and educational value that are explicitly afforded protection by CEQA, specifically Section VII(f) of Appendix G which addresses the potential for adverse impacts to unique paleontological resources, sites, or geological features. It requires that impacts on such resources be considered in the project review process. While CEQA does not precisely define unique paleontological resources, the treatment of paleontological resources on non-federal lands is usually conducted in accordance with guidance from the criteria established by the Society of Vertebrate Paleontology (SVP). Treatment usually consists of identification, assessment, and mitigation for potential impacts to significant paleontological resources (SVP 2010).

PRC Section 5097.5 states that no person shall "knowingly and willfully" excavate upon, or remove, destroy, injure or deface any historic or prehistoric ruins, burial grounds, archaeological or vertebrate paleontological site, including fossilized footprints, inscriptions made by human agency, or any other archaeological, paleontological or historical feature, situated on public lands, except with the express permission of the public agency having jurisdiction over such lands. Public lands include those "owned by, or under the jurisdiction of, the [S]tate, or any city, county, district, authority, or public corporation, or any agency thereof." If paleontological resources are identified within a given project site, the lead agency must take those resources into consideration when evaluating project impacts. The level of consideration may vary with the importance of the resource in question.

In accordance with guidelines established by the SVP (2010), an assessment of the scientific significance of fossilized remains is based on whether they can provide data on the taxonomy and phylogeny of ancient organisms, the paleoecology, and nature of paleoenvironments in the geologic past, or the stratigraphy and age of geologic units. Because most vertebrate fossils are rare, they are considered important paleontological resources. Conversely, marine invertebrates are generally common, the fossil record is well developed and well documented, and they are generally not considered important paleontological resources. Substantial damage to or destruction of significant paleontological resources as defined by the SVP (2010) would represent a significant impact.



Project APE

0 0.5 1 Kilometers

0 0.5 1 Miles

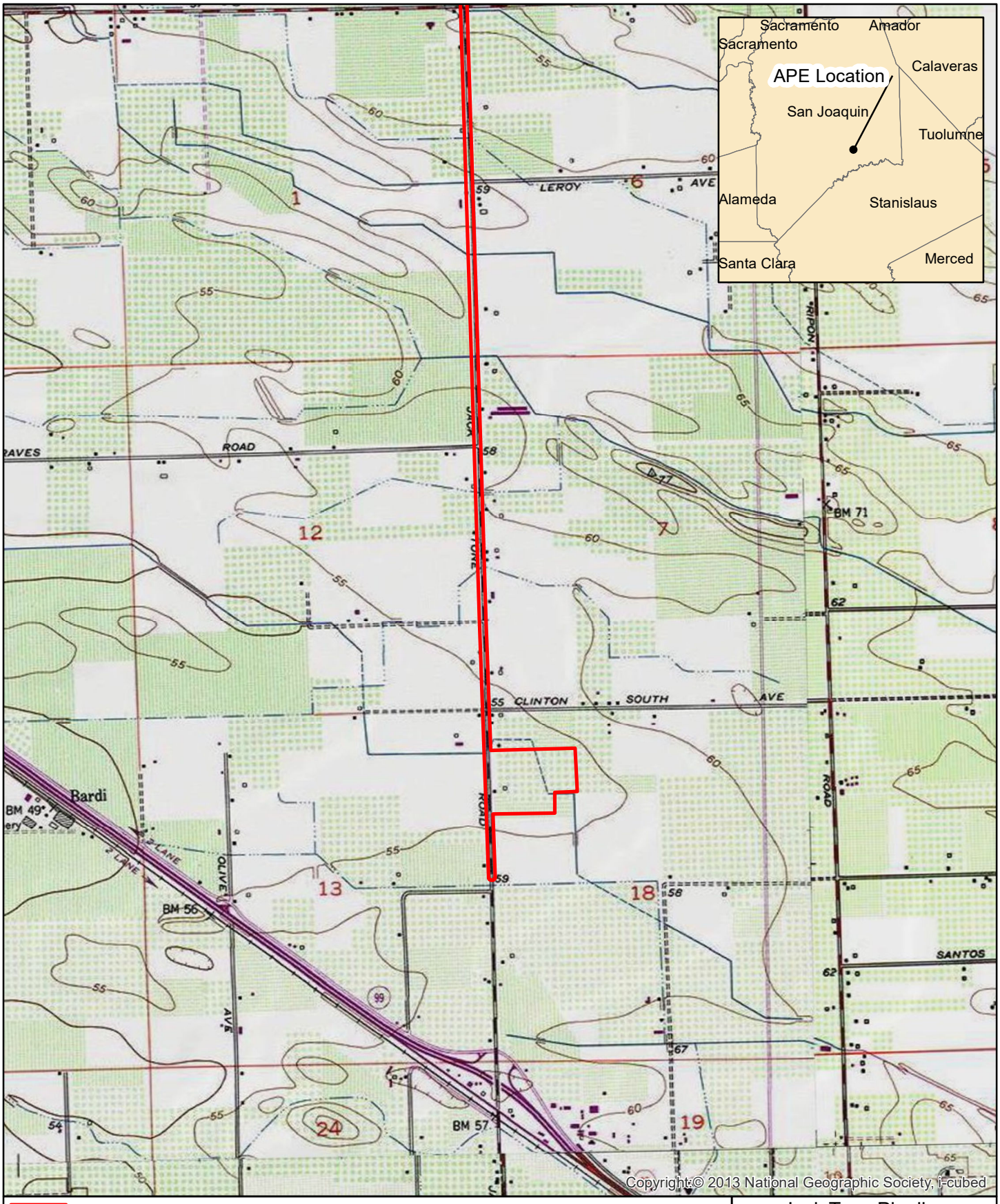
1:24,000

Jack Tone Pipeline
Figure 1 - APE Location
Map 1 of 2

Natural Investigations Company

Map Date 3/15/2024

Manteca 1952 Quadrangle Photorevised 1987 Minor Revision 1994:Township 1S, Range 7E, Section 25,36
Manteca 1952 Quadrangle Photorevised 1987 Minor Revision 1994:Township 1S, Range 8E, Section 30,31



Project APE

0 0.5 1 Kilometers

0 0.5 1 Miles

1:24,000

Jack Tone Pipeline
Figure 1 - APE Location
Map 2 of 2

Natural Investigations Company

Map Date 3/15/2024

Manteca 1952 Quadrangle Photorevised 1987 Minor Revision 1994:Township 2S, Range 7E, Section 1,12,13
Manteca 1952 Quadrangle Photorevised 1987 Minor Revision 1994:Township 2S, Range 8E, Section 6,7,18

REPORT PREPARATION

Lori Harrington M.A., RPA was the Principal Investigators for the Project and primary author of this report. Ms. Harrington has thirty years of experience in California archaeology and exceeds all requirements of the *Secretary of Interior's Qualifications Standard*s at 36 CFR Part 61.

Dylan Stapleton, M.A., RPA performed the pedestrian survey for the Project and prepared the field results section of this report. Mr. Stapleton has eighteen years of professional experience in archaeology. The format of this report follows the guidelines in *Archaeological Resource Management Reports: Recommended Contents and Format* prepared by the Office of Historic Preservation (1990).

ENVIRONMENTAL SETTING

GEOLOGY, HYDROLOGY, AND SOILS

Geology and Hydrology

The project site is located within the San Joaquin Valley in central California, which forms the southern part of the Great Valley Geomorphic Province. This region is characterized by a flat, northwest-trending structural trough that spans approximately 50 miles in width and 450 miles in length. The San Joaquin Valley is predominantly filled with thick sedimentary rock sequences dating back as far as 130 million years ago. Specifically, the underlying geology at the project site, as indicated by the Geologic Map of the San Francisco – San Jose Quadrangle (Wagner et al. 1991), is identified as the Modesto Formation, comprising relatively recent sediments deposited from around 12,000 years before the present to the present day.

Natural streams are absent within or near the project site. Surface water quality in the vicinity is monitored and managed through the City's Storm Water Management Program (SWMP), which was developed to comply with the federal National Pollutant Discharge Elimination System (NPDES) regulations and the State Water Resources Control Board's (SWRCB) Municipal Separate Storm Sewer Systems (MS4) General Permit (BaseCamp Environmental, Inc., 2022).

Soils

The United States Department of Agriculture (USDA) Natural Resource Conservation Service (NRCS) Soil Survey Geographic Database lists one major soil type present in the Project APE: Veritas Fine Sandy Loam (Map Unit Symbol 266). Veritas soil consists of deep to duripan, moderately well-drained, soils that formed in alluvium derived from mixed rock sources. Veritas soils are on low fan terraces. The slope is 0 to 2 percent. Due to the nature of road building the soils in the Project APE are likely to consist of ill with no native soils present in the vertical APE.

CLIMATE

Climate

The project region is characterized by hot, dry summers and warm, moist winters. Annual precipitation in this region averages 25 inches, with most of the rain falling between November and April. High winter temperatures reach approximately 57 degrees Fahrenheit, with summer temperature highs of around 100 degrees Fahrenheit. The current Mediterranean climate is dryer and hotter than the conditions present at the time of California's initial occupation (Major 1988).

CURRENT LAND USES

During the late nineteenth and twentieth centuries, localized cutting and filling occurred along the study area in support of the development of transportation infrastructure. The project area is currently utilized as a transportation route for vehicle traffic.

CULTURAL SETTING

INDIGENOUS OVERVIEW

Pleistocene and early Holocene (12,000–6,500 BP)

Human occupation of the northern San Joaquin Valley is believed to date before the terminal Pleistocene Epoch, 12,000 years before present (BP). Although few archaeological sites demonstrate evidence of human occupation of the San Joaquin Valley during the late Pleistocene and early Holocene (12,000–6,500 BP), this is likely a product of the archaeological record itself rather than lack of use of this area. Most Pleistocene- and early Holocene-epoch sites are deeply buried in accumulated gravels and silts or have eroded away (Moratto, 1984). The earliest sites in and around the County are believed to be the Farmington Complex sites in San Joaquin and Stanislaus counties, the Clark Flat sites (CA-Cal-342 and CA-Cal-347), and possibly the Sky Rocket site, CA-Cal-629/630 (Dillon 2002) These sites are on the San Joaquin Valley–Sierra Nevada foothills interface. Artifacts associated with this period are dominated by stemmed points and formed flake tools with diagnostic shapes; plant-processing stone tools are evident at CA-CAL-342 between 6750 and 6500 BP.

Middle Holocene (6500–4500 BP)

Archaeological evidence from the Middle Holocene (6500–4500 BP) for the northern San Joaquin Valley is also limited to the San Joaquin Valley–foothills interface. Three sites (CA-Cal-342, CA-Cal-347, and CA-Cal-286) have produced artifacts that date to the Middle Holocene. Artifacts from CA-Cal-342 include stemmed projectile points and formed flake tools of the Early Holocene with the addition of Pinto Series projectile points (Impact Science 2014).

Late Holocene (4500 BP–present)

The Early Period (4500–2500 BP) of the Late Holocene (4500 BP–present), attributed to the Windmiller Pattern, is known from several lower Sacramento Valley sites (CA-SJo-56, CA-SJo-68, SA-SJo-142, CA-Sac-107, and CA-Sac-127) and one Stockton area site (CA-SJo-112). The Windmiller Pattern is characterized by the exploitation of a wide variety of terrestrial mammals, fish, and birds, and by an emphasis on hard-seed procurement. The artifact assemblage includes large spear and projectile points; trident fish spears; at least two types of fishhooks; quartz crystals and a diversity of charmstone styles; and baked clay net sinkers, pecan-shaped fish-line sinkers, and cooking balls. Groundstone items include both the handstone and millingslab, and the mortar and pestle. The bone tools include awls, needles, and flakes. Utilitarian items were often acquired as finished products through trade with outlying areas. Formal cemeteries appear to have been located both within and away from the village, and the deceased were often buried with red ochre and rich grave offerings (Impact Science 2014).

The Middle Period (2500–1300 BP)

The Middle Period extended from approximately 2500–1300 BP in Central California and is commonly identified with the Berkeley Pattern. The primary difference between the Berkeley Pattern and the Windmiller Pattern is the greater emphasis on acorn consumption within the Berkeley Pattern, reflected by

more numerous and varied mortars and pestles. The Berkeley Pattern also possessed a well-developed bone industry and such technological innovations as ribbon flaking of chipped stone artifacts. Also, the arrow point replaced the dart point in the later reaches of this period (Impact Science 2014).

Late Period (450–100 BP)

The final period is the Late Period (450–100 BP) identified with the Augustine Pattern.3 The Augustine Pattern appears to be related to the Berkeley Pattern, and the differences between the two may be the result of the combination of Berkeley traits with those carried into the central California region by migrating populations from the north, an event that began approximately 1800 BP.

The Augustine Pattern exhibited great elaboration of ceremonial and social organization. Exchange became well developed, and acorns were exploited with even greater intensity, as evidenced by shaped mortars and pestles and numerous hopper mortars. Other notable elements of the material culture assemblage included smaller arrow points, flanged tubular smoking pipes (cloud blowers); harpoons; an especially elaborate baked clay industry, including figures and pottery vessels (Cosumnes Brownware); and clamshell disk beads. Other traits included the introduction of the burning of offerings in a grave pit during the mortuary ritual, increased village sedentism, population growth, and an incipient monetary economy in which beads were used as a standard of exchange (Impact Science 2014).

ETHNOGRAPHIC OVERVIEW

The project is located on lands historically occupied by the Northern Valley Yokut (Wallace 1978). Prior to Euro-American contact, the Northern Valley Yokut in the lower San Joaquin River watershed and its tributaries extending from Calaveras River in the north to approximately the large bend of the San Joaquin River eastward near Mendota. The lower San Joaquin River meanders through the territory making bends, sloughs, and marshes full of tule reeds as it meanders. Farther from the rivers and marshes, the valley floor would have been dry and sparely vegetated (Wallace 1978; Kroeber 1925).

Northern Valley Yokut habitation areas were most commonly situated in close proximity to rivers and tributaries, more often on the east side of the river (Kroeber 1925). Yokut populations and habitation areas were generally concentrated near the San Joaquin River, and in the foothills to the east. This focus on waterways can also be seen in their dietary resources, which included various fish, waterfowl, antelope, elk, acorns, tule roots, and various seeds. In particular, salmon was an abundant food during the fall spawning and in springtime. A focus on fishing is also seen in the material culture consisting of net sinkers and harpoons, likely used from rafts constructed from tule reed bundles (Wallace 1978).

Traditional larger habitation areas were often situated upon mounds, on or near riverbanks. Northern Valley Yokut dwellings were constructed of tule reed woven mats placed over a pole frame oval or round structure. These structures were generally from 25 to 40 feet in diameter, and typically housed a single family (Wallace 1978). This is in contrast to the larger multifamily dwellings erected sometimes by the Southern Yokuts. In addition to dwellings, earth covered ceremonial sweat lodges were constructed. While there were permanent, or semi-permanent, habitation areas in association with riverine resources, peripheral camps used when gathering, hunting, and processing resources such as acorns and seeds were common (Gayton 1948; Kroeber 1925).

The Northern Valley Yokuts saw sharp and devastating decline from disease and relocation to coastal mission

nearly immediately after Spanish contact (Osbourne 1992). This served to further increase with the large influx of cattle ranching, agriculture, and Anglos Americans after the gold rush (Osbourne 1992, Cook 1976a).

According to Wallace (1978) the vicinity surrounding the Project area would have been within Northern Valley Yokut tribal territory. This group inhabited the lower San Joaquin River watershed and its tributaries, extending from the Calaveras River in the north to approximately the large bend of the San Joaquin River near Mendota. The lower San Joaquin River meanders through the area, creating bends, sloughs, and marshes full of tule reeds. Further from the rivers and marshes, the valley floor would have been dry and sparsely vegetated (Wallace 1978; Kroeber 1925).

Northern Valley Yokut habitation areas were most commonly located near rivers and tributaries, typically on the east side of the river (Kroeber 1925). Yokut populations and habitation areas were generally concentrated near the San Joaquin River and in the foothills to the east. This proximity to waterways influenced their diet, which included various fish, waterfowl, antelope, elk, acorns, tule roots, and various seeds. Salmon, in particular, was abundant during the fall spawning and springtime. Their focus on fishing is evident in their material culture, which included net sinkers and harpoons likely used from rafts constructed from tule reed bundles (Wallace 1978).

