



Keyes Road at Turlock Irrigation District Ceres Main Canal Bridge Replacement Project

Initial Study – Mitigated Negative Declaration

prepared by

Stanislaus County
Department of Public Works
1716 Morgan Road
Modesto, California 95358
Contact: Paul Saini

prepared with the assistance of

Rincon Consultants, Inc.
7080 North Whitney Avenue, Suite 101
Fresno, California 93720

July 2019



RINCON CONSULTANTS, INC.
Environmental Scientists | Planners | Engineers
rinconconsultants.com

Keyes Road at Turlock Irrigation District Ceres Main Canal Bridge Replacement Project

Initial Study – Mitigated Negative Declaration

prepared by

Stanislaus County
Department of Public Works
1716 Morgan Road
Modesto, California 95358
Contact: Paul Saini

prepared with the assistance of

Rincon Consultants, Inc.
7080 North Whitney Avenue, Suite 101
Fresno, California 93720

July 2019



RINCON CONSULTANTS, INC.

Environmental Scientists | Planners | Engineers
rinconconsultants.com

This report prepared on 50% recycled paper with 50% post-consumer content.

Table of Contents

Initial Study	1
1. Project Title	1
2. Lead Agency Name and Address.....	1
3. Contact Person and Phone Number	1
4. Project Location	1
5. Project Sponsor's Name and Address	1
6. General Plan Designation.....	1
7. Zoning.....	1
8. Description of Project	4
9. Surrounding Land Uses and Setting	5
10. Other Public Agencies Whose Approval is Required	5
11. Have California Native American Tribes Traditionally and Culturally Affiliated with the Project Area Requested Consultation Pursuant to Public Resources Code Section 21080.3.1?	5
Environmental Factors Potentially Affected.....	7
Determination	7
Environmental Checklist	9
1 Aesthetics.....	9
2 Agriculture and Forestry Resources.....	11
3 Air Quality	14
4 Biological Resources.....	19
5 Cultural Resources	26
6 Energy	32
7 Geology and Soils	36
8 Greenhouse Gas Emissions	40
9 Hazards and Hazardous Materials	44
10 Hydrology and Water Quality	48
11 Land Use and Planning.....	53
12 Mineral Resources	55
13 Noise	57
14 Population and Housing.....	65
15 Public Services.....	66
16 Recreation	69
17 Transportation	71
18 Tribal Cultural Resources	74
19 Utilities and Service Systems	77
20 Wildfire.....	79
21 Mandatory Findings of Significance	81
References	83
Bibliography.....	83

List of Preparers	86
-------------------------	----

Tables

Table 1	Health Effects Associated with Non-Attainment Criteria Pollutants	14
Table 2	SJVAPCD Thresholds of Significance – Criteria Pollutant Emissions	16
Table 3	Estimated Project Construction Emissions	17
Table 4	Previous Cultural Resource Studies within 0.5-mile of the Project Site	27
Table 5	Previously Recorded Cultural Resources within 0.5-mile of the Project Site	28
Table 6	Electricity Consumption in the TID Service Area in 2017.....	32
Table 7	Natural Gas Consumption in PG&E Service Area in 2017	32
Table 8	Estimated Fuel Consumption during Construction.....	33
Table 9	Human Response to Different Levels of Groundborne Vibration.....	59
Table 10	Stanislaus County Land Use Compatibility for Community Noise Environments	59
Table 11	Stanislaus County Code Exterior Noise Level Standards.....	60
Table 12	Stanislaus County Code Cumulative Duration Allowance Standards	61
Table 13	Typical Construction Equipment Noise Levels	62
Table 14	Vibration Levels for Construction Equipment at Noise-Sensitive Receptors.....	63

Figures

Figure 1	Regional Location	2
Figure 2	Project Site Location	3

Appendices

Appendix A	Air Quality and GHG Modelling Worksheets
Appendix B	Biological Resources Assessment
Appendix C	Cultural Resources Technical Memorandum
Appendix D	Phase I Environmental Site Assessment
Appendix E	Assembly Bill 52 Correspondence

Initial Study

1. Project Title

Keyes Road at Turlock Irrigation District Ceres Main Canal Bridge Replacement Project

2. Lead Agency Name and Address

Stanislaus County
Department of Public Works
1716 Morgan Road
Modesto, California 95358

3. Contact Person and Phone Number

Paul Saini, Project Manager
sainip@stancounty.com

4. Project Location

The Keyes Road over Turlock Irrigation District (TID) Ceres Main Canal (Bridge No. 38C-0193) is located in Stanislaus County between Moffett Road and Esmar Road, just west of the Keyes community. Keyes Road is a two-lane road classified as a major collector and is used as an east-west connector in the region with an interchange at State Route 99 (SR-99). Figure 1 shows the location of the project site in its regional context, and Figure 2 shows the project site and the surrounding land uses.

5. Project Sponsor's Name and Address

Stanislaus County
Department of Public Works
1716 Morgan Road
Modesto, California 95358

6. General Plan Designation

Agriculture (Stanislaus County General Plan 2016)

7. Zoning

General Agriculture (A-2-40) (Stanislaus County Code Title 21 Zoning Ordinance)

Figure 1 Regional Location



★ Project Location

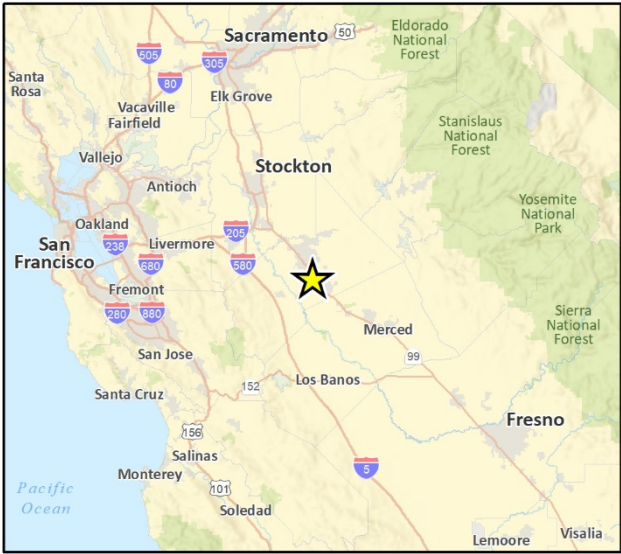


Fig 1. Regional Location

Figure 2 Project Site Location



8. Description of Project

Project Background

The existing Keyes Road Bridge (Bridge No. 38C-0193) was constructed in 1920 and supports one vehicle lane in each direction as it crosses the TID Ceres Main Canal. The road is classified as a major collector and is used as an east-west connector in the region with an interchange at SR-99. The average daily traffic (ADT) along Keyes Road is 5,270 vehicles per day with approximately 10 percent being truck traffic.

The existing structure spans approximately 23 feet over the concrete lined trapezoidal channel of the Ceres Main Canal and consists of a two-span, cast-in-place reinforced concrete slab supported on reinforced concrete pier walls and diaphragm type abutments founded on spread footings. The bridge is 32 feet wide, accommodating two lanes of traffic and shoulders.

A bridge inspection report conducted in accordance with the Title 23 of the Code of Federal Regulations (Federal Highway Act) and the National Bridge Inspection Standards (NBIS) was completed by the California Department of Transportation (Caltrans) Structure Maintenance and Investigations on October 5, 2016. The inspection found a full width 0.08-inch wide crack in the asphalt concrete approach of Abutment 1. According to the latest Caltrans Bridge Inspection Report (BIR), the existing structure also has concrete delamination, spalled areas, exposed rusted rebar in the soffit, cracking, abrasion, and other damage. The BIR also indicates that the existing bridge is capable of carrying only 50% of current design truck loading. At almost 100 years of age, and at its current state of repair, the existing bridge is beyond its useful life and is proposed by Stanislaus County to be replaced.

Project Purpose and Objectives

The purpose of the Keyes Road at TID Ceres Main Canal Bridge Replacement Project (“proposed project” or “project”) is to correct the structural damage found by the bridge inspection. The replacement bridge would be designed to meet the roadway requirements in the American Association of State Highway and Transportation Officials (AASHTO) Green Book as well as the County’s Standard Specifications and Drawings for a two-lane major collector (rural). Based on coordination with the County, the roadway approaches have been laid out such that additional right-of-way will not be required, and it is noted that the County does not have plans to widen the Keyes Road corridor to four lanes in the future. The proposed project would increase the load limit of the bridge, improve safety for motorists and minimize vehicular accidents. The proposed project would be locally funded with Senate Bill (SB) 1 funds received from the State.

Construction Activities and Schedule

The proposed project would involve the demolition of the current two span, 23-foot, two-lane Keyes Road Bridge over the TID Ceres Main Canal and associated roadway approaches and replacement with a new concrete bridge in the same location. The proposed bridge would have an overall width of approximately 44 feet accommodating two 12-foot-wide lanes, two eight-foot-wide shoulders, and Caltrans standard vehicular barriers. This would result in an increase of approximately four feet on each side of the existing bridge alignment. The new bridge would provide the same number of existing travel lanes as the County does not have plans to widen the Keyes Road corridor.

A concrete box culvert is being proposed for the bridge replacement. A profile grade increase of approximately six inches is anticipated in order to accommodate a box culvert with similar hydraulic

opening to what is existing today. The existing roadway over the bridge does not meet current AASHTO Green Book standards and has an abrupt vertical hump in the roadway at the bridge. To modify the roadway to meet current AASHTO Green Book standards will require minor roadway approach work extending a total length of approximately 900 feet (450 feet in either direction).