Traditional larger habitation areas were often situated on mounds near riverbanks. Northern Valley Yokut dwellings were constructed of tule reed woven mats placed over a pole frame in oval or round shapes, generally ranging from 25 to 40 feet in diameter and typically housing a single family (Wallace 1978). This contrasts with the larger multifamily dwellings sometimes erected by the Southern Yokuts. Additionally, earth-covered ceremonial sweat lodges were constructed. Permanent or semi-permanent habitation areas were associated with riverine resources, while peripheral camps were used when gathering, hunting, and processing resources such as acorns and seeds (Gayton 1948; Kroeber 1925).

The Northern Valley Yokuts experienced a sharp and devastating decline due to disease and relocation to coastal missions nearly immediately after Spanish contact (Osbourne 1992). This decline further accelerated with the large influx of cattle ranching, agriculture, and Anglo Americans following the Gold Rush (Osbourne 1992; Cook 1976a).

HISTORIC OVERVIEW

California

Post-contact California history is divided into three distinct periods: the Spanish Period (1769–1822), the Mexican Period (1822–1848), and the American Period (1848–present). Although there were brief visits by Spanish, Russian, and British explorers from 1529 to 1769, the first significant settlement in California was established by the Spanish at San Diego in 1769. Between 1769 and 1823, 21 missions were built by the Spanish and the Franciscan Order along the coast between San Diego and San Francisco. The Spanish expeditions into the Central Valley in 1806 and 1808 led by Lieutenant Gabriel Moraga explored the main rivers, including the American, Calaveras, Cosumnes, Feather, Merced, Mokelumne, Sacramento, San Joaquin, and Stanislaus. Moraga is said to have named the lower Sacramento River and the valley region ‘Sacramento’ in honor of 'the Holy Sacrament' (Hoover et al. 2002).

In 1813, Moraga led another expedition in the lower portion of the Central Valley and gave the San Joaquin River its name (Hoover et al. 2002). The abundance of wildlife, such as waterfowl, fish, and fur-bearing animals, within or along the banks of the rivers attracted immigrants to this region. The last Spanish expedition into California’s interior was led by Luis Arguello in 1817. He and his men traveled up the

Sacramento River, past the future site of the City of Sacramento to the mouth of the Feather River, before returning to the coast (Beck and Haase 1974:18, 20; Gunsky 1989:3–4).

The first American trapper to enter California was Jedediah Smith, who explored the Sierra Nevada in 1826 and 1827, entering the Sacramento Valley and traveling along the American and Cosumnes Rivers. In 1827, Smith also traveled through the San Joaquin Valley. Other trappers soon followed, including employees of the Hudson's Bay Company in 1832 (Hoover et al. 2002). Between 1830 and 1833, and again in 1837, diseases were introduced by non-indigenous explorers, trappers, and settlers. These along with relocation to the missions, military raids, and settlement by non-native groups, decimated native Californian populations, communities, and tribes in the Sacramento and San Joaquin valleys (Cook 1976a; 1976b).

The American Period was initiated in 1848 with the signing of the Treaty of Guadalupe Hidalgo, which ended the Mexican–American War (1846–1848) and incorporated California as a territory of the United States. Gold was discovered at John Sutter's Mill on the American River in Coloma the same year, and by 1849, nearly 90,000 people had journeyed to the gold fields to share in the riches. In 1850, largely as a result of the Gold Rush, California became the thirty-first state. Four years later, the bustling boomtown of Sacramento became the state capital.

Immigrants to California seeking their fortune in the gold fields arrived from around the world. Some "argonauts" arrived by ship in San Francisco, while others came over the Sierra Nevada using previously established trails. Two of these trails are the California Trail and the Mormon Emigrant Trail (MET). The MET soon became a popular route to Placerville and the gold fields of the Sierra Nevada. A spur of this trail also turned north at Placerville and headed to Georgetown. Another major spur of the MET was identified between 1851 and 1853 by John Calhoun, better known as "Cock-Eyed" Johnson (Petershagen 1991; Supernowicz 1983, 1993). Johnson's Cut-Off left the MET and followed a trail over the Sierra Nevada near Echo Summit and into Placerville generally following the current Highway 50 corridor. In addition, another route, the Georgetown Cut-Off or Georgetown Junction Road, split off from Johnson's Cut-Off near Wright's Lake Road and headed directly to Georgetown. Some of these roads in the area were so heavily used that they became major thoroughfares and in some cases toll roads. In 1853 Placerville persuaded the county to declare the wagon road over the Sierra Nevada to Nevada Territory as a public thoroughfare, and in 1858 county officials approved the creation of privately run toll roads along the route, which eventually became the Placerville Road. Some of these roads also supported overland stage traffic after 1850 and the Pony Express between 1860 and 1861 (Supernowicz 1983, 1993; Petershagen 1991).

Mining was a major enterprise across the Georgetown and surrounding area throughout the latter half of the 19th century. During the late 1870s and 1890s, however, national economic crises drove down the price of gold and generally made mining an unprofitable endeavor. The gold mining industry recovered at the beginning of the 20th century and expanded to include prospecting for other potentially valuable minerals (Supernowicz 1983). Mining activity ceased once again during World War I through the following decade. Mining activity was briefly revived during the Depression, as individuals turned toward prospecting as a way to either supplement or generate an income. With the onset of World War II, mining activity diminished and did not recover as a major industry in the area (Supernowicz 1983).

Gold mining attracted people to the Sierra Nevada, and also opened the region to new business enterprises and occupations. The growth of many of these businesses and occupations is directly related to mining (Supernowicz 1983). For example, miners generated a need for a wide variety of supplies and services. Indeed, some of the most successful people in the region were not miners, but rather businessmen who supplied the miners. Many of these businessmen and businesses were established by discouraged miners who were not very successful in the gold fields. Consequently, new businesses and occupations, including farming, dairying, ranching, and logging, were established in the region. Indeed, by the 1870s, grazing of both sheep and cattle was one of the largest industries in El Dorado and Placer Counties, and by the 1880s

commercial fruit orchards covered a large expanse of the foothills in the region (Supernowicz 1983). Both mining and agriculture placed water at a premium. Water companies, such as the California Water Company, were established to construct dams, reservoirs, and ditch systems to both satisfy and profit from the demand for water (Supernowicz 1983, 1988). Some of these water conveyance systems are still in use (e.g., ditches associated with the Eldorado Irrigation District).

Regional economic boom and population growth, however, had a negative impact on Native American populations. The loss of land and territory (e.g., traditional hunting and gathering locales), malnutrition, starvation, and violence contributed to the decline of Native Americans across the Sierra Nevada foothills and the rest of the state (Chartkoff and Chartkoff 1984; Gunsky 1989).

San Joaquin County

San Joaquin County saw limited settlement during the Spanish and Mexican periods. However, after the California Gold Rush, the area experienced a surge in population as former gold seekers recognized the agricultural potential of the region, particularly for wheat farming and later the cultivation of row and orchard crops, as well as cattle ranching. The establishment of numerous small towns was facilitated by railroad development, which provided access to goods and employment, thus shaping settlement patterns in the broader San Joaquin Valley. Agriculture and ranching have historically been the primary land uses in this area, a tradition that continues today (Impact Science, Inc. 2014).

Woodbridge, one of the earliest communities in the county, began in 1852 as a ferry crossing serving those bound for the eastern gold fields. The town was formally laid out in 1859 with the construction of a bridge across the Mokelumne River, leading to the rapid development of ranches and farmhouses across the hillsides and valley floor. By the mid-1850s, the landscape featured fenced pastures, corrals, cultivated fields, and various structural complexes as depicted on historic maps (Impact Science, Inc. 2014).

Another significant early settlement was on Charles M. Weber's land grant from the 1840s. By 1850, the incorporation of Stockton as a city had occurred, and by 1854, it boasted a population of 7,000, making it the fourth-largest city in the state. Stockton's location as a river port fueled its growth into a vibrant center of trade and commerce. The area saw significant development in freighting, staging, agriculture (primarily wheat and grains), livestock raising, and local commerce. By the 1860s, grains emerged as a major commercial crop, with Stockton becoming a pivotal shipping point for California's grain trade, much of which was destined for foreign markets (Impact Science, Inc. 2014).

The presence of the railroad also contributed to the growth of Placer County’s agricultural industry, mainly fruits and nuts, since the rail line provided access to a large market east of the Sierra Nevada (Impact Science, Inc. 2014).

Ripon Area

The initial European American settler in Ripon was William Hiller Hughes, who, in 1857, secured 160 acres of public land near the Stanislaus River in Dent Township, San Joaquin County (Gardner, 1957). William, born in Greene County, Pennsylvania in 1821, spent his early years on his father’s farm before marrying Margaret Hill in 1845. They had a son named George F. During the late 1840s, they farmed in Pennsylvania, then moved to Missouri in 1849. Unfortunately, Margaret passed away in 1850, leading William to marry Eliza Jane Dye in 1851. The family journeyed to California in 1853, initially mining in Sonora before acquiring land near Ripon in 1857 to cultivate wheat and barley. Over the years, William expanded his holdings significantly, accumulating about 2,300 acres by 1875 (Shazo, 2022).

Perry Yaple, another early settler, arrived in California in 1852, establishing himself in Stockton before relocating to Ripon in 1861 to engage in beekeeping. However, a bee epidemic in 1868 forced him to shift focus to grain farming (Shazo, 2022).

In 1870, William Hughes facilitated the establishment of a Southern Pacific railroad depot on his land, later renamed Ripon. A.B. Crooks, arriving from Wisconsin, opened the town's first store in 1874 and subsequently petitioned for a post office, becoming Ripon's inaugural postmaster (Shazo, 2022).

By 1884, Ripon boasted significant development, including a hotel, schools, stores, churches, and warehouses (Shazo, 2022). The region's agriculture initially focused on dry farming, primarily for drought-resistant crops like grain and cattle grazing. However, in 1895, irrigation systems like the Stanislaus and San Joaquin Water Company enabled the cultivation of fruit and nut crops (Shazo, 2022). The arrival of the South San Joaquin Irrigation District in 1909 led to the subdivision of large landholdings into smaller farms, transitioning Ripon towards row crops and dairy farming (Shazo, 2022).

RESEARCH METHODS AND FINDINGS

CALIFORNIA HISTORICAL RESOURCES INFORMATION SYSTEM

A California Historical Resources Information System (CHRIS) records search was conducted by the North Central Information Center at California State University, Sacramento to determine whether indigenous or historic cultural resources were previously recorded within the Project APE, the extent to which the Project APE has been previously surveyed, and the number and type of cultural resources within a 0.5-mile radius of the Project APE. The records search included the following sources:

- National Register of Historic Places: listed properties
- California Register of Historical Resources: listed resources
- Historic Property Data File for Placer County
- Archaeological Determinations of Eligibility
- Built Environment Resources Directory
- California Inventory of Historical Resources
- California Historical Landmarks
- California Points of Historical Interest
- Historical GLO land plat maps

Previous Studies

The records search identified four previous cultural resources surveys in the Project APE and seven previous cultural resources surveys in the 0.5-mile record search radius around it (Table 1).

Table 1. Previous Studies in and within 0.5 Miles of the Project APE

NCIC Report No. SJ-	Study	Author/Year	In/Out of the Project APE
00740	Department of Transportation, Negative Archaeological Survey Report, 10-SJO-120, P.M. 8.4/9.2, CU 10200, EA 386900, Construct Left Turn Pockets and Widen Existing Route 120 at Intersection	Steven Dondero Caltrans 1989.	In

Table 1. Previous Studies in and within 0.5 Miles of the Project APE			
NCIC Report No. SJ-	**Study**	**Author/Year**	**In/Out of the Project APE**
02528	Cultural Resources Assessment of the North Point Annexation Water Treatment Project, City of Ripon, San Joaquin County, California	Gerry, Robert A. and Oglesby, James R.1994.	In
02759	Cultural Resources Inventory Report for the Proposed Mojave Northward Expansion Project, Final.	Hatoff, Brian, Barb Voss, Sharon Waechter, Stephen Wee, and Vance Bente 1995	In
03654	Archaeological Survey Report for the Proposed Road Rehabilitation and Shoulder Widening, on California State Highway 120 Between Jack Tone Road and Escalon in San Joaquin County, California; 10-SJ-120, KP 15.12/26.71 (PM 9.4/16.6).	Wooten, K. and E. Wulf 1999.	Out
03801	Archaeological Inventory Survey, Sierra College Baptist Church Development Project, c. 20 acres, near Clover Valley, Placer County, California	Jensen, Peter M.1999.	Out
04203	Historic Property Survey Report for a Proposed Road Rehabilitation on State Highway 120 Between Jack Tone Road and the City of Escalon, San Joaquin County, California, 10-SJ-120, KP 15.12/26.71 (PM 9.4/16.6), EA 10-0A7400.	Wooten, K.2000.	Out
04204	Historical Architectural Survey Report for a Road Improvement/Widening Project on State Route 120 Between Jack Tone Road and the City of Escalon, San Joaquin County, 10-SJ-120, PM 9.6/16.3 (KP 15.1/26.7), 10-0A7400	Fisher, J. 2000.	Out
04394	Letter Report - ATC Tower No. 41146. Five Corners, Lone Tree Road, San Joaquin County, California.	Peak, Melinda 2001	Out
05138	Historic Property Survey Report for the Jack Tone Road/State Route 99 Interchange Project in the City of Ripon, San Joaquin County, California, 10-SJO-99, K.P. 3.5/4.2	McLean, D. K. B. and J. Marvin 1999	Out
06625	Cultural Resources Survey, South County Surface Water Project, San Joaquin County, California, South San Joaquin Irrigation District	ASI Archaeology and Cultural Resource Management 1998	In
08284	Cultural Resources Inventory Report for the Central Valley Independent Network Fiber Optic Communications Network Project, California	AECOM 2011	Out

Previously Recorded Resources

The records search identified two previously recorded cultural resources in the Project APE and identified three previously recorded cultural resources in the 0.5-mile radius around it (Table 2).

Table 2. Previously Recorded Sites within 0.5 Miles of the APE			
Primary No. (P-39-)	**Brief Description**	**Recorded By and Year (most recent)**	**In/Out of the Project APE**
000015	AH07 (Roads/trails/railroad grades) - Railroad bed	Napton, L.K. 1994	Out
000095	HP20 (Canal/aqueduct) - canal	Hatoff, Brian, et al.1993	In
000096	HP20 (Canal/aqueduct) - canal	Hatoff, Brian, et al.1993	In
000459	AH04 (Privies/dumps/trash scatters) - refuse scatter	K. Wooten and E. Wulf 1999	Out
004381	HP02 (Single-family property) - Vernacular Gothic Revival	Judith Marvin 1997	Out

SACRED LANDS FILE SEARCH

Natural Investigations requested a Sacred Lands File search from the Native American Heritage Commission to identify any sensitive Native American cultural resources in or near the Project APE and received the results of the NAHC search on March 21, 2024. The results of the SLF search were *negative* for sensitive Native American cultural resources in the Project area. The NAHC also provided contact information for tribal members and organizations affiliated with the region. Natural Investigations sent letters and maps to all tribal contacts included on the NAHC list on March 22, 2024, informing them of the Project and requesting any information regarding the Project area that they would be willing to share. If no response was received, follow-up phone calls were made on April 5, 2024. To date, no requests from those contacted have been made. Additional information on Native American outreach efforts undertaken for the Project is provided in Appendix A included with this report.

FIELD METHODS AND FINDINGS

METHODS

An intensive-level pedestrian survey was conducted for the project area by Natural Investigations archaeologist Dylan Stapleton on March 26-27, 2024 (Figure 1). The Project Area is comprised of 4.5 miles of linear road shoulder with a 30-foot maximum ROW buffer on either shoulder as the survey corridor and 21 acres of a laydown yard. The entire Project Area was intensively surveyed using transects spaced no greater than 15 meters apart.

During the pedestrian survey, all visible ground surface within the project area was carefully examined for cultural material (e.g. flaked stone tools, tool-making debris, stone milling tools, or fire-affected rock), soil discoloration that might indicate the presence of a cultural midden, soil depressions, and features indicative of the former presence of structures or buildings (e.g. postholes, foundations), or historic-era debris (e.g. metal, glass, ceramics). Ground disturbances (e.g. embankment, dirt roads, rodent burrows, etc.) were visually inspected. A digital camera was used to take photographs of the Study Area, a Munsell® Soil Color Chart was used to record soil color, and a handheld BE-5300-GPS global positioning system (GPS) unit with sub-meter accuracy was used to record locational data.

FINDINGS

The Project Area is comprised of a 30-foot buffer of the east and west shoulders respectively of Jack Tone Road and a 21-acre laydown yard. The Project Area is located within farmland in an open grassland environment and is situated in a low fan terrace setting. The Project Area is located along the east and west shoulders of north-south trending Jack Tone Road between French Camp Road to the north and East River Road to the south, near the City of Ripon in San Joaquin County, California. The shoulders along Jack Tone Road were a mixture of bare soil, paved driveways/entrances, gravel, and asphalt. There is a buried fiber optic line along the east shoulder of Jack Tone Road.

The Project Area of Jack Tone Road is bounded by agricultural lands/orchards, private residences, and farm complexes, while the laydown yard parcel is bounded by Jack Tone Road to the west, a private residence and agricultural land to the north, agricultural land to the south and Mistlin Sports Park to the east. Elevations within the Project Area ranged from 59-65 feet above mean sea level. Vegetation was comprised of annual grass and forbs.

Visibility at the time of the survey was excellent (75-100%) (Photographs 1-10). Slope within the Project Area was low at 1%. Soils in the Project Areas were a Munsell grayish brown (10YR 5/2) loamy coarse sand and a pale brown (10YR 6/3) sand.

Photograph 1. Overview of survey area. View north.

Photograph 2. Overview of survey area. View south.

Photograph 3. Overview of survey area. View north.

Photograph 4. Overview of survey area. View south.

Photograph 5. Overview of northern terminus of the survey area. View north.

Photograph 6. Overview of southern terminus of the survey area. View south.

Photograph 7. Photograph 7: Overview of laydown yard survey area. View south.

Photograph 8. Overview of laydown yard survey area. View north.

Photograph 9. Overview of laydown yard survey area. View east.

Photograph 10. Overview of laydown yard survey area. View west.

No new prehistoric sites, features or ethnographic sites were recorded during the survey. Seven new historic resources (NIC-2024-Jack Tone-01, 02, 03, 04, 05, 06, 07) were recorded. Two previously recorded historic sites (P-39-000095, P-39-000096) were updated. California Department of Parks and Recreation (DPR) 523 Series site records were completed for the new resources and updates are provided in Appendix B of this report.

CULTURAL RESOURCES IDENTIFIED IN THE STUDY AREA

Previously Recorded Historic Resources

P-39-000095:

This resource is Canal T of the South San Joaquin Irrigation District (Photograph 11). It is a concrete-lined canal nearly uniform in its geometry and scale measuring approximately 22 feet across. The canal crosses under Jack Tone Road, approximately 0.6 miles south of Leroy Avenue. It was originally recorded by JRP Historical Consulting Services in 1993. The canal is an active irrigation canal for the agriculture fields in the area and is actively maintained.

Photograph 11. Overview of canal crossing Jack Tone Road. View west.

Evaluation of P-39-000095:

P-39-000095 was recorded and evaluated by Hatoff, Brian, et al.1993 and was not considered eligible for listing on the National Register of Historic Places. According to Hatoff, "This portion of Canal T is effectively a post-World War II piece of engineering and retains no integrity or visual link to the pioneering settlement pattern in the South San Joaquin Irrigation District". This segment of the Canal continues to serve as a modern, upgraded (concrete) irrigation feature. The resource has been adequately recorded and no other mitigation measures are required.

In summary, P-39-000095 does not retain integrity or visual linkage to the pioneering settlement pattern in the South San Joaquin Irrigation District does not meet the necessary criterion, and is not eligible for inclusion in the NRHP or the CRHR.

P-39-000096

This resource is Canal R of the South San Joaquin Irrigation District (Photograph 12). It is a concrete-lined canal nearly uniform in its geometry and scale measuring approximately 19 feet across. The canal crosses under Jack Tone Road, approximately 0.3 miles south of Highway 120 (Yosemite Avenue) and 100 yards north of Leroy Avenue. It was originally recorded by JRP Historical Consulting Services in 1993. The canal is an active irrigation canal for the agriculture fields in the area and is actively maintained.

Photograph 12. Overview of canal crossing Jack Tone Road. View west.

Evaluation of P-39-000096

P-39-000096 was recorded and evaluated by Hatoff, Brian, et al.1993 and was not considered eligible for listing on the National Register of Historic Places. According to Hatoff, "This portion of Canal T is effectively a post-World War II piece of engineering and retains no integrity or visual link to the pioneering settlement pattern in the South San Joaquin Irrigation District". This segment of the Canal continues to serve as a modern, upgraded (concrete) irrigation feature. The resource has been adequately recorded and no other mitigation measures are required.

In summary, P-39-000096 does not retain integrity or visual linkage to the pioneering settlement pattern in the South San Joaquin Irrigation District does not meet the necessary criterion, and is not eligible for inclusion in the NRHP or the CRHR.

Newly Identified Historic Site:

NIC-2024-Jack Tone-01

This historic resource is a 40-foot-long segment of East Louise Avenue, a two-lane, paved county road (Photograph 13). East Louise Avenue first appears on the 7.5' USGS 1914 topographic map. The road is maintained by the County of San Joaquin and is in active use.

Photograph 13. Overview of intersection. View east.

Evaluation of NIC-2024-Jack Tone 01

While NIC-2024-JackTone-01 may be of general local interest, it maintains none of its original integrity. NIC-2024-JackTone-01 is not associated with any known historic events or personalities. The road has been redesigned and compromised so that any potential noteworthy engineering and construction methods (size and length, presence of distinctive engineering features, structural integrity) are undetermined. The resource has been adequately recorded and will not be impacted by the current project. The resource has been adequately recorded and no other mitigation measures are required.

In summary, NIC-2024-JackTone-01 does not retain integrity or visual linkage to the historic settlement pattern of the area and does not meet the necessary criterion, and is not eligible for inclusion in the NRHP or the CRHR.

NIC-2024-Jack Tone-02

This historic resource is a 40-foot-long segment of Highway 120/Yosemite Ave, a two-lane, paved secondary highway (Photograph 14). Highway 120/Yosemite Avenue first appears on the 7.5' USGS 1914 topographic map. The road is maintained by the County of San Joaquin and is in active use.

Photograph 14. Overview of the intersection of Highway 120/Yosemite Ave and Jack Tone Road. View northeast.

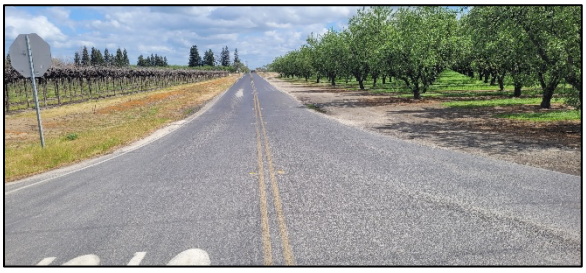
Evaluation of NIC-2024-Jack Tone-02

While NIC-2024-JackTone-02 may be of general local interest, it maintains none of its original integrity. NIC-2024-JackTone-01 is not associated with any known historic events or personalities. The road has been redesigned and compromised so that any potential noteworthy engineering and construction methods (size and length, presence of distinctive engineering features, structural integrity) are undetermined. The resource has been adequately recorded and no other mitigation measures are required.

In summary, NIC-2024-JackTone-02 does not retain integrity or visual linkage to the historic settlement pattern of the area and does not meet the necessary criterion, and is not eligible for inclusion in the NRHP or the CRHR.

NIC-2024-Jack Tone-03

This historic resource is a 20-foot-long segment of Leroy Avenue, a two-lane, paved county road (Photograph 15). Leroy Ave first appears on the 7.5' USGS 1953 topographic map. The road is maintained by the County of San Joaquin and is in active use.



Photograph 15. Overview of the intersection of Leroy Ave and Jack Tone Road. View east.

Evaluation of NIC-2024-Jack Tone-03

While NIC-2024-JackTone-03 may be of general local interest, it maintains none of its original integrity. NIC-2024-JackTone-01 is not associated with any known historic events or personalities. The road has been redesigned and compromised so that any potential noteworthy engineering and construction methods (size and length, presence of distinctive engineering features, structural integrity) are undetermined. The resource has been adequately recorded and no other mitigation measures are required.

In summary, NIC-2024-JackTone-03 does not retain integrity or visual linkage to the historic settlement pattern of the area and does not meet the necessary criterion, and is not eligible for inclusion in the NRHP or the CRHR.

NIC-2024-Jack Tone-04

This historic resource is a 20-foot-long segment of Graves Avenue, a two-lane, paved county road (Photograph 16). Graves Ave first appears on the 7.5' USGS 1914 topographic map. The road is maintained by the County of San Joaquin and is in active use.

Photograph 16. Overview of the intersection of Graves Ave and Jack Tone Road. View east.

Evaluation of NIC-2024-Jack tone-04

While NIC-2024-JackTone-04 may be of general local interest, it maintains none of its original integrity. NIC-2024-JackTone-01 is not associated with any known historic events or personalities. The road has been redesigned and compromised so that any potential noteworthy engineering and construction methods (size and length, presence of distinctive engineering features, structural integrity) are undetermined. The resource has been adequately recorded and no other mitigation measures are required.

In summary, NIC-2024-JackTone-04 does not retain integrity or visual linkage to the historic settlement pattern of the area and does not meet the necessary criterion, and is not eligible for inclusion in the NRHP or the CRHR.

NIC-2024-Jack Tone-05

This historic resource is a 20-foot-long segment of Van Wyk Road, a two-lane, paved county road (Photograph 17). Van Wyk Road first appears on the 7.5' USGS 1914 topographic map. The road is labeled as a private driveway. The road is maintained by the County of San Joaquin and is in active use.

Photograph 17. Overview of the intersection of Van Wyk Road and Jack Tone Road. View west.

Evaluation of NIC-2024-Jack Tone-05

While NIC-2024-JackTone-05 may be of general local interest, it maintains none of its original integrity. NIC-2024-JackTone-01 is not associated with any known historic events or personalities. The road has been redesigned and compromised so that any potential noteworthy engineering and construction methods

(size and length, presence of distinctive engineering features, structural integrity) are undetermined. The resource has been adequately recorded and no other mitigation measures are required.

In summary, NIC-2024-JackTone-05 does not retain integrity or visual linkage to the historic settlement pattern of the area and does not meet the necessary criterion, and is not eligible for inclusion in the NRHP or the CRHR.

NIC-2024-Jack Tone-06

This historic resource is a 40-foot-long segment of Clinton South Avenue, a two-lane, paved county road (Photograph 18). Clinton South Avenue first appears on the 7.5' USGS 1914 topographic map. The road is maintained by the County of San Joaquin and is in active use.

Photograph 18. Overview of the intersection of Van Wyk Road and Jack Tone Road. View east.

Evaluation of NIC-2024-Jack Tone-06

While NIC-2024-JackTone-06 may be of general local interest, it maintains none of its original integrity. NIC-2024-JackTone-01 is not associated with any known historic events or personalities. The road has been redesigned and compromised so that any potential noteworthy engineering and construction methods (size and length, presence of distinctive engineering features, structural integrity) are undetermined. The resource has been adequately recorded and no other mitigation measures are required.

In summary, NIC-2024-JackTone-06 does not retain integrity or visual linkage to the historic settlement pattern of the area and does not meet the necessary criterion, and is not eligible for inclusion in the NRHP or the CRHR.

NIC-2024-Jack Tone-07

This historic resource is a 4.5-mile-long segment of Jack Tone Road, a two-lane, paved secondary highway (Photograph 19). Jack Tone Road first appears on the 7.5' USGS 1914 topographic map. The road is maintained by the County of San Joaquin and is in active use.

Photograph 19. Overview of Jack Tone Road. View south.

Evaluation of NIC-2024-Jack Tone-07

While NIC-2024-JackTone-06 may be of general local interest, it maintains none of its original integrity. NIC-2024-JackTone-01 is not associated with any known historic events or personalities. The road has been redesigned and compromised so that any potential noteworthy engineering and construction methods (size and length, presence of distinctive engineering features, structural integrity) are undetermined. The resource has been adequately recorded no other mitigation measures are required.

In summary, NIC-2024-JackTone-06 does not retain integrity or visual linkage to the historic settlement pattern of the area and does not meet the necessary criterion, and is not eligible for inclusion in the NRHP or the CRHR.

POTENTIAL FOR BURIED ARCHAEOLOGICAL DEPOSITS

The Project APE rests upon the Modesto Formation, consisting of geologically recent sediments (i.e., around 12,000 years before present to the present). However, due to the highly disturbed nature of the APE (utility corridor), the likelihood of uncovering undisturbed subsurface archaeological deposits through Project implementation is low.

CONCLUSIONS AND RECOMMENDATIONS

CULTURAL RESOURCES

Within the Project APE, nine cultural resources were identified: two previously recorded features P-39-000095 and 96; and newly recorded features NIC-2024-Jack Tone-01 through 07. These resources consist of infrastructure (canals and roads). Assessment of these resources finds that none are significant under any NRHP criteria or constitute historic properties as defined under NHPA Section 300308. Nor are they significant resources as defined under CEQA PRC Section 21083.2(g).

The SLF search for the Project was negative. Due to the highly disturbed nature of the APE (utility corridor), the likelihood of uncovering undisturbed subsurface archaeological deposits through Project implementation is low.

Consequently, Natural Investigations determined that a finding of *No Historic Properties Affected* pursuant to 36 CFR § 800.4 (d)(1) is appropriate for the Project. A finding of *Less Than Significant* is appropriate for the Project pursuant to CEQA. No mitigations are required.

PALEONTOLOGICAL RESOURCES

The San Joaquin Valley contains exceptionally productive Pliocene-age (approximately 2 to 4.5 million years old) fossil-bearing beds, particularly in the western portions of the region. The rock deposits in this area produce a world-famous supply of paleontological treasures, including but not limited to abundant and perfectly preserved sand dollars, Pectens, and various freshwater mollusks. These fossils are entombed in the sediments deposited within a complex intergrading of fresh water, estuarine, and marine paleoconditions directly related to the last great inland sea that periodically inundated the modern Central Valley of California (Impact Sciences, Inc. 2014).

A record search of the Museum of Paleontology at the University of California in Berkeley indicated that 97 paleontological finds have been made in the County (UCMP 2020). Most specimens from the County

have been found in rock formations in the foothills of the Diablo Mountain Range. However, remains of extinct animals, such as mammoth, may be found in the predominant Modesto Formation but may also be found virtually anywhere in the County, especially along watercourses such as the San Joaquin River and its tributaries. None of the geologic units known to contain fossils in San Joaquin County have been mapped within the Project Area.

As no unique geologic features, fossil-bearing strata, or paleontological sites have been recorded within the Project Area, and the underlying metavolcanic rocks mapped in the Project Area are unlikely to contain fossilized remains, the paleontological resource sensitivity within the Project Area is estimated to be low based on SVP criteria (SVP 2010). No further paleontological resources work is recommended at this time.

INADVERTENT DISCOVERIES

Cultural Resources

Regardless of the findings for the Project, it is possible to inadvertently uncover cultural resources during ground-disturbing Project activities. In the event that cultural resources are inadvertently discovered during Project activities, work should be halted within 30 feet of the find and a qualified archaeologist (i.e., an archaeologist that meets the qualifications at 36 CFR Part 61) should be retained to assess its potential significance. Construction activities may continue in other areas, but may not resume in the area of the find until the significance of the find is assessed and it is appropriately treated. If the find is not significant no additional cultural resources investigations are necessary and Project work may resume in the area of the find. If the find is determined significant, additional cultural resources investigations, such as data recovery excavation, may be warranted and would be determined in consultation with the Project applicant, the County, appropriate Tribes, and any other relevant regulatory agencies or interested parties, as appropriate.