Standard concrete barriers on the replacement bridge would be constructed and include fixed, blunt-end objects, shielded using Midwest Guardrail Systems (MGS) or crash cushions. The need for shielding of the bridge barriers may impede access to the existing access roads at the corners of the bridge. Based on coordination with TID, access to all four corners of the project site need to be maintained to allow for TID crew to effectively perform maintenance on the canal. The roadway project engineer has proposed crash cushions at the southwest and northeast corners in order to limit work required to regrade and reroute TID canal access roads as part of the project. It is not anticipated that approach railing on the remaining corners would be required based on Caltrans design criteria. Additionally, canal access roads would be aligned across Keyes Road in order for all TID maintenance staff to access each side of the canal safely with limited interruption from Keyes Road.

The average daily traffic along Keyes Road is 5,270 vehicles per day with approximately 10% consisting of truck traffic (Cornerstone Structural Engineering Group 2019). Keyes Road is primarily used as an east-west connector between lands in the general region of the project site and the SR-99. A detour is proposed to be used during construction in order to close the bridge during construction. The detour would require vehicles to travel north or south on Central Avenue in order to access SR-99.

The anticipated construction time for the Keyes Road bridge replacement is approximately three months. Ceres Main Canal is typically dry in this reach from November to March, and therefore the work would be conducted during this window to avoid water in the canal. Construction is anticipated to occur from November to late January.

9. Surrounding Land Uses and Setting

The project site is located in a rural area just west of the community of Keyes in Stanislaus County. All of the parcels surrounding the site of the proposed bridge replacement are zoned A-2-40 for agricultural uses according to the Stanislaus County Zoning Ordinance, as shown in Figure 2.

10. Other Public Agencies Whose Approval is Required

The proposed project would require a roadway encroachment permit from the Stanislaus County Department of Public Works. Project implementation may also require the County to obtain permits and/or other forms of approval from Federal and State agencies. These agencies may include, but are not limited to, the following:

- Regional Water Quality Control Board – coverage under the General Permit for Discharges with Low Threat to Water Quality (discharge of groundwater to Ceres Main Canal)

11. Have California Native American Tribes Traditionally and Culturally Affiliated with the Project Area

Requested Consultation Pursuant to Public Resources Code Section 21080.3.1?

On June 10, 2019, the County provided the following tribal governments with an AB 52 consultation letter (via certified mail):

- California Valley Miwok Tribe Sheep Rancheria of Me-Wuk Indians
- Northern Valley Yokuts Tribe
- Southern Sierra Miwuk Nation
- Tule River Indian Tribe
- Tuolumne Band of Me-Wuk Indians

Under AB 52, Native American tribes have 30 days to respond and request further project information and request formal consultation. The County did not receive a request for formal consultation under AB 52. Copies of AB 52 correspondence for this project are included in Appendix E.

Environmental Factors Potentially Affected

This project would potentially affect the environmental factors checked below, involving at least one impact that is “Potentially Significant” or “Less than Significant with Mitigation Incorporated” as indicated by the checklist on the following pages.

- | | | |
|---|---|--|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Agriculture and Forestry Resources | <input type="checkbox"/> Air Quality |
| <input checked="" type="checkbox"/> Biological Resources | <input checked="" type="checkbox"/> Cultural Resources | <input type="checkbox"/> Energy |
| <input checked="" type="checkbox"/> Geology/Soils | <input type="checkbox"/> Greenhouse Gas Emissions | <input checked="" type="checkbox"/> Hazards & Hazardous Materials |
| <input checked="" type="checkbox"/> Hydrology/Water Quality | <input type="checkbox"/> Land Use/Planning | <input type="checkbox"/> Mineral Resources |
| <input checked="" type="checkbox"/> Noise | <input type="checkbox"/> Population/Housing | <input type="checkbox"/> Public Services |
| <input type="checkbox"/> Recreation | <input checked="" type="checkbox"/> Transportation | <input checked="" type="checkbox"/> Tribal Cultural Resources |
| <input type="checkbox"/> Utilities/Service Systems | <input type="checkbox"/> Wildfire | <input checked="" type="checkbox"/> Mandatory Findings of Significance |

Determination

Based on 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 to the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- ☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- ☐ I find that the proposed project MAY have a “potentially significant impact” or “less than significant with mitigation incorporated” 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.

Keyes Road at Turlock Irrigation District Ceres Main Canal Bridge Replacement Project

- ☐ I find that although the proposed project could have a significant effect on the environment, because all potential 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.



Signature



Printed Name



Date



Title

Environmental Checklist

1	Aesthetics			
	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

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

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

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

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

A scenic vista is generally defined as an expansive view of highly valued landscape observable from a publicly accessible vantage point. There are no designated scenic vistas or scenic highways in the project area and views of the proposed project are limited to motorists on Keyes Road (Caltrans 2011). The project site is located in an area surrounded by agricultural land and does not have any nearby scenic resources, such as trees, rock outcroppings or historic buildings in the vicinity. The proposed project involves a bridge replacement. The new bridge would be constructed of similar materials (reinforced concrete) and would be similar in size and scale as the existing bridge. The proposed project would not include any features that would obstruct scenic views or vistas. Additionally, the nearest designated State Scenic Highway, Interstate 5 (I-5), is over 15 miles west of

the project site (Caltrans 2011). Distance would obscure the proposed bridge replacement from I-5. Consequently, impacts to scenic vistas and scenic resources would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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

Construction of the proposed project would involve some initial vegetation removal and periodic heavy equipment activity that may result in short-term degradation of visual quality (associated with exposed soils, stockpiles, and construction materials) of views from Keyes Road. However, the post-construction visual contrast would diminish quickly as the affected areas would be restored to their pre-construction conditions. The proposed bridge would be constructed in the same location as the existing bridge over the TID Main Ceres Canal and would be constructed of similar materials. The proposed project would be similar in visual character to the existing roadway and would not substantially change the visual character or quality of public views of the site and its surroundings. Impacts would be minimal and temporary in nature as the site would be improved following the completion of construction. Therefore, impacts on visual character and quality would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- d. *Would the project create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?*

The proposed project does not include the installation of any lighting fixtures or use of shiny or reflective materials. Project-related construction activities may require occasional night lighting. Such lighting would be located relatively close to the bridge and focused on work activities. There are no residences or other light-sensitive receptors adjacent to or near the project site that would be affected by lighting during construction. No impact would occur.

NO IMPACT

2 Agriculture and Forestry Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Conflict with existing zoning for agricultural use or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Existing Setting

A search of the California Important Farmland Finder from the California Department of Conservation (DOC 2016) was conducted for the project area and surrounding vicinity. According to the DOC, the entire project site and Area of Potential Effect (APE) is designated as "Prime Farmland" (2016). Prime farmland is defined as farmland with "the best combination of physical and chemical features able to sustain long-term agricultural production."

According to the Stanislaus County General Plan Agricultural Element, agriculture is the leading industry in Stanislaus County generating an annual gross agricultural value in excess of a billion dollars to the local economy. Agricultural land constitutes approximately 85 percent of all land in the county (Stanislaus County 2016).

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

All land in the area surrounding the project site, located within the APE of the proposed project, are designated as prime farmland. These areas may be temporarily impacted during project construction but would not be permanently converted to non-agricultural use. Once construction is complete, the project would not preclude agricultural activities in these areas or adjacent areas. The proposed project would not cause a reduction in agricultural land and would not substantially affect the existing agricultural operation or impair agricultural land productivity in the surrounding areas. No conversion of agricultural land to non-agricultural use would occur. This impact would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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

The California Land Conservation Act ("Williamson Act") was enacted to help preserve agricultural and open space lands via a contract between the property owner and the local jurisdiction. Stanislaus County participates in the Williamson Act program. According to the DOC, the project site is surrounded by parcels with existing Williamson Act contracts and that are zoned for agricultural use. As mentioned above, these areas may be temporarily impacted during project construction due to activities such as equipment staging and heavy machinery operation. However, the surrounding agricultural uses would not be altered, and existing Williamson Act contracts would remain intact. The proposed project would not cause a reduction in land zoned for agricultural use and would not substantially affect the existing agricultural operation or impair agricultural land productivity in the surrounding areas. No conversion of agricultural land to non-agricultural use would occur. This impact would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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

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

The proposed project would not result in the loss of timberland or forest land. There are no forestlands surrounding the project site. There would be no impact.

NO IMPACT

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

The proposed project involves replacing a bridge over the TID Ceres Main Canal in a rural part of Stanislaus County. The proposed project would not place residents near existing farmland and would not induce growth that would necessitate additional schools or housing that may result in the conversion of farmland to non-agricultural uses. Some changes in the existing environment could

occur, including increased noise and dust due to bridge construction. However, these changes would be temporary in nature and would be returned to pre-construction conditions with the completion of the proposed project. These incremental changes would not result in conversion of farmland to non-agricultural use in the long term. Additionally, as mentioned above, there are no forest lands surrounding the project site. Therefore, impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

3 Air Quality

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Air Quality Standards and Attainment

Federal and state standards have been established for six criteria pollutants, including ozone, carbon monoxide (CO), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), particulates less than 10 and 2.5 microns in diameter (PM₁₀ and PM_{2.5}), and lead (Pb).

The project site is located in the San Joaquin Valley Air Basin (the Basin), which is under the jurisdiction of the San Joaquin Valley Air Pollution Control District (SJVAPCD). The SJVAPCD is required to monitor air pollutant levels to ensure that air quality standards are met and, if they are not met, to develop strategies to meet the standards. Depending on whether the standards are met or exceeded, the local air basin is classified as being in “attainment” or “non-attainment.” The Basin is currently in non-attainment for the federal and State 8-hour ozone standards, the State 1-hour ozone standard (severe non-attainment), State and federal PM_{2.5} standards, and the State PM₁₀ standard. The Basin is in attainment or unclassified for all other standards. The SJVAPCD has prepared and adopted a number of Air Quality Management Plans (AQMPs) for ozone (e.g., 2016 Plan for the 2008 8-Hour Standard) and particulate matter (e.g., 2016 Moderate Area Plan for the 2012 PM_{2.5} Standard) (SJVAPCD 2016a; 2016b). The health effects associated with criteria pollutants for which the Basin is in non-attainment are described in Table 1.