Human Remains

Although unlikely, the discovery of human remains is always a possibility. State of California Health and Safety Code Section 7050.5 covers these discoveries, except on federal lands. This code section states that no further disturbance may occur until the County Coroner has made a determination of origin and disposition of the remains pursuant to PRC Section 5097.98. The County Coroner must be notified of the find immediately upon discovery. If the human remains are determined to be of Native American origin, the Coroner will notify the NAHC, which will determine and notify a Most Likely Descendent (MLD). The MLD must complete an inspection of the site within 48 hours of notification and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.

Paleontological Resources

In the event that a paleontological resource is inadvertently discovered during Project-related work, regardless of the depth of work or location, work must be halted within 30 feet of the find and a qualified paleontologist (SVP 2010) notified immediately so that an assessment of its potential significance can be undertaken. If the find is determined to be significant, it should be salvaged following the standards of the SVP (2010) and curated with a certified repository such as the UCMP

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APPENDIX A:
Sacred Lands File Search Results

NATIVE AMERICAN HERITAGE COMMISSION

NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov
NAHC.ca.gov

March 21, 2024

Cindy Arrington
Natural Investigations Company

***Via Email to*: Cindy@naturalinvestigations.com**

Re: Jack Tone Pipeline - 2072 Project, San Joaquin County

Dear Ms. Arrington:

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

Natural Investigations Company

March 22, 2024

PROJECT INFORMATION AND COMMENT REQUEST LETTER

TO: Sara Dutschke, Chairperson, Ione Band of Miwok Indians;
Rhonda Morningstar Pope, Chairperson, Buena Vista Rancheria of Me-Wuk Indians;
Corrina Gould, Chairperson, Confederated Villages of Lisjan Nation;
Cheyenne Gould, Tribal Cultural Resource Manager, Confederated Villages of Lisjan Nation;
Deja Gould, Language Program Manager, Confederated Villages of Lisjan Nation;
Monica Arellano, Vice Chairwoman, Muwekma Ohlone Indian Tribe of the SF Bay Area;
Timothy Perez, Tribal Compliance Officer, Northern Valley Yokut / Ohlone Tribe;
Dahlton Brown, Director of Administration, Wilton Rancheria;
Cultural Preservation Department, Wilton Rancheria;
Herbert Griffin, Executive Director of Cultural Preservation, Wilton Rancheria;
Kenneth Woodrow, Chairperson, Wuksachi Indian Tribe/Eshom Valley Band;
Lawrence Wilson Jr., Cultural Specialist, California Valley Miwok Tribe;
Anthony Wilson, Treasurer, California Valley Miwok Tribe;
Joey Garfield, Tribal Archaeologist, Tule River Indian Tribe;
Neil Peyron, Chairperson, Tule River Indian Tribe;
Kerri Vera, Environmental Department, Tule River Indian Tribe.

EMAIL: Cindy@naturalinvestigations.com

PHONE: (916) 765-9381

PROPOSED PROJECT: Jack Tone Road Pipeline in San Joaquin County, California

USGS QUAD: Manteca 7.5-minute Quadrangles: Sections 1, 6, 7, 23, 13, 18, 25, 30, 31, 36 of Township 1 & 2 south, Range 7 & 8 east of the Mount Diablo Base and Meridian

ACREAGE: ~80

Natural Investigations Company, Inc. (Natural Investigations) was retained to provide cultural resource services in support of the Jack Tone Road Pipeline project, in San Joaquin County, California. The project location can be found on the attached Figure 1.

Project Description: The project proposes the installation of approximately 4.5 miles of a pair of new water pipelines along the right-of-way of Jack Tone Road. The two pipelines would be of polyvinyl chloride, or PVC, and would be approximately 18 inches in diameter. The project site is in the City of Ripon and the unincorporated area of San Joaquin County east of the city. The northern terminus would tie into an existing South San Joaquin Irrigation District (SSJID) pipeline, approximately 48 inches in diameter, conveying treated water from the Nick DeGroot Water Treatment Plant west of Woodward Reservoir in Stanislaus County. Where the proposed pipelines would tie into the SSJID pipeline, an air release valve would be installed at the end of each pipeline. The valves would be installed below surface grade and would be connected to the proposed pipelines via a three-inch diameter pipe. Pipeline construction would be confined to the existing right-of-way of Jack Tone Road; no additional acquisition of right-of-way would be required.

Sacred Lands File Search: The Native American Heritage Commission (NAHC) returned the results of a Sacred Lands File search conducted for the Project, stating that records were negative for the presence of Native American

cultural resources in the project vicinity. The NAHC recommended that we contact you for additional information on the potential for Native American cultural resources within or near the Project.

CHRIS File Search: Natural Investigations requested a records search of the California Historical Resources Information System by the Central California Information Center at California State University, Stanislaus to identify any previously recorded prehistoric or historic cultural resources and previously conducted surveys in the project area. The CHRIS search identifies four previous studies have been conducted (1989-1998) in the project area and seven previous studies have been completed (1999-2011) within a 0.50-mile radius. Additionally, the CHRIS search shows two previously recorded historic-era resources (both lateral canals for the South San Joaquin Irrigation District) within the project area and three historic-era resources (railroad, vineyard, trash scatter) have been identified within the 0.50-mile radius.

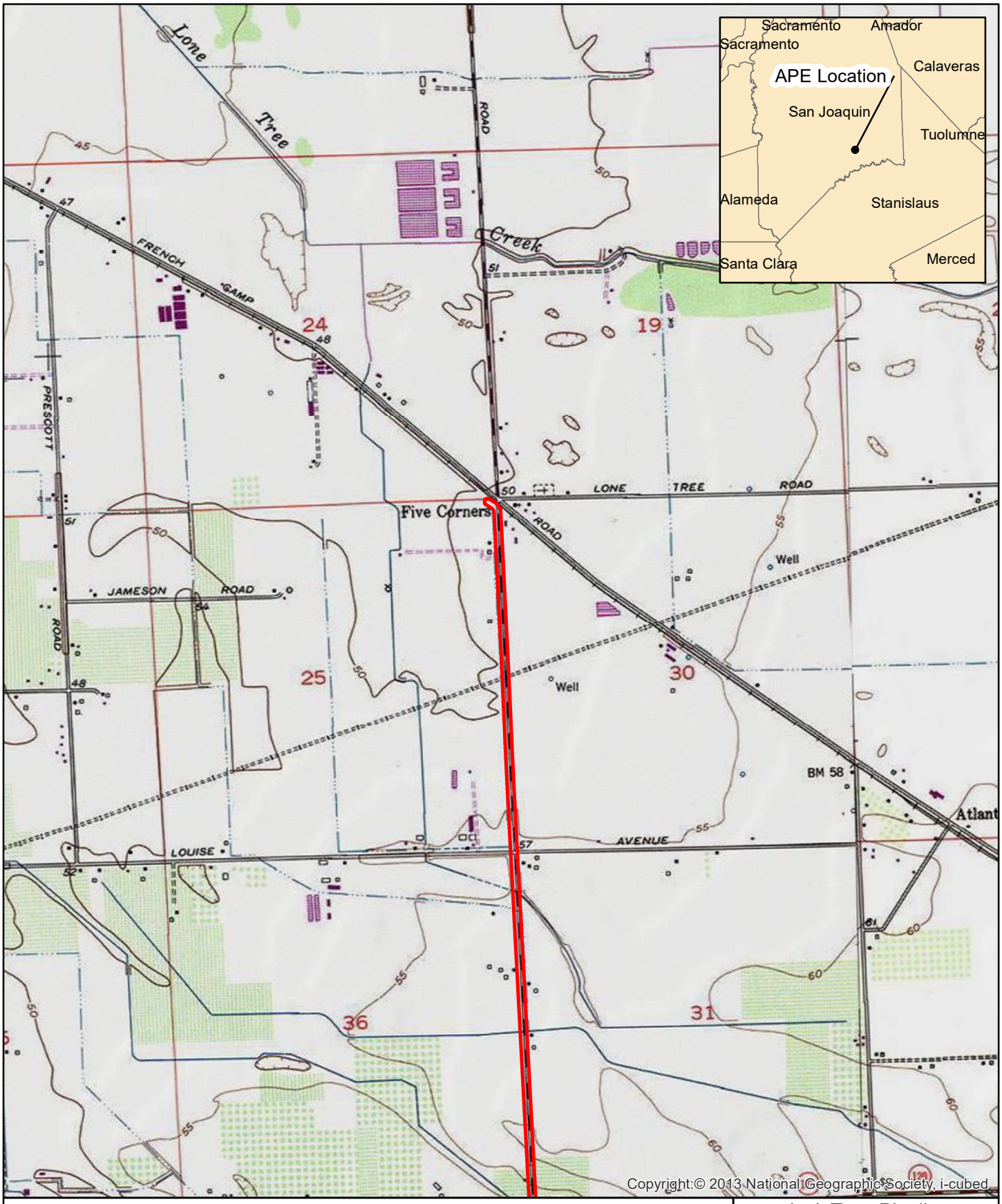
We would greatly appreciate any comments that you may have on potential cultural resources in the area and invite you to raise any other concerns relating to the Project should you have them. All information provided regarding specific sites or Native American cultural resources will remain confidential. Please feel free to contact me by phone or email. We would greatly appreciate a response at your earliest convenience.

Thank you for your assistance.

Respectfully submitted,

Cindy Arrington, M.S., RPA
Administrator
916-765-9381
Cindy@naturalinvestigations.com

Attachments: Figure 1: Project Location Map



Project APE

0 0.5 1 Kilometers

0 0.5 1 Miles

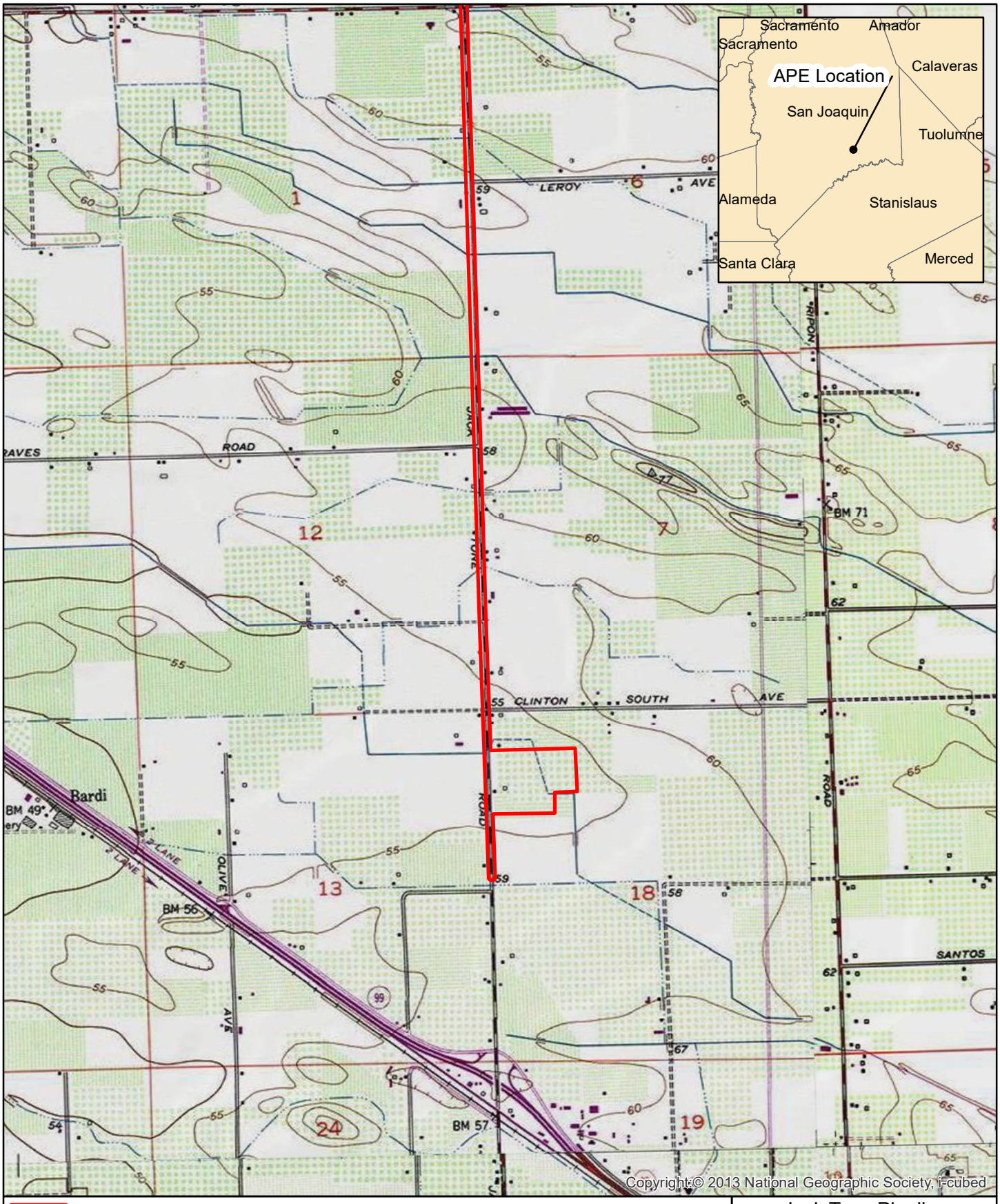
1:24,000

Jack Tone Pipeline
Figure 1 - APE Location
Map 1 of 2

Natural Investigations Company

Map Date 3/15/2024

Manteca 1952 Quadrangle Photorevised 1987 Minor Revision 1994:Township 1S, Range 7E, Section 25,36
Manteca 1952 Quadrangle Photorevised 1987 Minor Revision 1994:Township 1S, Range 8E, Section 30,31



Project APE

0 0.5 1 Kilometers

0 0.5 1 Miles

1:24,000

Jack Tone Pipeline
Figure 1 - APE Location
Map 2 of 2

Natural Investigations Company

Map Date 3/15/2024

Manteca 1952 Quadrangle Photorevised 1987 Minor Revision 1994:Township 2S, Range 7E, Section 1,12,13
Manteca 1952 Quadrangle Photorevised 1987 Minor Revision 1994:Township 2S, Range 8E, Section 6,7,18

Natural Investigations Company

Native American Contact Tracking Sheet
Jack Tone Pipeline Project
San Joaquin County, California

Contact Name	Date Letter Sent	Date Follow Up	Responses
Ione Band of Miwok Indians Sara Dutschke, Chairperson 9252 Bush Street Plymouth, CA, 95669 Phone: (209) 245-5800 consultation@ionemiwok.net	03/22/2024	04/05/2024	Ms. Dutschke was not available. A voice message was left asking if the Tribe had any questions or concerns regarding the project and if so, to please contact Natural Investigations.
Buena Vista Rancheria of Me-Wuk Indians Rhonda Morningstar Pope, Chairperson 1418 20th Street, Suite 200 Sacramento, CA, 95811 Phone: (916) 491-0011 rhonda@buenavistatribe.com	03/22/2024	04/05/2024	Ms. Pope was not available. A voice message was left asking if the Tribe had any questions or concerns regarding the project and if so, to please contact Natural Investigations
Confederated Villages of Lisjan Nation Corrina Gould, Chairperson 10926 Edes Avenue Oakland, CA, 94603 Phone: (510) 575-8408 cvltribe@gmail.com	03/22/2024	03/25/2024	Ms. Gould replied by email stating at this time the Tribe has no further information to supply about the proposed site. However, the Tribe wishes to be contacted should cultural resources be identified during the project implementation.
Confederated Villages of Lisjan Nation Cheyenne Gould, Tribal Cultural Resource Manager 10926 Edes Avenue Oakland, CA, 94603 Phone: (510) 575-8408 cvltribe@gmail.com	03/22/2024	04/05/2024	Ms. Gould was not available. A voice message was left asking if the Tribe had any questions or concerns regarding the project and if so, to please contact Natural Investigations.
Confederated Villages of Lisjan Nation Deja Gould, Language Program Manager 10926 Edes Avenue Oakland, CA, 94603 Phone: (510) 575-8408 cvltribe@gmail.com	03/22/2024	04/05/2024	Ms. Gould was not available. A voice message was left asking if the Tribe had any questions or concerns regarding the project and if so, to please contact Natural Investigations.
Muwekma Ohlone Indian Tribe of the SF Bay Area Monica Arellano, Vice Chairwoman 20885 Redwood Road, Suite 232 Castro Valley, CA, 94546 Phone: (408) 205-9714 monicavarellano@gmail.com	03/22/2024	04/05/2024	Ms. Arellano was not available. A voice message was left asking if the Tribe had any questions or concerns regarding the project and if so, to please contact Natural Investigations.