Table 1 Health Effects Associated with Non-Attainment Criteria Pollutants

Pollutant	Adverse Effects
Ozone	(1) Short-term exposures: (a) pulmonary function decrements and localized lung edema in humans and animals and (b) risk to public health implied by alterations in pulmonary morphology and host defense in animals; (2) long-term exposures: risk to public health

	implied by altered connective tissue metabolism and altered pulmonary morphology in animals after long-term exposures and pulmonary function decrements in chronically exposed humans; (3) vegetation damage; and (4) property damage.
Inhalable particulate matter (PM ₁₀)	(1) Excess deaths from short-term and long-term exposures; (2) excess seasonal declines in pulmonary function, especially in children; (3) asthma exacerbation and possibly induction; (4) adverse birth outcomes including low birth weight; (5) increased infant mortality; (6) increased respiratory symptoms in children such as cough and bronchitis; and (7) increased hospitalization for both cardiovascular and respiratory disease (including asthma). ^a
Fine Inhalable particulate matter (PM _{2.5})	(1) Excess deaths from short- and long-term exposures; (2) excess seasonal declines in pulmonary function, especially in children; (3) asthma exacerbation and possibly induction; (4) adverse birth outcomes, including low birth weight; (5) increased infant mortality; (6) increased respiratory symptoms in children, such as cough and bronchitis; and (7) increased hospitalization for both cardiovascular and respiratory disease, including asthma. ^a

^a More detailed discussions on the health effects associated with exposure to suspended particulate matter can be found in the following documents: EPA, Air Quality Criteria for Particulate Matter, October 2004.

Source: USEPA 2018

State Regulations

The California Green Building Standards Code (CALGreen Code) (California Code of Regulations, Title 24, Part 11) was adopted by the California Building Standards Commission in 2013 and became effective in January 2014. The Code applies to all new constructed residential, nonresidential, commercial, mixed-use, and State-owned facilities, including schools and hospitals. CALGreen Code is comprised of Mandatory Residential and Nonresidential Measures and more stringent Voluntary Measures (TIERs I and II).

Mandatory Measures are required to be implemented on all new construction projects and consist of a wide array of green measures concerning project site design, water use reduction, improvement of indoor air quality, and conservation of materials and resources. CALGreen Code refers to Title 24, Part 6 compliance with respect to energy efficiency; however, it encourages 15 percent energy use reduction over that required in Part 6. Voluntary Measures are optional, more stringent measures that may be used by jurisdictions to enhance their commitment towards green and sustainable design and achievement of Assembly Bill (AB) 32 goals. Under TIERs I and II, all new construction projects are required to reduce energy consumption by 15 percent and 30 percent, respectively, below the baseline required under the California Energy Commission, as well as implement more stringent green measures than those required by mandatory code.

Local Regulations and Policies

The SJVAPCD is responsible for formulating and implementing the AQMPs for the Basin. The SJVAPCD Air Quality Guidelines for General Plan documents was most recently revised in June 2005. The SJVAPCD published its technical guidance document, *Guidance for Assessing and Mitigating Air Quality Impacts*, for reviewing air quality impacts in the Basin under the California Environmental Quality Act (CEQA) in March 2015. In addition, the SJVAPCD has established a number of regulations to reduce air pollutant emissions from construction of land use projects under Regulation VIII (Fugitive PM₁₀ Prohibitions). The purpose of Regulation VIII is to reduce ambient concentrations of fine particulate matter (PM₁₀) by requiring actions to prevent, reduce or mitigate anthropogenic fugitive dust emissions. Regulation VIII identifies general requirements under Rule 8011, as well as those for construction, demolition excavation, extraction, and other

earthmoving activities (Rule 8021), bulk materials (Rule 8031), carryout and trackout (Rule 8041), open areas (Rule 8051), paved and unpaved roads (Rule 8061), unpaved vehicle/equipment traffic areas (Rule 8071), and agricultural sources (Rule 8081).

Air Quality Thresholds

The SJVAPCD provides guidance for analyzing the significance of a project's air quality impacts in its publication *Guidance for Assessing and Mitigating Air Quality Impacts* (SJVAPCD 2015). The document includes two separate quantitative thresholds; one to analyze criteria pollutant emissions and the other to analyze ambient air quality impacts. Table 2 summarizes these two thresholds. Projects that emit pollutants at levels below SJVAPCD criteria pollutant significance thresholds and the ambient air quality screening threshold would not violate or contribute to a violation of an ambient air quality standard and are considered to have a less than significant individual impact to air quality. In addition, projects with emissions below significance thresholds for criteria pollutants would be determined to "not conflict or obstruct implementation of the District's air quality plan," as stated in section 7.12 of the SJVAPCD's guidance document.

The SJVAPCD also provides guidance on assessing a project's cumulative impacts on air quality. A project would have a considerable contribution to a significant cumulative impact if it exceeds significance thresholds for criteria pollutant emissions. A project would not have a considerable contribution to cumulative impacts if all three of the following conditions are met:

- Project emissions are below significance thresholds for criteria pollutant emissions, and
- Project emissions are below ambient air quality standards, and
- The sum of emissions from the project and other planned and pending projects in the project area do not exceed ambient air quality standards

Table 2 SJVAPCD Thresholds of Significance – Criteria Pollutant Emissions

Pollutant/Precursor	Construction Emissions (tons/year)	Operational Emissions (tons/year)
CO	100	100
Nitrogen Oxides (NO _x)	10	10
Reactive Organic Gases (ROG)	10	10
Sulfur Oxides (SO _x)	27	27
PM ₁₀	15	15
PM _{2.5}	15	15
Ambient Air Quality--Screening Threshold		
Maximum emission of any criteria pollutant		100 pounds/day
Source: SJVAPCD 2015		

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

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

Construction Emissions

Construction of the proposed project would generate temporary emissions from three primary sources: the operation of construction vehicles and equipment (e.g., scrapers, loaders, dump trucks, etc.); ground disturbance during clearing and grading which would release fugitive dust; and the application of asphalt, paint, or other oil-based substances. The amount of daily construction emissions depends on the quantity of equipment used and the length of construction. The extent of fugitive dust (PM_{2.5} and PM₁₀) emissions would also depend upon the following factors: 1) the amount of disturbed soils; 2) the length of disturbance time; 3) whether existing structures are demolished; 4) whether excavation is involved; and 5) whether transporting excavated materials off-site or import of material to a site is necessary. The amount of ROC emissions generated by paints and oil-based substances, such as asphalt, would depend primarily upon the type and amount of material utilized.

Project emissions were estimated using California Emissions Estimator Model (CalEEMod) software version 2016.3.2 using applicant provided information for the types of equipment that would be used onsite during each of the construction phases, as well as the construction timeline. This analysis assumed that construction of each phase would occur until the phase is completed. The following construction phases were modeled: demolition, site preparation, grading, building construction, paving, and architectural coating. Project construction was assumed to last three months beginning in the November of 2019 with an estimated completion date in January of 2020. The architectural coating phase was assumed to overlap with the building construction phase consistent with standard construction practices.

Table 3 Estimated Project Construction Emissions

Pollutant	Annual Criteria Pollutant Emissions (tons/year)	Criteria Pollutant Significance Thresholds (tons/year)	Significant Impact?	Maximum Daily Emissions (pounds/day)	Ambient Air Quality Screening Threshold (pounds/day)	Significant Impact?
ROG	<0.1	10	No	1.7	100	No
NO _x	0.2	10	No	19.7	100	No
CO	0.2	100	No	10.1	100	No
SO _x	<0.1	27	No	<0.1	100	No
PM ₁₀	<0.1	15	No	6.2	100	No
PM _{2.5}	<0.1	15	No	1.5	100	No

See Table 2.1 "Overall Construction-Unmitigated" emissions. CalEEMod worksheets in Appendix A; emission data presented is the highest of winter or summer outputs.

As shown in Table 3, construction emissions would not exceed the SJVAPCD annual criteria pollutant emissions or ambient air quality screening significance thresholds, and construction impacts would be less than significant. However, the SJVAPCD requires control measures for fugitive dust under

SJVAPCD Rule 8021 for any project involving earth-moving activities. With implementation of Rule 8021 dust control measures, temporary construction emissions would be further reduced. The Rule 8021 dust control measures would require several measures such as watering the construction site, vehicle speed limit of 15 miles per hour, covering of stockpiles, track-out controls at project-site access points, and someone designated to monitor dust control. All construction activity would be required to incorporate the SJVAPCD requirements pertaining to minimizing construction-related emissions. Impacts from construction emissions would be less than significant.

Operational Emissions

The proposed project would replace the Keyes Road Bridge over the TID Main Ceres Canal and would be in the same location as the existing bridge. The proposed project would not add capacity; and, therefore, it would not result in an increase in traffic volumes or resulting air emissions following completion of construction. Therefore, the proposed project would not have any long-term air quality impacts.

LESS THAN SIGNIFICANT IMPACT

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

The California Air Resources Board (CARB) defines sensitive receptors in its “Air Quality and Land Use Handbook: A Community Health Perspective” guidance document as vulnerable populations such as children, pregnant women, the elderly, and those with existing health problems (CARB 2005). Sensitive receptors are identified by land uses that are more likely to be used by these vulnerable population groups and include health care facilities, retirement homes, schools and playground facilities, and residential areas. The project site is in a rural part of Stanislaus County and is not located near residential neighborhoods or other sensitive receptors. Additionally, as shown above, emissions from the proposed project would not exceed SJVAPCD significance thresholds. The proposed project is neither a source of toxic air contaminants, as defined in California Air Pollution Control Officers Association’s (CAPCOA) “Health Risk Assessments for Proposed Land Use Projects” guidance document (CAPCOA 2009), nor located in the vicinity of a source of toxic air contaminants, therefore a health risk assessment is not required. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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

Table 6 of SJVAPCD’s 2015 Guidance for Assessing and Mitigating Air Quality Impacts lists land uses associated with odor complaints. The uses in the table include wastewater treatment facilities, sanitary landfills, transfer stations, manufacturing plants, food processing facilities, and dairy operations, as well as other industrial uses. The proposed project involves replacing an existing bridge in a rural area of Stanislaus County. None of the uses identified in the table would occur with the proposed project. The proposed project would not generate objectionable odors affecting a substantial number of people during operation.

During construction activities, heavy equipment and vehicles would emit odors associated with vehicle and engine exhaust and during idling. However, these odors would be temporary and would cease upon completion. Overall, the proposed project would not generate objectionable odors affecting a substantial number of people. This impact would be less than significant.

LESS THAN SIGNIFICANT IMPACT

4 Biological Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

In May 2019, Rincon Consultants, Inc. conducted a Biological Resources Assessment (BRA), including a literature review and field reconnaissance survey to document existing site conditions, the

potential presence of special-status biological resources (including plant and wildlife species), observed plant communities, jurisdictional waters and wetlands, and habitat for nesting birds. The following summarizes the findings of the assessment. The complete BRA is contained in Appendix B of this document.

A BRA study area for the proposed project was defined as containing all the project components or impact areas as outlined in the project description that includes the bridge replacement and staging areas, plus a 100-foot survey buffer. The study area has generally flat topography and is characterized by low-lying agricultural pasture lands, with an approximate elevation of 95 feet above mean sea level.

The study area is completely disturbed and consists of a manmade concrete-lined irrigation canal and almond orchards with dirt access roads bordering the canal. Sparse disturbed vegetation is present at the road margins, but most of the area outside of the orchards is barren land cover, as described by the California Wildlife Habitat Relationships System (California Department of Fish and Wildlife [CDFW] 2019a). Ruderal vegetation identified within the survey area includes Canadian horseweed (*Conyza canadensis*) and cutleaf evening primrose (*Oenothera laciniata*).

The survey area and its surroundings provide habitat for wildlife species that commonly occur in San Joaquin Valley grassland and agricultural habitats. Avian species observed/detected on or adjacent to the site include red-tailed hawk (*Buteo jamaicensis*) and house finch (*Haemorhous mexicanus*).

The study area is located within the Lake Ramona-San Joaquin River Hydrologic Unit Code (HUC), Salado Creek-San Joaquin River watershed (HUC12 number 180400020403). The canal located within the study area, the Ceres Main Canal, is an artificial channel downstream of Main Canal. The Main Canal transports irrigation water from the Turlock Lake to the Ceres Main Canal and throughout the Turlock area. The Ceres Main Canal serves as an interceptor canal for spillage from upper lateral canals within the TID service area (TID 2012). The Ceres Main Canal has no connectivity to other waters of the United States downstream. Other than this agricultural canal, no other wetlands are present in the study area.

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

Special-status species are those plants and animals listed, proposed for listing, or candidates for listing as Threatened or Endangered by the United States Fish and Wildlife Service [USFWS] under the Endangered Species Act (ESA); those listed or candidates for listing as Rare, Threatened, or Endangered under the California Endangered Species Act (CESA) or Native Plant Protection Act; those identified as Fully Protected by the California Fish and Game Code (CFG) (Sections 3511, 4700, 5050, and 5515); those identified as Species of Special Concern (SSC) by the CDFW; and plants occurring on lists 1 and 2 of the California Native Plant Society (CNPS) California Rare Plant Rank (CRPR) system per the following definitions:

- **Rank 1A** = Plants presumed extinct in California;
- **Rank 1B.1** = Rare or endangered in California and elsewhere; seriously endangered in California (over 80% of occurrences threatened/high degree and immediacy of threat);
- **Rank 1B.2** = Rare or endangered in California and elsewhere; fairly endangered in California (20-80% occurrences threatened);

- **Rank 1B.3** = Rare or endangered in California and elsewhere, not very endangered in California (<20% of occurrences threatened, or no current threats known);
- **Rank 2** = Rare, threatened or endangered in California, but more common elsewhere.

Based on a query of the California Natural Diversity Database (CNDDDB), there are 14 special-status plant species documented within the *Ceres*, California USGS 7.5-minute quadrangle and the eight surrounding quadrangles (CDFW 2019b). None of these special-status plant species were detected during the reconnaissance-level field survey. A protocol botanical survey for all species has not been completed, and the reconnaissance survey was conducted outside the bloom period for some of these species and as such, their potential to occur within the study area is based solely on the presence of potential suitable habitat and the proximity to the study area to the CNDDDB documented occurrences. The 14 special-status plant species documented by the database query occur in a variety of habitats such as vernal pools, riparian woodlands and forests, meadows and grasslands. The survey area is completely disturbed and consists of a manmade irrigation canal and agricultural land with dirt access roads bordering the canal. Minimal sparse disturbed or ruderal vegetation is present at the road margins; however, this does not represent suitable habitat for any of the evaluated special-status plant species with potential to occur in the region. Given the existing site conditions and lack of suitable habitat, no special-status plant species are expected to occur within the survey area. No impacts to special-status plant species would occur from implementation of the proposed project.

The database and literature review performed for the project indicated that 20 special-status wildlife species have been documented within the *Ceres* quad and eight surrounding quads, five of which have been documented within five miles of the study area. No federal or state listed, or other special-status wildlife species were observed during the survey. Of the 20 species evaluated only the Swainson's hawk (*Buteo swainsoni*) is considered to have potential to occur on the site.

Swainson's Hawk

Swainson's hawk is a state threatened species with a low potential to nest within 0.5 mile of the project site. In the Central Valley this species breeds in areas containing large expanses of foraging habitat (grasslands, agriculture and other open lands) with scattered trees, riparian areas, other groves or windrows of trees suitably large to support nesting. Suitable foraging areas such as grasslands, or agricultural fields such as fallow fields, alfalfa, low-growing crops such as beet and tomato, and irrigated and dryland pasture, are required adjacent to the nesting habitat.

The literature review identified 40 occurrences of this species within the nine-quad search radius and ten occurrences within five miles of the project site. No Swainson's hawks were observed on or adjacent to the project site during the field visit. The almond orchards surrounding the project site on adjacent parcels represent marginal nesting habitat. Power poles are present within 0.5 mile of the project and may potentially be used for nesting when higher quality nesting habitat is absent, but are generally not preferred by this species, and nesting on standard power poles is uncommon. Open grassland and agricultural fields suitable for foraging are absent from the project site and adjacent areas.

Project activities could directly impact Swainson's hawk nests if activities occur during the nesting season and an active nest is present in the vicinity (within 0.5 mile) of the project. Impacts may occur through increased injury or mortality or disruption of normal adult behaviors resulting in the abandonment or harm to eggs and nestlings. Because this species is state-listed, direct impacts to individuals would be considered significant under CEQA. Direct impacts to this species from project

activities would be considered potentially significant but mitigable through implementation of the mitigation measure BIO-1 outlined below.

Nesting Birds

The study area also contains some suitable nesting habitat for a variety of native avian species common to agricultural fields. Species of birds common to the area that typically utilize agricultural areas for foraging and nesting habitat, such as red-tailed hawk and house finch, were detected during the reconnaissance survey. The orchards and ruderal areas (including barren ground) within and adjacent to the study area could be utilized for nesting by a variety of common birds protected by CFGC Section 3503. The nesting season generally extends from February through August but can vary based upon annual climatic conditions.

If nesting birds are present on-site during construction, direct effects could include injury or mortality from construction activity, or nest abandonment from construction noise, dust, and other project activities. Impacts of this type would not be considered significant for common species; however, they would be in violation of CFGC.

Mitigation Measures

Implementation of the following measures would reduce potential impacts to Swainson's hawk and other nesting birds to less than significant levels:

BIO-1 Swainson's Hawk Pre-Construction Survey and Monitoring

To avoid impacts to nesting Swainson's hawk, all construction activities shall be limited to the time period between September 15 and March 1. If construction activities cannot be completed within this timeframe, a protocol-level survey shall be conducted in accordance with the *Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley* (Swainson's Hawk Technical Advisory Committee 2000). If nesting Swainson's hawks are detected within 0.5 mile of project activities, CDFW shall be consulted regarding the establishment of an avoidance buffer. If construction activities are necessary within the buffer zone, monitoring of the nest site by a qualified biologist will be required. If the biologist determines the nest is abandoned and the nestlings are still alive, the project sponsor shall fund the recovery and hacking (controlled release of captive reared young) of the nestling(s). Construction activities occurring within the 0.5-mile radius of an active nest may require a 2081 Incidental Take Permit from the CDFW if there is the likelihood that construction would cause the failure or abandonment of the nest.

BIO-2 Nesting Bird Impact Pre-Construction Survey and Monitoring

To avoid disturbance of nesting and special status birds, or migratory species protected by Sections 3503, 3503.5, and 3513 of the CFGC, activities related to the project, including, but not limited to, vegetation and/or tree removal shall occur outside of the bird breeding season (February 1 through August 30). If ground disturbance, vegetation removal or heavy equipment work must begin within the breeding season, then a pre-construction nesting bird survey shall be conducted no more than 14 days prior. The nesting bird pre-construction survey shall be conducted within the disturbance footprint and a 300-foot buffer surveyed by binoculars. The survey shall be conducted by a biologist familiar with the identification of avian species known to occur in the region.