Northern Valley Yokut / Ohlone Tribe Timothy Perez, Tribal Compliance Officer P.O. Box 717 Linden, CA, 95236 Phone: (209) 662-2788 huskanam@gmail.com	03/22/2024	04/05/2024	Mr. Perez was not available. A voice message was left asking if the Tribe had any questions or concerns regarding the project and if so, to please contact Natural Investigations.
Cultural Preservation Department Wilton Rancheria 9728 Kent Street Elk Grove, CA 95624 (916) 683-6000 Office cpd@wiltonrancheria-nsn.gov	03/22/2024	04/05/2024	A voice message was left asking if the Tribe had any questions or concerns regarding the project and if so, to please contact Natural Investigations.
Dahlton Brown, Director of Administration Wilton Rancheria 9728 Kent Street Elk Grove, CA, 95624 Phone: (916) 683 - 6000 dbrown@wiltonrancheria-nsn.gov	03/22/2024	04/05/2024	Mr. Brown was not available. A voice message was left asking if the Tribe had any questions or concerns regarding the project and if so, to please contact Natural Investigations.
Herbert Griffin, Executive Director of Cultural Preservation Wilton Rancheria 9728 Kent Street Elk Grove, CA 95624 (916) 683-6000 Ext. 2006 hgriffin@wiltonrancheria-nsn.gov	03/22/2024	04/05/2024	Mr. Griffin was not available. A voice message was left asking if the Tribe had any questions or concerns regarding the project and if so, to please contact Natural Investigations.
California Valley Miwok Tribe Lawrence Wilson Jr., Cultural Specialist P.O. Box 395 West Point, CA, 95255 Phone: (209) 304-2307 l.ewilson@yahoo.com	03/22/2024	04/05/2024	Mr. Wilson was not available. A voice message was left asking if the Tribe had any questions or concerns regarding the project and if so, to please contact Natural Investigations.
California Valley Miwok Tribe Anthony Wilson, Treasurer Phone: (530) 458-1675 awanata426@gmail.com	03/22/2024	04/05/2024	Mr. Wilson was not available. A voice message was left asking if the Tribe had any questions or concerns regarding the project and if so, to please contact Natural Investigations.
Wuksachi Indian Tribe/Eshom Valley Band Kenneth Woodrow, Chairperson 1179 Rock Haven Ct. Salinas, CA, 93906 Phone: (831) 443-9702 kwood8934@aol.com	03/22/2024	04/05/2024	Mr. Woodrow was not available. A voice message was left asking if the Tribe had any questions or concerns regarding the project and if so, to please contact Natural Investigations.
Tule River Indian Tribe Joey Garfield, Tribal Archaeologist P. O. Box 589 Porterville, CA, 93258 Phone: (559) 783-8892 joey.garfield@tulerivertribe-nsn.gov	03/22/2024	04/05/2024	Mr. Garfield was not available. A voice message was left asking if the Tribe had any questions or concerns regarding the project and if so, to please contact Natural Investigations.

Tule River Indian Tribe Neil Peyron, Chairperson P. O. Box 589 Porterville, CA, 93258 Phone: (559) 781-4271 neil.peyron@tulerivertribe-nsn.gov	03/22/2024	04/05/2024	Mr. Peyron was not available. A voice message was left asking if the Tribe had any questions or concerns regarding the project and if so, to please contact Natural Investigations.
Tule River Indian Tribe Kerri Vera, Environmental Department P. O. Box 589 Porterville, CA, 93258 Phone: (559) 783-8892 kerri.vera@tulerivertribe-nsn.gov	03/22/2024	04/05/2024	Ms. Vera was not available. A voice message was left asking if the Tribe had any questions or concerns regarding the project and if so, to please contact Natural Investigations.

From: Lisjan Nation
To: cindy@naturalinvestigations.com
Subject: Re: Tribal Outreach-Jack Tone Road - Project 2072
Date: Monday, March 25, 2024 5:10:34 PM

Thank you for reaching out to the Tribe about the proposed project. At this time the Tribe has no further information to supply about the proposed site for this plan. As always we encourage developers in our traditional territories to remain cognizant of the facts that our tribal people lived all over the Bay Area and because of colonization and genocidal practices that reached into the late 19th century and early 20thCentury,it is not always possible to know for certain if you may find cultural resources or burials at sites where you anticipate ground disturbance. The Tribe wishes to be contacted if there are any findings.

'Uni (Respectfully),

Corrina Gould, Tribal Chair
Confederated Villages of Lisjan Nation

On Fri, Mar 22, 2024 at 9:36 AM <cindy@naturalinvestigations.com> wrote:

> Greetings. Natural Investigations Company was retained to provide cultural resource services in support of the Jack Tone Road Pipeline project, in San Joaquin County, California. Attached to this email is a project information letter, project map, and the NAHC SLF results. Please let me know if you have any questions.
>
> Kindest regards,
>
> Cindy Arrington, M.S., RPA

Administrator

Natural Investigations Co., Inc.

3104 O Street, #221

Sacramento, CA 95816

Mobile: (916) 765-9381
Email: cindy@naturalinvestigations.com

SB(Micro) Certified

APPENDIX B:
Site Records

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 #: NIC-2024-Jack Tone-01

P1. Other Identifier:

*P2. Location: ☐ Not for Publication ☒ Unrestricted *a. County San Joaquin

*b. USGS 7.5' Quad Manteca Date 1952 PR1987 T 1S ; R 7/8E ; ¼ of ¼ of Sec ; MD B.M. 25, 36/30, 31

c. Address City Zip

d. UTM: Zone 10S 663397 mE/ 4186599 mN Intersection of Jack Tone Rd and E. Louise Ave
Zone mE/ mN

e. Other Locational Data:

*P3a. Description:

This is the intersection segment of E. Louise Avenue and Jack Tone Road in San Joaquin County. E. Louise Avenue first appears on the 7.5' USGS 1914 topographic map. E. Louise Ave is a two lane, paved county road that trends east-west. The road is maintained by the County of San Joaquin and is in active use.

*P3b. Resource Attributes: AH7. Roads/trails/railroad grades

*P4. Resources Present: ☐ Building ☐ Structure ☐ Object ☒ Site ☐ District ☐ Element of District ☐ Other (Isolates, etc.)

*P5b. Description of Photo:

Overview of intersection of E. Louise Ave and Jack Tone Road. View east.

*P6. Date Constructed/Age and Source
☒ Historic ☐ Prehistoric ☐ Both

c.1914- 1914 Manteca USGS topographic map

*P7. Owner and Address:

Department of Public Works Road and Traffic Maintenance 1810 E. Hazelton Ave Stockton, CA 95205

*P8. Recorded by:

D. Stapleton
Natural Investigations Inc.
3104 O Street
Sacramento, CA 95816

*P9. Date Recorded: 03-25-24

*P10.Survey Type:
intensive pedestrian

*P11. Report Citation:

Natural Investigations
2024 (April) Cultural and Paleontology Resources Investigations for the Jack Tone Pipeline Project, San Joaquin 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):

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

LINEAR FEATURE RECORD

Primary #
HRI #
Trinomial #

 Resource Name or #: NIC-2024-Jack Tone-01

L1. Historic and/or Common Name: East Louise Avenue
L2a. Portion Described: ☐ Entire Resource ☒ Segment ☐ Point Observation **Designation:**
b. Location of point or segment:

10S 663397 mE/4186599 mN: intersection of E. Louise Ave and Jack Tone Road

L3. Description:
A paved, two lane county road.

L4. Dimensions:

a. Top Width: 20 feet
b. Bottom Width: n/a
c. Height or Depth: n/a
d. Length of Segment: 40 feet

L5. Associated Resources:
None

L4e. Sketch of Cross-Section **Facing:**

L6. Setting:
Low fan terrace in an agricultural setting.

L7. Integrity Considerations:
Road maintains integrity of setting, location, feeling, association, design and workmanship.

L8b. Description of Photo, Map, or Drawing

L9. Remarks:

L10. Form Prepared by:

D. Stapleton
Natural Investigations Inc.
3104 O Street
Sacramento, CA 95816

L11. Date: 03-26-24

*Recorded by: L. Harrington *Date: 04/04/2024 ■Continuation ☐Update

Eligibility Evaluation

While NIC-2024-JackTone-01 may be of general local interest, it maintains none it its original integrity. NIC-2024-JackTone-01 is not associated with any known historic events or personalities. The road has been redesigned and compromised so that any potential noteworthy engineering and construction methods (size and length, presence of distinctive engineering features, structural integrity) are undetermined. The resource has been adequately recorded and will not be impacted by the current project.

In summary, NIC-2024-JackTone-01 does not retain integrity or visual linkage to the historic settlement pattern of the area and does not meet the necessary criterion and is not eligible for inclusion in the NRHP or the CRHR.

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

LOCATION MAP

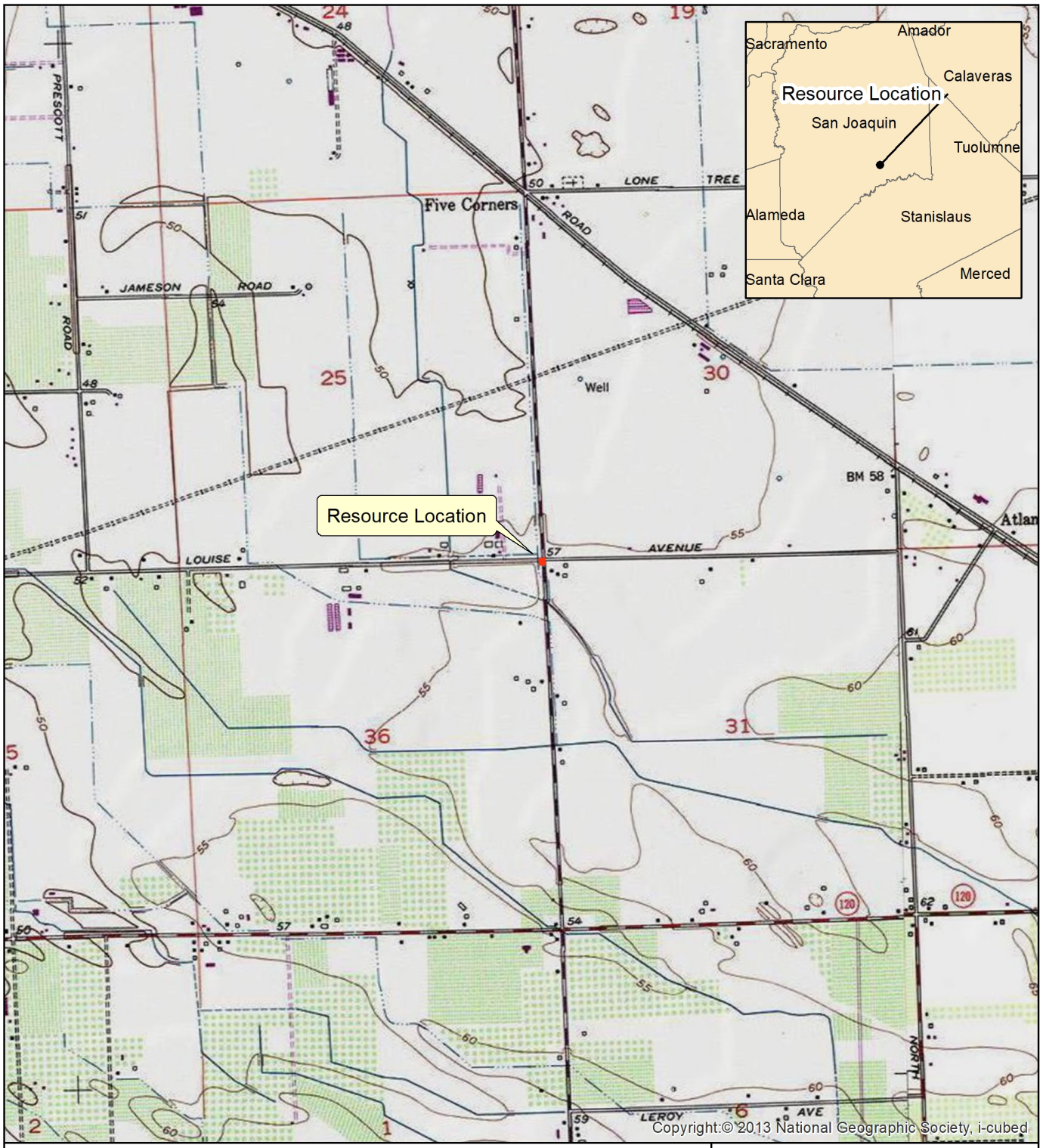
Primary #
HRI #
Trinomial #

***Resource Name or #:** NIC-2024-Jack Tone-01

***Map Name:** Manteca

***Scale:** 1:24,000

***Date of Map:** 1952, PR 1987, MR 1994



NIC-2024-Jack Tone-01

0 0.5 1 Kilometers

0 0.5 1 Miles

Manteca 1952 Quadrangle Photorevised 1987 Minor Revision 1994:Township 1S, Range 7E, Section 25,36
Manteca 1952 Quadrangle Photorevised 1987 Minor Revision 1994:Township 1S, Range 8E, Section 30,31

1:24,000

NIC-2024-Jack Tone-01
Resource Location Map

Natural Investigations Company

*Required information

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 _____

Page 1 **of** 4 ***Resource Name or #:** NIC-2024-Jack Tone-02
P1. Other Identifier: Highway 120/Yosemite Ave
***P2. Location:** ☐ **Not for Publication** ■ **Unrestricted** ***a. County** San Joaquin
***b. USGS 7.5' Quad** Manteca **Date** 1952 PR1987 **T** 1S ; **R** 7/8E ; ¼ **of** ¼ **of Sec** ; MD **B.M.** 1,36/31, 6
c. Address City Zip
d. UTM: Zone 10S 663479 mE/ 4184987 mN Intersection of Jack Tone Rd and Hwy 120/Yosemite Ave
Zone mE/ mN
e. Other Locational Data:

***P3a. Description:**

This is the intersection segment of Highway 120/Yosemite Ave and Jack Tone Road in the county of San Joaquin. Highway 120/Yosemite Avenue first appears on the 7.5' USGS 1914 topographic map. Highway 120/Yosemite Ave is a two lane, paved secondary highway that trends east-west. The road is maintained by the County of San Joaquin and is in active use.

***P3b. Resource Attributes:** AH7. Roads/trails/railroad grades
***P4. Resources Present:** ☐ Building ☐ Structure ☐ Object ■ Site ☐ District ☐ Element of District ☐ Other (Isolates, etc.)

***P5b. Description of Photo:**
Overview of the intersection of Highway 120/Yosemite Ave and Jack Tone Road. View northeast.

***P6. Date Constructed/Age and Source**
■ Historic ☐ Prehistoric ☐ Both
c.1914- 1914 Manteca USGS topographic map

***P7. Owner and Address:**
Department of Public Works Road and Traffic Maintenance 1810 E. Hazelton Ave Stockton, CA 95205

***P8. Recorded by:**
D. Stapleton
Natural Investigations Inc.
3104 O Street
Sacramento, CA 95816

***P9. Date Recorded:** 03-25-24

***P10.Survey Type:**
intensive pedestrian

***P11. Report Citation**:
Natural Investigations
2024 (April) Cultural and Paleontology Resources Investigations for the Jack Tone Pipeline Project, San Joaquine 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):

State of California — The Resources Agency Primary #
DEPARTMENT OF PARKS AND RECREATION HRI #
LINEAR FEATURE RECORD Trinomial

 Resource Name or #: NIC-2024-Jack Tone-02

L1. Historic and/or Common Name: Yosemite Ave/Highway 120
L2a. Portion Described: ☐ Entire Resource ■ Segment ☐ Point Observation **Designation:**
b. Location of point or segment:

10S 663479 mE/4184987 mN

L3. Description:
This is the intersection of Highway 120/Yosemite Ave and Jack Tone Road.