If nests are found, an avoidance buffer shall be established by a qualified biologist. The buffer shall be established to ensure nesting activity is not disturbed by construction activity and shall be

determined by the qualified biologist based on the species' known tolerances, the proposed work activity, and existing disturbances associated with land uses outside of the site. The buffer shall be demarcated by the biologist with bright construction fencing, flagging, construction lathe, or other means to mark the boundary. All construction personnel shall be notified as to the existence of the buffer zone and to avoid entering the buffer zone during the nesting season. No ground disturbing activities shall occur within this buffer until the avian biologist has confirmed that breeding/nesting is completed, and the young have fledged the nest, or the nest has become otherwise inactive. Encroachment into the buffer shall occur only at the discretion of the qualified biologist.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

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

Plant communities are also considered sensitive biological resources if they have limited distributions, have high wildlife value, include sensitive species, or are particularly susceptible to disturbance. CDFW ranks sensitive communities as "threatened" or "very threatened" and keeps records of their occurrences in CNDDDB. CNDDDB vegetation alliances are ranked 1 through 5 based on NatureServe's (2010) methodology, with those alliances ranked globally (G) or statewide (S) as 1 through 3 considered sensitive. Some alliances with the rank of 4 and 5 have also been included in the 2018 sensitive natural communities list under CDFW's revised ranking methodology (CDFW 2018).

No native vegetation communities were mapped within the survey area and no sensitive vegetation communities are present. No sensitive natural communities, including riparian habitat, are present within the study area and therefore, no impact would occur.

NO IMPACT

- c. *Would the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?*

The segment of the Ceres Main Canal that runs directly through the project site under the Keyes Road Bridge is a potentially jurisdictional feature. Impacts from development could occur if runoff were allowed to enter the canal. Based on the jurisdictional delineation, the Ceres Main Canal has no hydrologic connection to any navigable or interstate waters and it does not appear to support wildlife. Accordingly, the canal is not under the jurisdiction of the United States Army Corps of Engineers or Regional Water Quality Control Board (RWQCB) jurisdiction pursuant to the Clean Water Act or the CDFW jurisdiction pursuant to the CFGC; however, the canal may be subject to the RWQCB jurisdiction pursuant to the Porter-Cologne Act. If project activities would result in impacts to the bed, banks, and/or or channel of the canal, or deposit any pollutants or material into it, coordination and permitting with RWQCB to obtain a Waste Discharge Requirements (WDRs) permit may be required.

Although the State Water Resources Control Board's (SWRCB) Wetland Definition and Procedures for Discharges of Dredge and Fill Material to Waters of the State are adopted, but not yet implemented, the implementation of these procedures may affect the jurisdiction of the Ceres Main Canal. Under the adopted procedures, the Ceres Main Canal may qualify as an area excluded from the application procedures because the canal is an artificially irrigated area that would revert to dry land should application of water to that area cease (SWRCB 2019). In the event that the procedures

are implemented, the delineation of waters of the state should be reviewed in light of the final adopted language and revised if necessary.

Impacts to the canal have been avoided and minimized through design of the project. Construction of the proposed project would occur during the annual pause in TID conveyance of irrigation water to customers along the canal. Dewatering the construction area would help to minimize the potential for transport of sediments and pollutants from construction activities.

Mitigation Measure BIO-3 requires implementation of avoidance and minimization measures that would avoid direct impacts and reduce indirect impacts to potentially jurisdictional features during and after construction activities.

Mitigation Measure

The following measure would reduce impacts to jurisdictional waters and wetlands to a less than significant level.

BIO-3 Jurisdictional Waters Avoidance and Minimization

Project actions shall be designed to prevent indirect impacts to drainage features within and adjacent to the project site. General project staging, and laydown activities shall not occur within drainages during construction. To avoid unnecessary encroachment into drainages, these features shall be clearly depicted on project plan sets and the limits of these features within the project site shall be marked with highly visible flagging, rope, or similar materials in the field. Silt fencing or other measures will be used to protect these areas from sediment transport or other indirect impacts that could result from adjacent construction

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

- d. *Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?*

Wildlife movement corridors, or habitat linkages, are generally defined as connections between habitat patches that allow for physical and genetic exchange between otherwise isolated animal populations or those populations that are at risk of becoming isolated. Such linkages may serve a local purpose, such as providing a linkage between foraging and denning areas, or they may be regional in nature. Some habitat linkages may serve as migration corridors, wherein animals periodically move away from an area and then subsequently return. Others may be important as dispersal corridors for young animals. A group of habitat linkages in an area can form a wildlife corridor network.

According to the Stanislaus County General Plan Conservation/Open Space Element the eastern and western ends of the county represent important wildlife movement corridors within the region (Stanislaus County 2016). The study area is located just west of the community of Keyes, in the center of the County, and is not located within a significant habitat linkage or corridor. The project site is completely surrounded by agricultural land in orchard production. Therefore, the study area is not considered an important regional wildlife movement area.

No significant wildlife movement corridors or habitat linkages are present in the survey area. Due to the relatively small size of the project footprint, and its location within existing regional agricultural

development, the project is not likely to interfere substantially with the movement of wildlife species. Impacts to wildlife movement would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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

The study area is not within or proximate to any critical habitat or other ecologically sensitive area, as identified by local, regional, state or federal agencies. Furthermore, there are no trees within the study area and therefore, all County ordinances and guidelines protecting trees do not apply. There are no additional local policies or ordinances protecting biological resources that pertain to the proposed project. Therefore, no impact would occur.

NO IMPACT

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

The project site does not occur in an area with an adopted or approved Habitat Conservation Plan or Natural Communities Conservation Plan, or other approved local, regional, or state habitat conservation. No impact would occur.

NO IMPACT

5 Cultural Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

CEQA requires a lead agency determine whether a project may have a significant effect on historical resources (Public Resources Code [PRC], Section 21084.1) and tribal cultural resources (PRC Section 21074 [a][1][A]-[B]). A historical resource is a resource listed in, or determined to be eligible for listing, in the California Register of Historical Resources (CRHR), a resource included in a local register of historical resources, or any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant (State CEQA Guidelines, Section 15064.5[a][1-3]).

A resource shall be considered historically significant if it:

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

In addition, if it can be demonstrated that a project would 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 resources cannot be left undisturbed, mitigation measures are required (PRC, Section 21083.2[a], [b]).

PRC, Section 21083.2(g) defines a unique archaeological resource as 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:

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

A historical resource is one listed in or determined to be eligible for listing in the CRHR, a resource included in a local register of historical resources or any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant (CEQA Guidelines §15064.5[a][1-3]). Section 15064.5(a)(3) also states that a resource shall be considered by the lead agency to be “historically significant” if the resource meets the criteria for listing on the CRHR.

Cultural Resources Investigation

Rincon Consultants prepared a cultural resources technical memorandum for the proposed project in June of 2019; it is included in Appendix C. The purpose of this technical memorandum is to document the results of the tasks performed by Rincon; specifically, a cultural resources records search, Native American outreach, archival research, cultural resources field survey, and resource documentation and evaluation.

On April 30, 2019, Rincon requested a records search of the California Historical Resources Information System (CHRIS) at the Central California Information Center (CCIC) located at California State University, Stanislaus. The purpose of the records search was to identify previously recorded cultural resources, as well as previously conducted cultural resources studies of the project site and a 0.5-mile radius surrounding it. The search also included a review of the National Register of Historic Places (NRHP), the California Register of Historical Resources (CRHR), California Points of Historical Interest list, the California Historical Landmarks list, the Archaeological Determination of Eligibility (ADOE) list, and the California State Historic Resources Inventory.

The CCIC records search identified one previously conducted cultural resources study within a 0.5-mile radius of the project site; this study was conducted on the project site. The study found “no visible surface indications of the presence of archaeological remains” (Chavez 1976). Table 4 provides a summary of the report within the search radius.

Table 4 Previous Cultural Resource Studies within 0.5-mile of the Project Site

Report Number	Author(s)	Year	Title	Relationship to Project Site
ST-00859	D. Chavez	1976	<i>An Archaeological Reconnaissance of the Robert's Ferry Reservoir and Water Extraction and Conveyance Systems, Stanislaus County, California: Phase II</i>	Within

Source: CCIC April 2019; Appendix C

The CCIC records search identified three previously recorded cultural resources within a 0.5-mile radius of the project site. Of these resources, one is located within the project site and a brief description is provided below. The reports associated with these reports were not identified in the records search results. Table 5 provides a summary of the previously recorded cultural resources within the search radius.

Table 5 Previously Recorded Cultural Resources within 0.5-mile of the Project Site

Primary Number	Trinomial	Resource Type	Description	Recorder(s) and Year(s)	NRHP/CRHR Eligibility Status	Relationship to Project Site
P-50-000071	-	Historic Structure (HP20)	Turlock Irrigation District's Upper and Lower Lateral No. 2 ½ (canal)	N. Lawson, 2009; P. Daly, 2009; JRP Historical Consulting, 1993	Unknown	Outside
P-50-000072	-	Historic Structure (HP20)	Turlock Irrigation District's Upper and Lower Lateral No. 3 (canal)	N. Lawson, 2009; JRP Historical Consulting, 1993; Judith Marvin, 2000	Unknown	Outside
P-50-000073	CA-STA-000426/H	Historic Structure (HP20)	Turlock Irrigation District's Water Conveyance Systems: Ceres Main Canal	JRP Historical Consulting, 1993; P. Daly, 2009; M. Patrick, 2016; J. Marvin, 1999, 2009 and 2015; N. Lawson and J. Feldman, 2009	(6Z) Found ineligible for NR, CR or Local designation through survey evaluation	Within

Source: CCIC April 2019; Appendix C

As part of the process of identifying cultural resources for the proposed project, Rincon contacted the Native American Heritage Commission (NAHC) on April 29, 2019 and requested a Sacred Lands File (SLF) search and a list of Native American tribal organizations and individuals who may have knowledge of sensitive cultural resources in or near the project site. Pending response from the NAHC, Rincon mailed anticipatory letters on May 23, 2019 to six Native American contacts who may have knowledge of cultural resources in the project site and vicinity. On May 28, 2019, Rincon received a response from the NAHC stating the results of the SLF search were "negative" for site-specific information and included a list of Native American contacts; letters were sent to all listed individuals who had not been previously contacted. As of July 11, 2019, Rincon has not received any responses from Native American contacts.

Rincon Archaeologist Hannah Haas, MA, RPA conducted an intensive pedestrian field survey of the project site on May 9, 2019. Ground visibility ranged from approximately 80 to 90 percent with 100 percent exposure. The cultural resources specialist walked transects along the northern and southern side of East Keyes Road for the entire length of the project site. No archaeological resources were identified during the pedestrian survey. Two built-environment resources, a 240-foot segment of the TID Ceres Main Canal (P-50-000073) and Keyes Road Bridge (Bridge No. 38C-193), were identified within the project site.

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

The cultural resources record search and additional background research identified two historic structures within the project site, a segment of the Ceres Main Canal (P-50-000073) and Keyes Road Bridge (Bridge No. 38C-193). Ceres Main Canal has been recommended ineligible for listing on the NRHP and CRHR through previous survey evaluations due to a loss of integrity to its period of significance. Findings in the Cultural Resources Technical Memorandum concurred with these previous findings and recommended the subject segment ineligible for listing in the NRHP or CRHR; it therefore is not considered a historical resource under CEQA (Haas and Williams 2019). Keyes Road Bridge (Bridge No. 38C-193) was previously identified as ineligible for the NRHP in Caltrans' Historic Bridge Inventory. The Cultural Resources Technical Memorandum concurred with this finding and further recommended the bridge ineligible for listing in the CRHR because it lacks historical and architectural significance; it therefore is not considered a historical resource under CEQA.

Based on the results of the research conducted for this project, no significant cultural resources were identified on the project site that would be impacted by the project. Therefore, no impact to historical resources would occur.

NO IMPACT

- b. Would the project cause a substantial adverse change in the significance of an archaeological resource as defined in §15064.5?*

The records search, Native American scoping, and pedestrian survey did not identify any archaeological resources on the project site. The absence of substantial prehistoric or historic period archaeological resources within the immediate vicinity, along with the existing level of disturbance in the project site, suggests there is a low potential for encountering subsurface archaeological deposits. Although the project site is considered to have low sensitivity for archaeological resources, unanticipated discoveries are always a possibility during ground disturbance. The lack of surface evidence of archaeological resources does not preclude their subsurface existence. If resources are identified during construction, impacts would be potentially significant. The following mitigation measure would reduce impacts to a less than significant level.

CUL-1 Unanticipated Discovery of Cultural Resources

If cultural resources are encountered during ground-disturbing activities, work in the immediate area must halt and an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology (National Park Service 1983) shall be contacted immediately to evaluate the find. If the discovery proves to be eligible for listing on the California Register of Historical Resources, additional work may be warranted, such as data recovery excavation, Native American consultation, and archaeological monitoring to mitigate any significant impacts under CEQA.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

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

The discovery of human remains is always a possibility during ground disturbing activities. If human remains are found, the State of California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. In the event of an unanticipated

discovery of human remains, the County Coroner must be notified immediately. If the human remains are determined to be prehistoric, the Coroner will notify the Native American Heritage Commission, which will determine and notify a most likely descendant (MLD). The MLD has 48 hours from being granted site access to make recommendations for the disposition of the remains. If the MLD does not make recommendations within 48 hours, the land owner shall reinter the remains in an area of the property secure from subsequent disturbance. With adherence to existing regulations, impacts to human remains would be less than significant.

LESS THAN SIGNIFICANT IMPACT

This page intentionally left blank.

6 Energy

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Electricity and Natural Gas

In 2017, California used 292,039 gigawatt-hours (GWh) of electricity, of which 29 percent were from renewable resources (California Energy Commission [CEC] 2019a). California also consumed approximately 12,500 million U.S. therms (MMthm) of natural gas in 2017. Stanislaus County is served by three electricity providers: Pacific Gas and Electric (PG&E), Modesto Irrigation District (MID) and Turlock Irrigation District (TID). In conjunction with the utility company, the California Public Utilities Commission (CPUC) is involved in energy conservation programs. PG&E is the natural gas provider for the entire County. The project site falls within the TID electrical service area and Sphere of Influence. Table 6 and Table 7 show the electricity and natural gas consumption by sector and total for TID and PG&E, respectively.

Table 6 Electricity Consumption in the TID Service Area in 2017

Agriculture and Water Pump	Commercial Building	Commercial Other	Industry	Mining and Construction	Residential	Streetlight	Total Usage
271.0	511.4	108.3	426.9	8.5	769.5	9.4	2105.0

Notes: All usage expressed in GWh

Source: CEC 2017a

Table 7 Natural Gas Consumption in PG&E Service Area in 2017

Agriculture and Water Pump	Commercial Building	Commercial Other	Industry	Mining and Construction	Residential	Total Usage
36.4	864.8	68.0	1,701.3	170.8	1,873.4	4,714.7

Notes: All usage expressed in MMthm

Source: CEC 2017b

Petroleum

In 2016, approximately 40 percent of the state's energy consumption was used for transportation activities (United States Energy Information Administration [EIA] 2019). Californians presently consume over 19 billion gallons of motor vehicle fuels per year (CEC 2019b). Though California's population and economy are expected to grow, gasoline demand is projected to decline from roughly 15.8 billion gallons in 2017 to between 12.3 billion and 12.7 billion gallons in 2030, a 20 percent to 22 percent reduction. This decline comes in response to both increasing vehicle electrification and higher fuel economy for new gasoline vehicles (CEC 2019b).

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

Construction Energy Demand

During project construction, energy would be consumed in the form of petroleum-based fuels used to power off-road construction vehicles and equipment on the project site, construction worker travel to and from the project site, and vehicles used to deliver materials to the site. The proposed project would require demolition, site preparation and grading, including hauling material off-site; pavement and asphalt installation; building construction; and architectural coating and paving.

The total consumption of gasoline and diesel fuel during project construction was estimated using the assumptions and factors from CalEEMod (Appendix A). Table 8 presents the estimated construction phase energy consumption, indicating construction equipment, vendor trips, and worker trips would consume approximately 4,839 gallons of fuel over the project construction period. Construction equipment would consume an estimated 3,600 gallons of fuel; vendor and hauling trips would consume approximately 629 gallons of fuel; and worker trips would consume approximately 610 gallons of fuel over the combined phases of project construction.

Table 8 Estimated Fuel Consumption during Construction

Fuel Type	Gallons of Fuel	MMBtu ⁴
Diesel Fuel (Construction Equipment) ¹	3,600	459
Diesel Fuel (Hauling & Vendor Trips) ²	629	80
Other Petroleum Fuel (Worker Trips) ³	610	67
Total	4,839	606

¹ Fuel demand rate for construction equipment is derived from the total hours of operation, the equipment's horse power, the equipment's load factor, and the equipment's fuel usage per horse power per hour of operation, which are all taken from CalEEMod outputs (see Appendix B), and from compression-ignition engine brake-specific fuel consumptions factors for engines between 0 to 100 horsepower and greater than 100 horsepower (U.S. EPA 2018). Fuel consumed for all construction equipment is assumed to be diesel fuel.

² Fuel demand rate for hauling and vendor trips (cut material imports) is derived from hauling and vendor trip number, hauling and vendor trip length, and hauling and vendor vehicle class from "Trips and VMT" Table contained in Section 3.0, *Construction Detail*, of the CalEEMod results (see Appendix B). The fuel economy for hauling and vendor trip vehicles is derived from the United States Department of Transportation (DOT 2018). Fuel consumed for all hauling trucks is assumed to be diesel fuel.

³ The fuel economy for worker trip vehicles is derived from DOT National Transportation Statistics (24 mpg) (DOT 2018). Fuel consumed for all worker trips is assumed to be gasoline fuel.

⁴ CaRFG CA-GREET 2.0 fuel specification of 109,786 Btu/gallon used to identify conversion rate for fuel energy consumption for worker trips specified above (CARB 2015). Low-sulfur Diesel CA-GREET 2.0 fuel specification of 127,464 Btu/gallon used to identify conversion rate for fuel energy consumption for construction equipment specified above (CARB 2015). Totals may not add up due to rounding.

The construction energy estimates represent a conservative estimate as the construction equipment used in each phase of construction was assumed to be operating every day of construction. Construction equipment would be maintained to all applicable standards as required, and construction activity and associated fuel consumption and energy use would be temporary and typical for construction sites. It is also reasonable to assume contractors would avoid wasteful, inefficient, and unnecessary fuel consumption during construction to reduce construction costs. Therefore, the proposed project would not involve the inefficient, wasteful, and unnecessary use of energy during construction, and the construction-phase impact related to energy consumption would be less than significant.

Operational Energy Demand

The proposed project would replace the Keyes Road Bridge over the TID Main Ceres Canal and would be in the same location as the existing bridge. The proposed project would not add capacity; and, therefore, it would not result in an increase in traffic volumes or resulting energy use in the form of electricity, natural gas or petroleum following completion of construction. Therefore, the proposed project would not have any long-term energy impacts.

LESS THAN SIGNIFICANT IMPACT

- b. *Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?*

The Stanislaus Council of Governments (StanCOG) 2018 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) contains emissions-reduction measures the County may implement, several of which are energy-related in nature. The RTP/SCS was adopted by StanCOG on August 15, 2018 and contains goals and policies to achieve and exceed emissions reduction targets. The 2018 RTP/SCS is intended to help to minimize energy consumption by improving the overall efficiency of the transportation system and land use patterns.

As demonstrated in Section 8, *Greenhouse Gas Emissions*, the proposed project is consistent with the goals in the RTP/SCS. Those goals specifically pertaining to energy efficiency include Goal 7, *System Preservation* and Goal 9, *Reliability and Congestions*. Each of these goals contain objectives to preserve and maintain the existing road infrastructure for the safety of the public and to reduce vehicle congestion in Stanislaus County. The proposed project would replace an existing bridge that has been compromised. This would improve traffic operations at the project site, and thus improve vehicle fuel efficiency. Additionally, the proposed project would not result in new vehicle trips or energy use. Therefore, implementation of the proposed project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. No impact would occur.