L4. Dimensions:

a. Top Width: 20 feet
b. Bottom Width: n/a
c. Height or Depth: n/a
d. Length of Segment: 40 feet

L5. Associated Resources:
None

L4e. Sketch of Cross-Section **Facing:**

L6. Setting:
Low fan terrace in an agricultural setting.

L7. Integrity Considerations:
Road maintains integrity of setting, location, feeling, association, design and workmanship.

L8b. Description of Photo, Map, or Drawing

L9. Remarks:

L10. Form Prepared by:

D. Stapleton
Natural Investigations Inc.
3104 O Street
Sacramento, CA 95816

L11. Date: 03-26-24

*Recorded by: L. Harrington *Date: 04/04/2024 ■Continuation □Update

Eligibility Evaluation

While NIC-2024-JackTone-02 may be of general local interest, it maintains none it its original integrity. NIC-2024-JackTone-02 is not associated with any known historic events or personalities. The road has been redesigned and compromised so that any potential noteworthy engineering and construction methods (size and length, presence of distinctive engineering features, structural integrity) are undetermined. The resource has been adequately recorded and will not be impacted by the current project.

In summary, NIC-2024-JackTone-02 does not retain integrity or visual linkage to the historic settlement pattern of the area and does not meet the necessary criterion and is not eligible for inclusion in the NRHP or the CRHR.

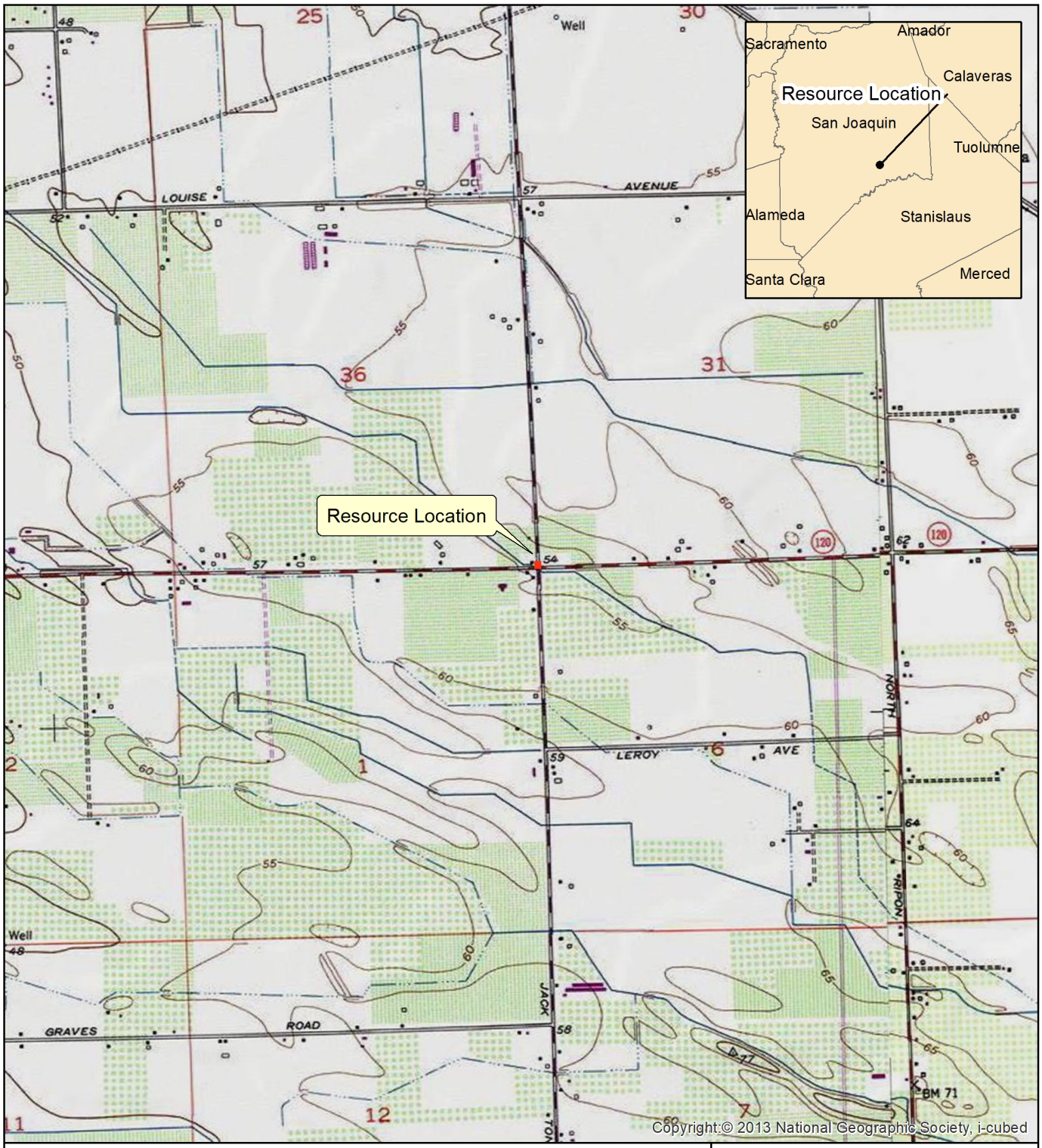
State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

LOCATION MAP

Primary #
HRI #
Trinomial #

Page 4 **of** 4 ***Resource Name or #:** NIC-2024-Jack Tone-02

***Map Name:** Manteca ***Scale:** 1:24,000 ***Date of Map:** 1952, PR 1987, MR 1994



DPR 523J (1/95) ***Required information**

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 _____

Page 1 **of** 4 ***Resource Name or #:** NIC-2024-Jack Tone-03
P1. Other Identifier: Leroy Ave
***P2. Location:** ☐ **Not for Publication** ■ **Unrestricted** ***a. County** San Joaquin
***b. USGS 7.5' Quad** Manteca **Date** 1952 PR1987 **T** 1S ; **R** 8E ; ¼ **of** ¼ **of Sec** 6 ; MD **B.M.**
c. Address City Zip
d. UTM: Zone 10S 663479 mE/ 4184987 mN Intersection of Jack Tone Rd and Leroy Ave
Zone mE/ mN
e. Other Locational Data:

***P3a. Description:**

This is the intersection segment of Leroy Ave and Jack Tone Road in the county of San Joaquin. Leroy Avenue first appears on the 7.5' USGS 1953 topographic map. Leroy Ave is a two lane, paved county road that trends east-west. The road is maintained by the County of San Joaquin and is in active use.

***P3b. Resource Attributes:** AH7. Roads/trails/railroad grades
***P4. Resources Present:** ☐ Building ☐ Structure ☐ Object ■ Site ☐ District ☐ Element of District ☐ Other (Isolates, etc.)

***P5b. Description of Photo:**
Overview of the intersection of Leroy Ave and Jack Tone Road. View east.

***P6. Date Constructed/Age and Source**
■ Historic ☐ Prehistoric ☐ Both
c.1953- 1953 Manteca USGS topographic map

***P7. Owner and Address:**
Department of Public Works Road and Traffic Maintenance 1810 E. Hazelton Ave Stockton, CA 95205

***P8. Recorded by:**
D. Stapleton
Natural Investigations Inc.
3104 O Street
Sacramento, CA 95816

***P9. Date Recorded:** 03-25-24

***P10.Survey Type:**
intensive pedestrian

***P11. Report Citation**:
Natural Investigations
2024 (April) Cultural and Paleontology Resources Investigations for the Jack Tone Pipeline Project, San Joaquine 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):

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

LINEAR FEATURE RECORD

Primary #
HRI #
Trinomial #

 Resource Name or #: NIC-2024-Jack Tone-03

L1. Historic and/or Common Name: Leroy Avenue
L2a. Portion Described: ☐ Entire Resource ☒ Segment ☐ Point Observation **Designation:**
b. Location of point or segment:

10S 663512 mE/4184166 mN

L3. Description:
This is the intersection of Leroy Ave and Jack Tone Road.

L4. Dimensions:

a. Top Width: 20 feet
b. Bottom Width: n/a
c. Height or Depth: n/a
d. Length of Segment: 40 feet

L5. Associated Resources:
None

L4e. Sketch of Cross-Section **Facing:**

L6. Setting:
Low fan terrace in an agricultural setting.

L7. Integrity Considerations:
Road maintains integrity of setting, location, feeling, association, design and workmanship.

L8b. Description of Photo, Map, or Drawing

L9. Remarks:

L10. Form Prepared by:

D. Stapleton
Natural Investigations Inc.
3104 O Street
Sacramento, CA 95816

L11. Date: 03-26-24

*Recorded by: L. Harrington *Date: 04/04/2024 ■Continuation ☐Update

Eligibility Evaluation

While NIC-2024-JackTone-03may be of general local interest, it maintains none it its original integrity. NIC-2024-JackTone-03 is not associated with any known historic events or personalities. The road has been redesigned and compromised so that any potential noteworthy engineering and construction methods (size and length, presence of distinctive engineering features, structural integrity) are undetermined. The resource has been adequately recorded and will not be impacted by the current project.

In summary, NIC-2024-JackTone-03 does not retain integrity or visual linkage to the historic settlement pattern of the area and does not meet the necessary criterion and is not eligible for inclusion in the NRHP or the CRHR.

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

LOCATION MAP

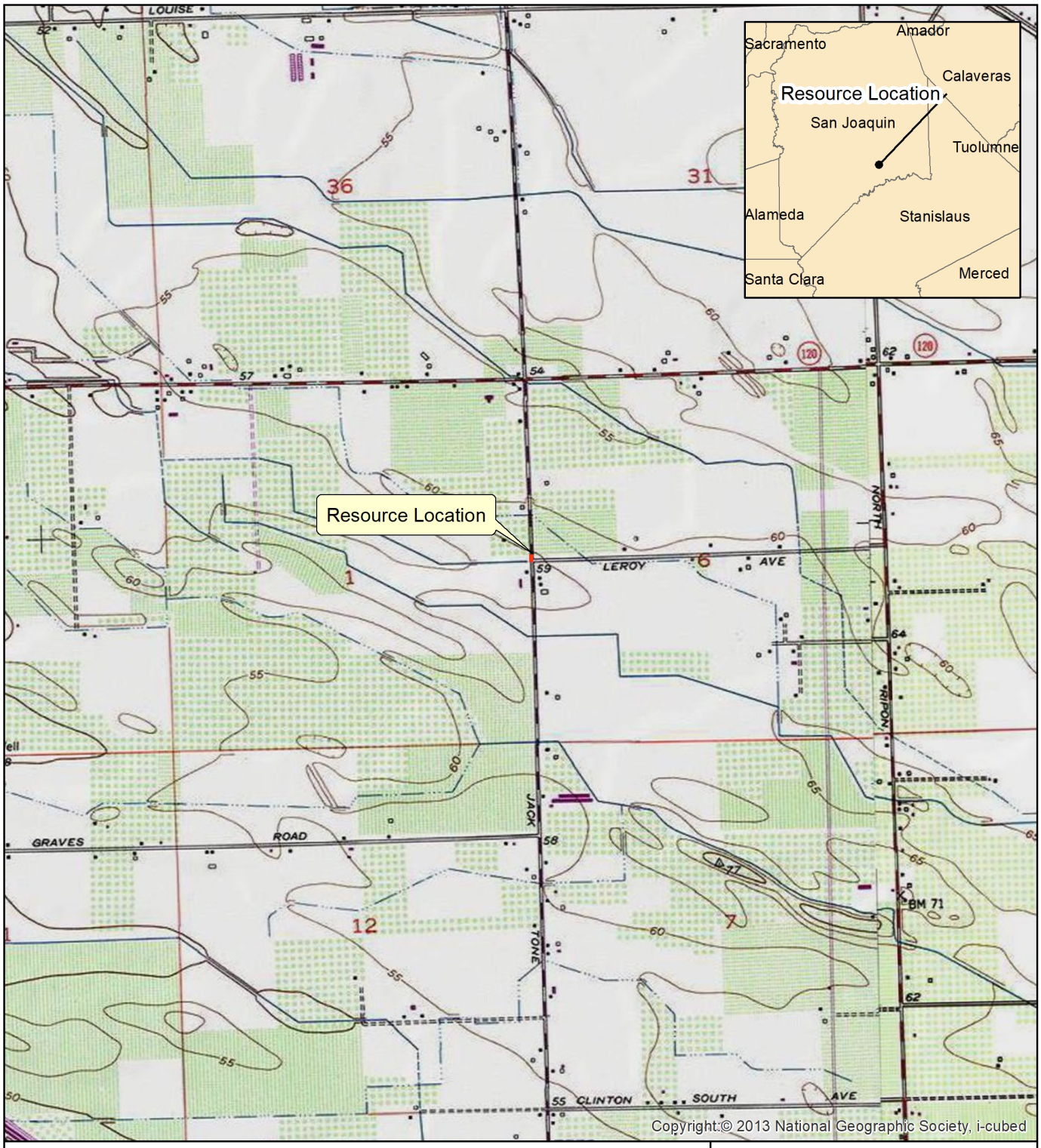
Primary #
HRI #
Trinomial #

***Resource Name or #:** NIC-2024-Jack Tone-03

***Map Name:** Manteca

***Scale:** 1:24,000

***Date of Map:** 1952, PR 1987, MR 1994



***Required information**

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 _____

Page 1 **of** 4 ***Resource Name or #:** NIC-2024-Jack Tone-04

P1. Other Identifier: Graves Road

***P2. Location:** ☐ **Not for Publication** ■ **Unrestricted** ***a. County** San Joaquin

***b. USGS 7.5' Quad** Manteca **Date** 1952 PR1987 **T** 1S ; **R** 7E ; ¼ **of** ¼ **of Sec** 12 ; MD **B.M.**

c. Address City Zip

d. UTM: Zone 10S 663479 mE/ 4184987 mN Intersection of Jack Tone Rd and Graves Rd
Zone mE/ mN

e. Other Locational Data:

***P3a. Description:**

This is the intersection segment of Graves Road and Jack Tone Road in the county of San Joaquin. Graves Road first appears on the 7.5' USGS 1914 topographic map. Graves Road is a two lane, paved county road that trends east-west. The road is maintained by the County of San Joaquin and is in active use.

***P3b. Resource Attributes:** AH7. Roads/trails/railroad grades

***P4. Resources Present:** ☐ Building ☐ Structure ☐ Object ■ Site ☐ District ☐ Element of District ☐ Other (Isolates, etc.)

***P5b. Description of Photo:**
Overview of the intersection of Graves Ave and Jack Tone Road. View east.

***P6. Date Constructed/Age and Source**
■ Historic ☐ Prehistoric ☐ Both
c.1914 1914 Manteca USGS topographic map

***P7. Owner and Address:**
Department of Public Works Road and Traffic Maintenance 1810 E. Hazelton Ave Stockton, CA 95205

***P8. Recorded by:**
D. Stapleton
Natural Investigations Inc.
3104 O Street
Sacramento, CA 95816

***P9. Date Recorded:** 03-25-24

***P10.Survey Type:**
intensive pedestrian

***P11. Report Citation**:
Natural Investigations
2024 (April) Cultural and Paleontology Resources Investigations for the Jack Tone Pipeline Project, San Joaquine 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):

State of California — The Resources Agency Primary #
DEPARTMENT OF PARKS AND RECREATION HRI #
LINEAR FEATURE RECORD Trinomial

 Resource Name or #: NIC-2024-Jack Tone-04

L1. Historic and/or Common Name: Graves Road
L2a. Portion Described: ☐ Entire Resource ■ Segment ☐ Point Observation **Designation:**
b. Location of point or segment:

10S 663534 mE/4182968 mN

L3. Description:
This is the intersection of Graves Road and Jack Tone Road.