NO IMPACT

This page intentionally left blank.

7 Geology and Soils

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
1. 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4. Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on or offsite landslide, lateral spreading, subsidence, liquefaction, or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Be located on expansive soil, as defined in Table 1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Directly or indirectly destroy a unique paleontological resource or site or unique	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
--	--------------------------------------	--	------------------------------------	-----------

geologic feature?

- a.1. *Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?*
- a.2. *Would the project directly or indirectly expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking?*
- a.3. *Would the project directly or indirectly expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction?*
- a.4. *Would the project directly or indirectly expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving landslides?*

Several known faults exist in the western part of Stanislaus County and in the Diablo Range west of I-5. However, the project site is not mapped in an earthquake fault zone, landslide zone, or liquefaction zone (DOC 2015). The County enforces the provisions of the Alquist-Priolo Special Study Zones Act that limits development in areas identified as having special seismic hazards. The proposed project would not expose people or structures to potential substantial adverse effects, including the risk of loss, injury or death involving any of the following: the rupture of a known earthquake fault, strong seismic ground shaking, seismic-related ground failure, including liquefaction, or landslides. Additionally, the proposed project involves replacing the existing bridge with one that would be designed to withstand any seismic hazards and would reduce such hazards for motorists traveling on the bridge during a seismic event. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- b. *Would the project result in substantial soil erosion or the loss of topsoil?*

Earthwork associated with the proposed project would be limited to excavation of footings for the replacement bridge and some grading for new roadway right-of-ways. No cut or fill slopes would be created and the project would not include excessive grading. Therefore, the proposed project would not result in substantial soil erosion or loss of topsoil; impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- c. *Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on or offsite landslide, lateral spreading, subsidence, liquefaction, or collapse?*

The project site is not located in an area vulnerable to liquefaction, collapse, landslides, lateral spreading, or fault ruptures as mapped by the DOC, nor is it located in an area of land subsidence (United States Geological Survey [USGS] 2019). Additionally, the project site is not located in a

landslide zone because the topography on and around the project site is relatively flat. There would be no impact.

NO IMPACT

- d. *Would the project be located on expansive soil, as defined in Table 1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?*

The project would not involve the construction of any structures that would create a substantial risk to life or property. There would be no unstable earth conditions, minor changes in topography or ground surface relief features, no destruction or modification of any unique geologic/physical feature by the proposed project. There would be no impact.

NO IMPACT

- e. *Would the project 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?*

The proposed project does not require the use of a septic tank or any wastewater disposal systems. Therefore, no impact would occur.

NO IMPACT

- f. *Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?*

The paleontological sensitivity of the geologic units that underlie the project site was evaluated using the results of the paleontological locality search and review of existing information in the scientific literature concerning known fossils within those geologic units. Fossil collections records from the University of California Museum of Paleontology (UCMP) online database were reviewed. These contain known fossil localities in Stanislaus County (2019). In addition, a request for a list of known fossil localities from the project site and immediate vicinity (i.e., localities recorded on the USGS Ceres, 7.5-minute topographic quadrangle) was submitted to the Natural History Museum of Los Angeles County (NHMLAC).

Following the literature review and museum record search a paleontological sensitivity classification was assigned to the geologic units within the project site. The potential for impacts to significant paleontological resources is based on the potential for ground disturbance to directly impact paleontologically sensitive geologic units. The Society of Vertebrate Paleontology (SVP) (2010) has developed a system for assessing paleontological sensitivity and describes sedimentary rock units as having high, low, undetermined, or no potential for containing scientifically significant nonrenewable paleontological resources. This criterion is based on rock units within which vertebrate or significant invertebrate fossils have been determined by previous studies to be present or likely to be present.

According to geologic mapping by Marchand (1980) and Wagner et al (1991), the project site is immediately underlain by the Modesto Formation (M2-1b, Qm) of Pleistocene age. The Modesto Formation consists of poorly indurated fluvial and alluvial deposits and well-developed soils (Davis and Hall 1959; Marchand and Allwardt 1981; Weissmann et al. 2005). These older Quaternary sediments are composed of massive to well-bedded sand, silt, and clay, with subordinate gravel deposits, derived from the Sierra Nevada Mountains via the Tuolumne River during the Late Pleistocene Wisconsin glaciations (Weissmann et al. 2002). A search of the paleontological locality

records at the NHMLAC resulted in no previously recorded fossil localities in the project site; however, Locality LACM 3513, situated just east and north of the project site near Oakdale, produced fossil specimens of Columbian mammoth (*Mammuthus columbi*), camel (*Camelops*), and horse (*Equus*) (McLeod 2019). At least 27 vertebrate fossil localities yielded from the Modesto Formation have been recorded throughout the San Joaquin Valley, including specimens of Jefferson's ground sloth, bison, mammoth, camel, snake, and rodent (UCMP 2019).

Due to prior bridge development, the surficial sediments of the project site mainly consist of recently compacted fill, which is generally less likely to contain well-preserved fossils and important taphonomic information than intact deposits. As such, artificial fill (i.e., disturbed sediments) has no paleontological resource potential. As currently proposed, project ground disturbance will reach a maximum depth of one foot below existing channel bottom during excavation for the new box culvert. However, such minimal ground disturbance within intact (native) deposits would not likely cause significant impacts to paleontological resources.

Further paleontological resources work is not recommended at this time; however, Mitigation Measure GEO-1 is recommended in the case of unanticipated fossil discoveries during excavation associated with bridge construction. Mitigation Measure GEO-1 would apply to all phases of project construction and would ensure that potential impacts to paleontological resources would be less than significant.

Mitigation Measure

GEO-1 Unanticipated Discovery of Paleontological Resources

In the event an unanticipated fossil discovery is made during the course of project development, then in accordance with SVP (2010) guidelines, it is the responsibility of any worker who observes fossils within the project site to stop work in the immediate vicinity of the find and notify a qualified professional paleontologist who shall be retained to evaluate the discovery, determine its significance and if additional mitigation or treatment is warranted. Work in the area of the discovery will resume once the find is properly documented and authorization is given to resume construction work. Any significant paleontological resources found during construction monitoring will be prepared, identified, analyzed, and permanently curated in an approved regional museum repository.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

8 Greenhouse Gas Emissions

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Climate change is the observed increase in the average temperature of the Earth's atmosphere and oceans along with other substantial changes in climate (such as wind patterns, precipitation, and storms) over an extended period of time. Climate change is the result of numerous, cumulative sources of greenhouse gases (GHGs). GHGs contribute to the "greenhouse effect," which is a natural occurrence that helps regulate the temperature of the planet. The majority of radiation from the Sun hits the Earth's surface and warms it. The surface in turn radiates heat back towards the atmosphere, known as infrared radiation. Gases and clouds in the atmosphere trap and prevent some of this heat from escaping back into space and re-radiate it in all directions. This process is essential to supporting life on Earth because it warms the planet by approximately 60° Fahrenheit. Emissions from human activities since the beginning of the industrial revolution (approximately 250 years ago) are adding to the natural greenhouse effect by increasing the gases in the atmosphere that trap heat, thereby contributing to an average increase in the Earth's temperature.

Project implementation would generate GHG emissions through the burning of fossil fuels or other emissions of GHGs, thus potentially contributing to cumulative impacts related to climate change. In response to climate change concerns, California adopted Assembly Bill (AB) 32, the "California Global Warming Solutions Act of 2006." AB 32 codified the Statewide goal of reducing emissions to 1990 levels by 2020 and the adoption of regulations to require reporting and verification of statewide GHG emissions. Furthermore, on September 8, 2016, the governor signed Senate Bill 32 (SB 32) into law, which modifies the California Global Warming Solutions Act of 2006 and requires the State to further reduce GHGs to 40 percent below 1990 levels by 2030.

Senate Bill 375, signed in August 2008, enhances the State's ability to reach AB 32 goals by directing CARB to develop regional GHG emission reduction targets to be achieved from passenger vehicles for 2020 and 2035. In addition, SB 375 directs each of the State's 18 major Metropolitan Planning Organizations (MPO) to prepare a "sustainable communities strategy" (SCS) that contains a growth strategy to meet these emission targets for inclusion in the Regional Transportation Plan (RTP). In 2010, the ARB issued StanCOG regional targets of a 5 percent reduction in per capita emissions for the planning year 2020 and a 10 percent reduction in per capita GHG emissions in planning year 2035, as compared to baseline per capita emissions levels in 2005.

On December 14, 2017, CARB adopted the 2017 Scoping Plan, which provides a framework for achieving the 2030 target. The 2017 Scoping Plan does not provide project-level thresholds for land use development. Instead, it recommends that local governments adopt policies and locally-appropriate quantitative thresholds consistent with a statewide per capita goal of six metric tons (MT) CO₂e by 2030 and two MT CO₂e by 2050 (CARB 2017). As stated in the 2017 Scoping Plan, these goals may be appropriate for plan-level analyses (city, county, subregional, or regional level), but not for specific individual projects because they include all emissions sectors in the State.

In the context of global GHG emissions, the vast majority of individual projects do not generate sufficient GHG emissions to directly influence climate change. However, physical changes caused by a project can contribute incrementally to cumulative effects that are significant, even if individual changes resulting from a project are limited. The issue of climate change typically involves an analysis of whether a project's contribution towards an impact would be cumulatively considerable. "Cumulatively considerable" means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, other current projects, and probable future projects (CEQA Guidelines, Section 15064[h][1]).