L4. Dimensions:

a. Top Width: 20 feet
b. Bottom Width: n/a
c. Height or Depth: n/a
d. Length of Segment: 40 feet

L5. Associated Resources:
None

L4e. Sketch of Cross-Section **Facing:**

L6. Setting:
Low fan terrace in an agricultural setting.

L7. Integrity Considerations:
Road maintains integrity of setting, location, feeling, association, design and workmanship.

L8b. Description of Photo, Map, or Drawing

L9. Remarks:

L10. Form Prepared by:

D. Stapleton
Natural Investigations Inc.
3104 O Street
Sacramento, CA 95816

L11. Date: 03-26-24

*Recorded by: L. Harrington *Date: 04/04/2024 ■Continuation □Update

Eligibility Evaluation

While NIC-2024-JackTone-04may be of general local interest, it maintains none it its original integrity. NIC-2024-JackTone-04 is not associated with any known historic events or personalities. The road has been redesigned and compromised so that any potential noteworthy engineering and construction methods (size and length, presence of distinctive engineering features, structural integrity) are undetermined. The resource has been adequately recorded and will not be impacted by the current project.

In summary, NIC-2024-JackTone-04 does not retain integrity or visual linkage to the historic settlement pattern of the area and does not meet the necessary criterion and is not eligible for inclusion in the NRHP or the CRHR.

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

LOCATION MAP

Primary #
HRI #
Trinomial #

Page 4 **of** 4 ***Resource Name or #:** NIC-2024-Jack Tone-04

***Map Name:** Manteca ***Scale:** 1:24,000 ***Date of Map:** 1952, PR 1987, MR 1994

Manteca 1952 Quadrangle Photorevised 1987 Minor Revision 1994:Township 2S, Range 7E, Section 12
Manteca 1952 Quadrangle Photorevised 1987 Minor Revision 1994:Township 2S, Range 8E, Section 7

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 _____

Page 1 **of** 4 ***Resource Name or #:** NIC-2024-Jack Tone-05
P1. Other Identifier: Van Wyk Road
***P2. Location:** ☐ **Not for Publication** ■ **Unrestricted** ***a. County** San Joaquin
***b. USGS 7.5' Quad** Manteca **Date** 1952 PR1987 **T** 1S ; **R** 7E ; ¼ **of** ¼ **of Sec** 12 ; MD **B.M.**
c. Address City Zip
d. UTM: Zone 10S 663560 mE/ 4182140 mN Intersection of Jack Tone Rd and Van Wyk Rd,
Zone mE/ mN
e. Other Locational Data:

***P3a. Description:**

This is the intersection segment of Van Wyk Road and Jack Tone Road in the county of San Joaquin. Van Wyk Road first appears on the 7.5' USGS 1914 topographic map. Van Wyk Road is a single lane, paved county road that trends east-west. The road is labeled as a private driveway. The road is maintained by the County of San Joaquin and is in active use.

***P3b. Resource Attributes:** AH7. Roads/trails/railroad grades

***P4. Resources Present:** ☐ Building ☐ Structure ☐ Object ■ Site ☐ District ☐ Element of District ☐ Other (Isolates, etc.)

***P5b. Description of Photo:**
Overview of the intersection of Van Wyk Road and Jack Tone Road. View west.

***P6. Date Constructed/Age and Source**
■ Historic ☐ Prehistoric ☐ Both
c.1914 1914 Manteca USGS topographic map

***P7. Owner and Address:**
Department of Public Works Road and Traffic Maintenance 1810 E. Hazelton Ave Stockton, CA 95205

***P8. Recorded by:**
D. Stapleton
Natural Investigations Inc.
3104 O Street
Sacramento, CA 95816

***P9. Date Recorded:** 03-25-24

***P10.Survey Type:**
intensive pedestrian

***P11. Report Citation**:
Natural Investigations
2024 (April) Cultural and Paleontology Resources Investigations for the Jack Tone Pipeline Project, San Joaquine 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):

State of California — The Resources Agency Primary #
DEPARTMENT OF PARKS AND RECREATION HRI #
LINEAR FEATURE RECORD Trinomial

 Resource Name or #: NIC-2024-Jack Tone-05

L1. Historic and/or Common Name: Van Wyk Road
L2a. Portion Described: ☐ Entire Resource ■ Segment ☐ Point Observation **Designation:**
b. Location of point or segment:

10S 663560 mE/ 4182140 mN

L3. Description:
This is the intersection of Van Wyk Road and Jack Tone Road.

L4. Dimensions:

a. Top Width: 12 feet
b. Bottom Width: n/a
c. Height or Depth: n/a
d. Length of Segment: 20 feet

L4e. Sketch of Cross-Section **Facing:**

L5. Associated Resources:
None

L6. Setting:
Low fan terrace in an agricultural setting.

L7. Integrity Considerations:
Road maintains integrity of setting, location, feeling, association, design and workmanship.

L8b. Description of Photo, Map, or Drawing

L9. Remarks:

L10. Form Prepared by:

D. Stapleton
Natural Investigations Inc.
3104 O Street
Sacramento, CA 95816

L11. Date: 03-26-24

*Recorded by: L. Harrington *Date: 04/04/2024 ■Continuation □Update

Eligibility Evaluation

While NIC-2024-JackTone-05 may be of general local interest, it maintains none it its original integrity. NIC-2024-JackTone-05 is not associated with any known historic events or personalities. The road has been redesigned and compromised so that any potential noteworthy engineering and construction methods (size and length, presence of distinctive engineering features, structural integrity) are undetermined. The resource has been adequately recorded and will not be impacted by the current project.

In summary, NIC-2024-JackTone-05 does not retain integrity or visual linkage to the historic settlement pattern of the area and does not meet the necessary criterion and is not eligible for inclusion in the NRHP or the CRHR.

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

LOCATION MAP

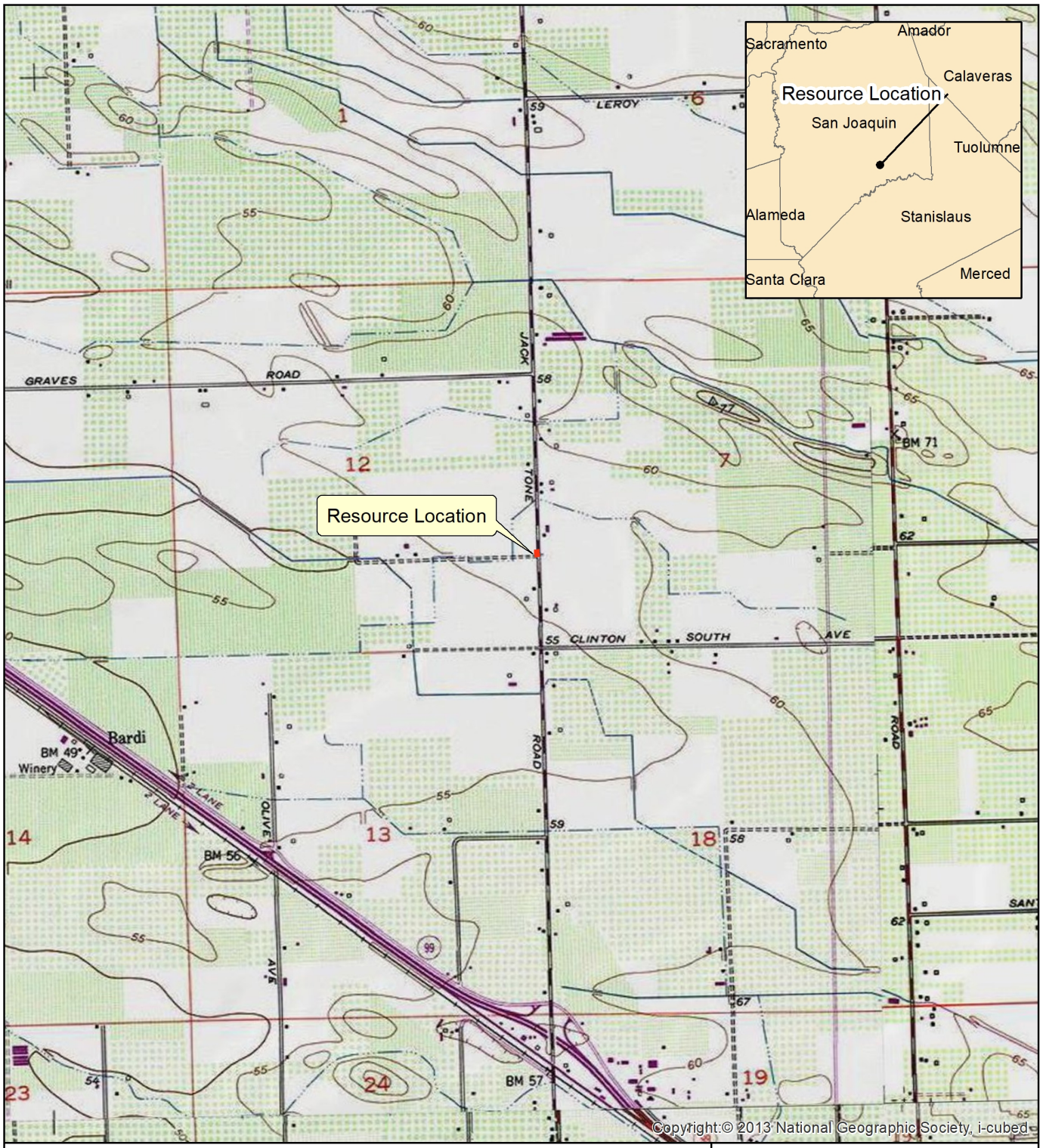
Primary #
HRI #
Trinomial #

***Resource Name or #:** NIC-2024-Jack Tone-05

***Map Name:** Manteca

***Scale:** 1:24,000

***Date of Map:** 1952, PR 1987, MR 1994



***Required information**

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 _____

Page 1 **of** 4 ***Resource Name or #:** NIC-2024-Jack Tone-06
P1. Other Identifier: Clinton South Ave
***P2. Location:** ☐ **Not for Publication** ■ **Unrestricted** ***a. County** San Joaquin
***b. USGS 7.5' Quad** Manteca **Date** 1952 PR1987 **T** 1S ; **R** 8E ; ¼ **of** ¼ **of Sec** ; MD **B.M.**
c. Address City Zip
d. UTM: Zone 10S 663589 mE/ 4181759 mN Intersection of Jack Tone Rd and Clinton South Ave.
Zone mE/ mN
e. Other Locational Data:

***P3a. Description:**

This is the intersection segment of Clinton South Ave and Jack Tone Road in the county of San Joaquin. Clinton South Ave first appears on the 7.5' USGS 1914 topographic map. River Road is a two lane, paved county road that trends east-west. The road is maintained by the County of San Joaquin and is in active use.

***P3b. Resource Attributes:** AH7. Roads/trails/railroad grades
***P4. Resources Present:** ☐ Building ☐ Structure ☐ Object ■ Site ☐ District ☐ Element of District ☐ Other (Isolates, etc.)

***P5b. Description of Photo:**
Overview of the intersection of Clinton South Ave and Jack Tone Road. View east.

***P6. Date Constructed/Age and Source**
■ Historic ☐ Prehistoric ☐ Both
c.1914 1914 Manteca USGS topographic map

***P7. Owner and Address:**
Department of Public Works Road and Traffic Maintenance 1810 E. Hazelton Ave Stockton, CA 95205

***P8. Recorded by:**
D. Stapleton
Natural Investigations Inc.
3104 O Street
Sacramento, CA 95816

***P9. Date Recorded:** 03-25-24

***P10.Survey Type:**
intensive pedestrian

***P11. Report Citation**:
Natural Investigations
2024 (April) Cultural and Paleontology Resources Investigations for the Jack Tone Pipeline Project, San Joaquine 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):

State of California — The Resources Agency Primary #
DEPARTMENT OF PARKS AND RECREATION HRI #
LINEAR FEATURE RECORD Trinomial

 Resource Name or #: NIC-2024-Jack Tone-06

L1. Historic and/or Common Name: Clinton South Ave
L2a. Portion Described: ☐ Entire Resource ■ Segment ☐ Point Observation **Designation:**
b. Location of point or segment:

10S 663589 mE/ 4181759 mN

L3. Description:
This is the intersection of Clinton South Ave and Jack Tone Road.

L4. Dimensions:

a. Top Width: 20 feet
b. Bottom Width: n/a
c. Height or Depth: n/a
d. Length of Segment: 40 feet

L4e. Sketch of Cross-Section **Facing:**

L5. Associated Resources:
None

L6. Setting:
Low fan terrace in an agricultural setting.

L7. Integrity Considerations:
Road maintains integrity of setting, location, feeling, association, design and workmanship.

L8b. Description of Photo, Map, or Drawing

L9. Remarks:

L10. Form Prepared by:

D. Stapleton
Natural Investigations Inc.
3104 O Street
Sacramento, CA 95816

L11. Date: 03-26-24

*Recorded by: L. Harrington *Date: 04/04/2024 ■Continuation □Update

Eligibility Evaluation

While NIC-2024-JackTone-06 may be of general local interest, it maintains none it its original integrity. NIC-2024-JackTone-06 is not associated with any known historic events or personalities. The road has been redesigned and compromised so that any potential noteworthy engineering and construction methods (size and length, presence of distinctive engineering features, structural integrity) are undetermined. The resource has been adequately recorded and will not be impacted by the current project.

In summary, NIC-2024-JackTone-06 does not retain integrity or visual linkage to the historic settlement pattern of the area and does not meet the necessary criterion and is not eligible for inclusion in the NRHP or the CRHR.

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

LOCATION MAP

Primary #
HRI #
Trinomial #

***Resource Name or #:** NIC-2024-Jack Tone-06

***Map Name:** Manteca

***Scale:** 1:24,000

***Date of Map:** 1952, PR 1987, MR 1994

NIC-2024-Jack Tone-06

0 0.5 1 Kilometers

0 0.5 1 Miles

Manteca 1952 Quadrangle Photorevised 1987 Minor Revision 1994:Township 2S, Range 7E, Section 12,13
Manteca 1952 Quadrangle Photorevised 1987 Minor Revision 1994:Township 2S, Range 8E, Section 7,8

1:24,000

NIC-2024-Jack Tone-06
Resource Location Map

NATURAL INVESTIGATIONS COMPANY

***Required information**

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 _____

Page 1 **of** 5 ***Resource Name or #:** NIC-2024-Jack Tone-07

P1. Other Identifier: Jack Tone Road

***P2. Location:** ☐ **Not for Publication** ■ **Unrestricted** ***a. County** San Joaquin

***b. USGS 7.5' Quad** Manteca **Date** 1952 PR1987 **T** 1S ; **R** 7/8E ; ¼ **of** ¼ **of Sec** ; MD **B.M.**

c. Address City Zip Sec: 25, 30, 36, 31, 1, 6, 12, 7, 13, 18

d. UTM: Zone 10S 663313 mE/ 4188208 mN north end
Zone 10S 663608 mE/ 4180956 mN south end

e. Other Locational Data:

***P3a. Description:**

This is a 4.5 mile segment of Jack Tone Road in the county of San Joaquin between French Camp Road to the north and East River Road to the south. Jack Tone Road first appears on the 7.5' USGS 1914 topographic map. Jack Tone Road is a two lane, paved secondary highway that trends north-south. The road is maintained by the County of San Joaquin and is in active use.

***P3b. Resource Attributes:** AH7. Roads/trails/railroad grades

***P4. Resources Present:** ☐ Building ☐ Structure ☐ Object ■ Site ☐ District ☐ Element of District ☐ Other (Isolates, etc.)

***P5b. Description of Photo:**
Overview of Jack Tone Road. View north.

***P6. Date Constructed/Age and Source**
■ Historic ☐ Prehistoric ☐ Both
c.1914 1914 Manteca USGS topographic map

***P7. Owner and Address:**
Department of Public Works Road and Traffic Maintenance 1810 E. Hazelton Ave Stockton, CA 95205

***P8. Recorded by:**
D. Stapleton
Natural Investigations Inc.
3104 O Street
Sacramento, CA 95816

***P9. Date Recorded:** 03-25-24

***P10.Survey Type:**
intensive pedestrian

***P11. Report Citation**:
Natural Investigations
2024 (April) Cultural and Paleontology Resources Investigations for the Jack Tone Pipeline Project, San Joaquine 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):

State of California — The Resources Agency Primary #
DEPARTMENT OF PARKS AND RECREATION HRI #
LINEAR FEATURE RECORD Trinomial

 Resource Name or #: NIC-2024-Jack Tone-07

L1. Historic and/or Common Name: Jack Tone Road
L2a. Portion Described: ☐ Entire Resource ■ Segment ☐ Point Observation **Designation:**
b. Location of point or segment:

10S 663313 mE/ 4188208 mN: North end
10S 663608 mE/ 4180956 mN: South end

L3. Description:
This is a 4.5 mile long segment of the secondary highway Jack Tone Road. The road is a paved, two lane secondary highway trending north-south. There are no paved shoulders along this route and the route goes through an active agricultural area with a mixture of private residences, orchards, agricultural fields and cross roads.

L4. Dimensions:

a. Top Width: 30 feet
b. Bottom Width: n/a
c. Height or Depth: n/a
d. Length of Segment: 4.5 miles

L5. Associated Resources:
None

L4e. Sketch of Cross-Section **Facing:**

L6. Setting:
Low fan terrace in an agricultural setting.

L7. Integrity Considerations:
Road maintains integrity of setting, location, feeling, association, design and workmanship.

L8b. Description of Photo, Map, or Drawing

L9. Remarks:

L10. Form Prepared by:

D. Stapleton
Natural Investigations Inc.
3104 O Street
Sacramento, CA 95816

L11. Date: 03-26-24

*Recorded by: L. Harrington *Date: 04/04/2024 ■Continuation □Update

Eligibility Evaluation

While NIC-2024-JackTone-07 may be of general local interest, it maintains none it its original integrity. NIC-2024-JackTone-07 is not associated with any known historic events or personalities. The road has been redesigned and compromised so that any potential noteworthy engineering and construction methods (size and length, presence of distinctive engineering features, structural integrity) are undetermined. The resource has been adequately recorded and will not be impacted by the current project.

In summary, NIC-2024-JackTone-07 does not retain integrity or visual linkage to the historic settlement pattern of the area and does not meet the necessary criterion and is not eligible for inclusion in the NRHP or the CRHR.

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

LOCATION MAP

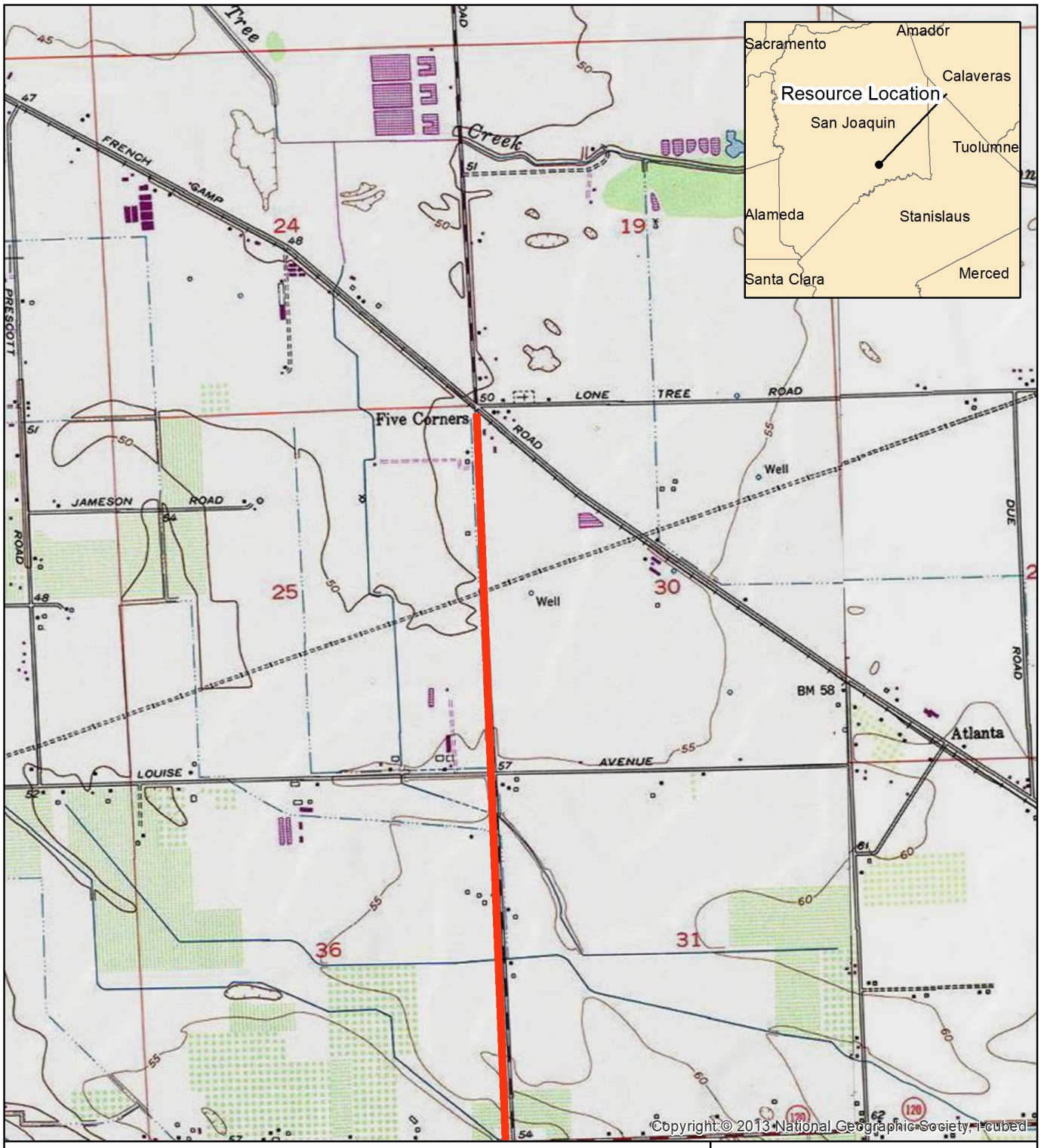
Primary #
HRI #
Trinomial #

***Resource Name or #:** NIC-2024-Jack Tone-07

***Map Name:** Manteca

***Scale:** 1:24,000

***Date of Map:** 1952, PR 1987, MR 1994



Manteca 1952 Quadrangle Photorevised 1987 Minor Revision 1994:Township 1S, Range 7E, Section 25,36
Manteca 1952 Quadrangle Photorevised 1987 Minor Revision 1994:Township 1S, Range 8E, Section 30,31

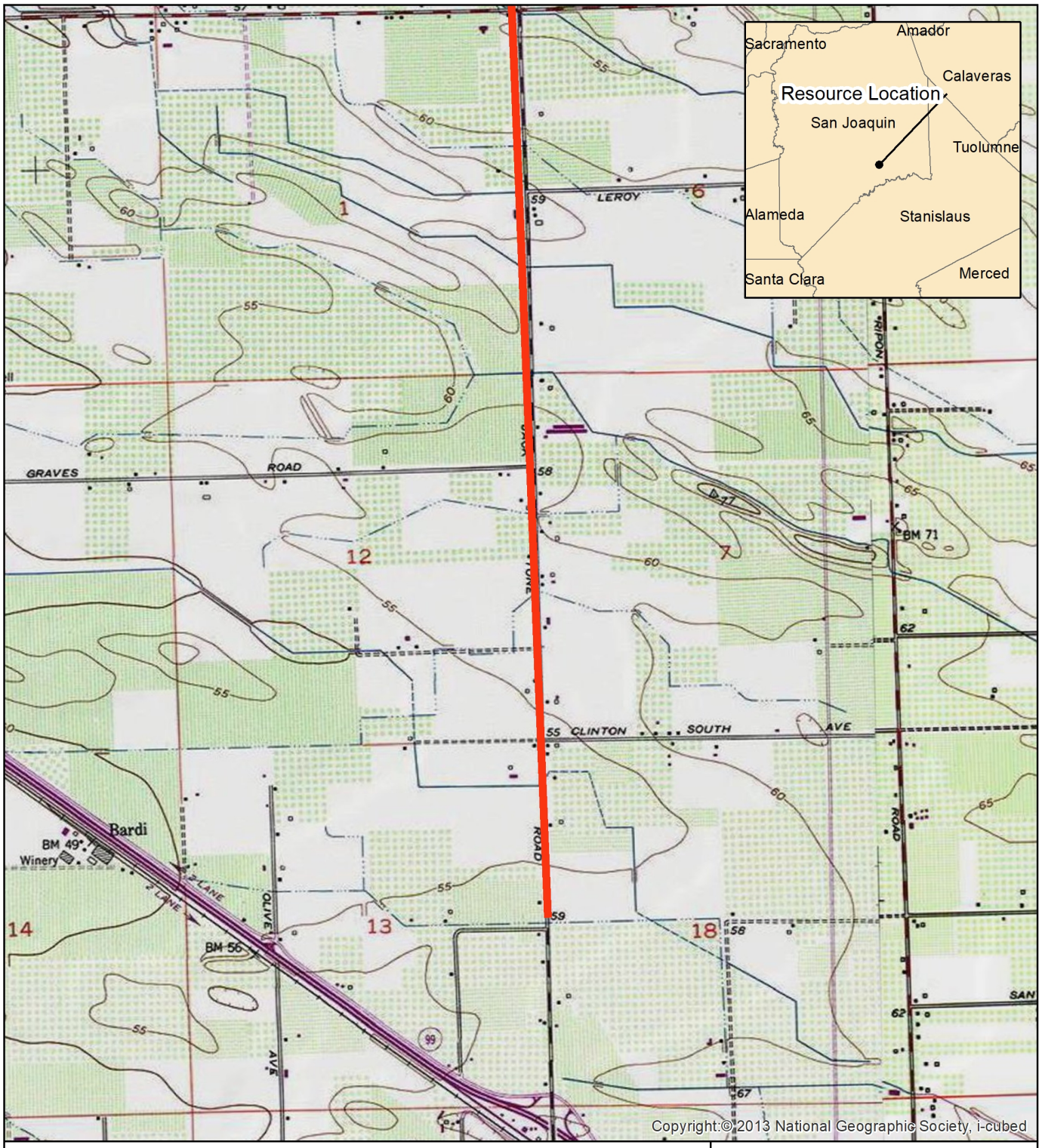
State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

LOCATION MAP

Primary #
HRI #
Trinomial #

Page 5 **of** 5 ***Resource Name or #:** NIC-2024-Jack Tone-07

***Map Name:** Manteca ***Scale:** 1:24,000 ***Date of Map:** 1952, PR 1987, MR 1994



NIC-2024-Jack Tone-07
Resource Location Map 2 of 2

NATURAL INVESTIGATIONS COMPANY

State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
CONTINUATION SHEET

Primary # P-39-000095
HRI #
Trinomial

Page 1 **of** 1 ***Resource Name or #** Canal T

☐ Continuation ■ Site Update

***Originally Recorded By:** Hatoff, Brian, et al. ***Date:** 1993

1. Impacts Observed Since Site Formation/Use:
☐ Constructed trail ☐ Wildlife path ☐ Grading ☐ Recreational Use by Humans (campfire ring, etc.) ☐ Fire
☐ Erosion ☐ Vandalism/Pothunting/Artifact Collection ☐ New vegetation growth ☐ Modern trash deposits
☐ Fire break ☐ Construction ☐ Vegetation removal ■ None ☐ Other (explain)

2. Is the site location narrative accurate?
■ Yes ☐No (explain)

3. Is the site description narrative accurate?
■ Yes ☐ No (explain)

4. Were new photos taken?
■Yes (attach Photograph Record or insert below) ☐ No (explain)

5. Date of Site Revisit:

6. Revisited by: Natural Investigations Company 3104 O Street Sacramento, CA 95816

7. Reason for Revisit:
☐ Collect GPS data/Impact Mapping ■ Change in project area conditions ☐Evaluation of Eligibility ☐Other (explain)

8. Report Citation:

CULTURAL AND PALEONTOLOGICAL RESOURCES INVESTIGATIONS FOR THE JACK TONE PIPELINE PROJECT, SAN JOAQUIN COUNTY, CALIFORNIA. NIC (April 2024)

9. Were UTM coordinates gathered? Location data obtained from aerial photography and USGS quadrangle maps.
UTMs: ■ Yes ☐ No Aerial Photography: ☐ Yes ■ No USGS Quadrangle Maps: ■ Yes ☐ No

10. Remarks:

This resource is Canal T of the South San Joaquin Irrigation District. It is a concrete-lined canal nearly uniform in its geometry and scale measuring approximately 22 feet across. The canal crosses under Jack Tone Road, approximately 0.6 miles south of Leroy Avenue. It was originally recorded by JRP Historical Consulting Services in 1993. The canal is an active irrigation canal for the agriculture fields in the area and is actively maintained.

P-39-000095 was recorded and evaluated by Hatoff, Brian, et al.1993 and was not considered eligible for listing on the National Register of Historic Places. According to Hatoff, “This portion of Canal T is effectively a post-World War II piece of engineering and retains no integrity or visual link to the pioneering settlement pattern in the South San Joaquin Irrigation District”. This segment of the Canal continues to serve as a modern, upgraded (concrete) irrigation feature. The resource has been adequately recorded and no other mitigation measures are required.

11. Photograph:

Photograph 1. Overview of canal crossing Jack Tone Road. View west.

State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
CONTINUATION SHEET

Primary # P-39-000096
HRI #
Trinomial

 ***Resource Name or #** Canal R

☐ Continuation ■ Site Update

***Originally Recorded By:** Hatoff, Brian, et al. ***Date:** 1993

1. Impacts Observed Since Site Formation/Use:
☐ Constructed trail ☐ Wildlife path ☐ Grading ☐ Recreational Use by Humans (campfire ring, etc.) ☐ Fire
☐ Erosion ☐ Vandalism/Pothunting/Artifact Collection ☐ New vegetation growth ☐ Modern trash deposits
☐ Fire break ☐ Construction ☐ Vegetation removal ■ None ☐ Other (explain)

2. Is the site location narrative accurate?
■ Yes ☐No (explain)

3. Is the site description narrative accurate?
■ Yes ☐ No (explain)

4. Were new photos taken?
■Yes (attach Photograph Record or insert below) ☐ No (explain)

5. Date of Site Revisit:

6. Revisited by: Natural Investigations Company 3104 O Street Sacramento, CA 95816

7. Reason for Revisit:
☐ Collect GPS data/Impact Mapping ■ Change in project area conditions ☐Evaluation of Eligibility ☐Other (explain)

8. Report Citation:

CULTURAL AND PALEONTOLOGICAL RESOURCES INVESTIGATIONS FOR THE JACK TONE PIPELINE PROJECT, SAN JOAQUIN COUNTY, CALIFORNIA. NIC (April 2024)

9. Were UTM coordinates gathered? Location data obtained from aerial photography and USGS quadrangle maps.
UTMs: ■ Yes ☐ No Aerial Photography: ☐ Yes ■ No USGS Quadrangle Maps: ■ Yes ☐ No

10. Remarks:

This resource is Canal R of the South San Joaquin Irrigation District. It is a concrete-lined canal nearly uniform in its geometry and scale measuring approximately 19 feet across. The canal crosses under Jack Tone Road, approximately 0.3 miles south of Highway 120 (Yosemite Avenue) and 100 yards north of Leroy Avenue. It was originally recorded by JRP Historical Consulting Services in 1993. The canal is an active irrigation canal for the agriculture fields in the area and is actively maintained.

P-39-000096 was recorded and evaluated by Hatoff, Brian, et al.1993 and was not considered eligible for listing on the National Register of Historic Places. According to Hatoff, “This portion of Canal T is effectively a post-World War II piece of engineering and retains no integrity or visual link to the pioneering settlement pattern in the South San Joaquin Irrigation District”. This segment of the Canal continues to serve as a modern, upgraded (concrete) irrigation feature. The resource has been adequately recorded and no other mitigation measures are required.

11. Photograph:

Photograph 1. Overview of canal crossing Jack Tone Road. View west.

*Required information