Methodology

The 2015 SJVAPCD Guidance for Assessing and Mitigating Air Quality Impacts document states that in the absence of scientific evidence supporting establishment of a numerical threshold, the District policy applies performance-based standards to assess project specific greenhouse gas (GHG) emission impacts on global climate change (SJVAPCD 2015). The guidance relies on use of Best Performance Standards (BPS) to assess significance of project specific GHG emissions during the environmental review process. Projects that are (1) exempt from CEQA requirements, (2) projects complying with an approved GHG emission reduction plan or mitigation program, and (3) projects implementing BPS are determined to have a less than significant individual and cumulative impact on global climate change and would not require the GHG emissions of the project to be quantified. Projects not implementing BPS do require such quantification under the 2015 SJVAPCD Guidance and must be determined to have reduced or mitigated GHG emissions by 29 percent to have less than significant individual or cumulative impact, consistent with the emission targets in AB 32 (SJVAPCD 2009). The SJVAPCD framework analysis for the proposed project is described below:

- The proposed project is not exempt from CEQA.
- The Stanislaus County has not yet adopted any GHG emission reduction plan or mitigation plan and there are no other plans applicable to the project site. Therefore, the proposed project cannot be consistent with any such plan.
- The proposed project would not implement BPS.

The proposed project does not comply with any of the three factors discussed above in determining project significance. Projects not implementing BPS require GHG emission quantification and must be determined to have reduced or mitigated GHG emissions by 29 percent as compared to Business-as-Usual (BAU) to have less than significant individual or cumulative impact, consistent with the emission targets in AB 32 (SJVAPCD 2009). However, in late 2015 the California Supreme Court's Newhall Ranch (*Center for Biological Diversity v. Department of Fish and Wildlife* (2015) 62 Cal. 4th 204), indicated that the BAU approach is no longer recommended unless substantial evidence can be provided demonstrating the link between a statewide goal and project threshold.

Given the recent legislative attention and judicial action regarding 2030 goals and the scientific evidence that additional GHG reductions are needed through the year 2050, the Association of Environmental Professionals' (AEP) Climate Change Committee published a white paper in October 2016 to provide guidance on defensible GHG thresholds for use in CEQA analyses and GHG reduction targets in climate action plans in light of the change in focus on the 2030 reduction target and questions raised in the Newhall Ranch case.

The AEP Climate Change Committee white paper identified seven thresholds for operational emissions. The following three methods described are currently the most widely used evaluation criteria.

(1) **Consistency with a Qualified GHG Reduction Plan.** For a project located within a jurisdiction that has adopted a qualified GHG reduction plan (as defined by CEQA Guidelines Section 15183.5), GHG emissions would be less than significant if the project is anticipated by the plan and fully consistent with the plan. However, projects with a horizon year beyond 2020 should not tier from a plan that is qualified up to 2020.

(2) **Bright Line Thresholds.** There are two types of bright line thresholds:

- a. Standalone threshold: Emissions exceeding standalone thresholds would be considered significant.
- b. Screening threshold: Emissions exceeding screening thresholds would require evaluation using a second-tier threshold, such as an efficiency threshold or other threshold concept to determine whether project emissions would be considered significant.

However, projects with a horizon year beyond 2020 should take into account the type and amount of land use projects and their expected emissions out to the year 2030.

(3) **Efficiency Thresholds.** Land use sector efficiency thresholds are currently based on AB 32 targets and should not be used for projects with a horizon year beyond 2020. Efficiency metrics should be adjusted for 2030 and include applicable land uses.

Operational emissions methods (1) and (3) are not applicable to the proposed project. The County does not have an adopted GHG reduction plan and efficiency thresholds are meant for plan-level analysis and do not typically apply to bridge projects. The AEP white paper also recommends that CEQA analyses for most projects may continue to rely on current adopted thresholds for the immediate future.

SJVAPCD does not have any adopted bright line thresholds. However, the Bay Area Air Quality Management District (BAAQMD), has adopted bright line thresholds as part of the May 2017 CEQA Air Quality Guidelines. As the lead agency, Stanislaus County has determined that the significance thresholds in the BAAQMD CEQA Air Quality Guidelines are appropriate for use in evaluating the significance GHG emissions associated with this project. In addition, the BAAQMD's *CEQA Air Quality Guidelines* are supported by substantial evidence and are valid for use in the CEQA review process.

The BAAQMD *CEQA Air Quality Guidelines* recommend a bright line threshold of 1,100 metric tons (MT) of carbon dioxide equivalent (CO₂e) per year. This threshold is based on attaining the 2020 goal for AB 32. The proposed project is expected to be operational by 2020 and therefore, BAAQMD's thresholds, which are the latest adopted thresholds and consistent with the AB 32 2020 targets, are considered appropriate.

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

Construction and operational emissions associated with the proposed project were quantified using CalEEMod version 2016.3.2. Complete CalEEMod results and assumptions are provided in Appendix A. It was assumed that construction activity would begin in the November of 2019 with completion by late January 2020.

Construction Emissions

Construction GHG emissions may include emissions produced as a result of material processing, emissions produced by on-site construction equipment, and emissions arising from traffic delays due to construction. These emissions would be produced at different levels throughout the construction phase. Construction activity for the proposed project would generate estimated annual emissions of 43 MT CO₂e total.

This increase in annual emissions would not exceed the 1,100 MT CO₂e per year threshold. Therefore, short-term construction impacts would be less than significant.

Operational Emissions

The proposed project would replace the Keyes Road Bridge over the TID Main Ceres Canal and would be in the same location as the existing bridge. The proposed project would not add capacity; and, therefore, it would not result in an increase in traffic volumes or resulting GHG emissions following completion of construction. Therefore, the proposed project would not have operational GHG emissions beyond existing conditions.

LESS THAN SIGNIFICANT IMPACT

- b. *Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?*

As mentioned above in Section 6, *Energy*, StanCOG adopted the 2018 RTP/SCS in August of 2018. The RTP/SCS contains goals to achieve and exceed GHG emissions reductions targets set by the ARB under AB 32 and SB 375. For example, the objective of the RTP/SCS Environmental Quality goal is to reduce the number of overall vehicle miles traveled per capita to reduce GHG emissions (StanCOG 2018). The proposed project would replace an existing bridge that has been compromised. This would improve traffic operations at the project site, and thus reduce transportation emissions associated with idling on roadways. While the project would not reduce trips, the proposed project would not result in new vehicle trips. As discussed above, the proposed project would not exceed BAAQMD's project-specific 1,100 MT CO₂e threshold. Therefore, the project would contribute toward the State emissions reduction goals set by AB 32, SB 32, and SB 375 and would not conflict with any plan, policy or regulation adopted to reduce emissions of GHG. There would be no impact.

NO IMPACT

9 Hazards and Hazardous Materials

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Be located on a site that is included on a list of hazardous material 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. For a project located in 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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

Construction Activities

The proposed project would replace the existing Keyes Road Bridge over the TID Ceres Main Canal. Implementation of the proposed project would not lead to direct, long-term use or disposal of any hazardous materials. Construction activities may include the temporary transport, storage, use, or disposal of potentially hazardous materials including fuels, lubricating fluids, cleaners, solvents, or contaminated soils. If spilled, these substances could pose a risk to the environment and to human health. However, the transport, storage, use, or disposal of hazardous materials would be subject to federal, state, and local regulations pertaining to the transport, use, storage, and disposal of hazardous materials, which would assure that risks associated with hazardous materials are minimized. The transport of hazardous materials would be subject to federal, state, and local regulations, which would assure that risks associated with the transport of hazardous materials are minimized. As mentioned in Section X, *Hydrology and Water Quality*, the construction contractor would be responsible for developing a Storm Water Prevention Plan (SWPPP), which would specify Best Management Practices (BMPs) to quickly contain and clean up accidental spills or leaks. Therefore, the potential for an accidental release of hazardous materials to harm the public or environment would be minor. Impacts related to hazardous materials during construction would be less than significant.

Project Operation

The project would involve replacing the existing Keyes Road Bridge over the TID Ceres Main Canal. The replacement bridge would not increase capacity and would maintain the same lane configuration of the existing roadway. Therefore, the proposed project would not involve the use, storage, transportation, or disposal of hazardous materials and would not release such materials into the environment. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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

A Phase I Environmental Site Assessment (ESA) of the project site was conducted by Rincon Consultants in June 2019 and is provided in Appendix D of this report. The Phase I ESA identified one recognized environmental condition (REC) in connection with the project site as a current and historical agricultural use property. Agricultural land use is typically associated with the use of pesticides and arsenic. Therefore, the former use of the property for agricultural purposes is considered an REC. Project construction activity that disturb soils on-site would potentially result in the release of hazardous materials into the environment. The Phase I ESA recommended that the site be further evaluated for impacts associated with the historical agricultural use of the project site. Impacts related to the accidental release of hazardous materials into the environment would be potentially significant and mitigation is required.

HAZ-1 Phase II Environmental Site Assessment

A Phase II ESA, conforming to the recommended guidelines established by the American Society for Testing and Materials in Standard E1903-11, shall be conducted prior to the start of project

demolition and construction activities. The Phase II ESA shall include the collection of shallow soil samples to be analyzed for organochlorine pesticides and arsenic at the project site. If contamination exceeding regulatory action levels is found at the project site, appropriate remediation shall be undertaken prior to issuance of grading permits for the contaminated area. Any remedial activity shall be conducted to the satisfaction of the appropriate regulatory oversight agency (for example, the County Health Department, Department of Conservation, Regional Water Quality Control Board, Department of Toxic Substances Control). The Phase II ESA shall provide recommendations to address any identified hazards and indicate when to apply those recommended actions in relation to proposed project activities (i.e., bridge demolition and project construction). Example recommendations that could be provided in the Phase II ESA include developing a Remedial Action Agreement that involve one or more of the following actions:

- additional delineation of impacts
- remediation of impacted groundwater and/or soil
- removal and disposal of contaminated soils
- mitigate potential for contaminant exposure and leave-in-place
- engagement with regulatory agencies

The project applicant shall implement remedial actions as identified in the Phase II ESA.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

- c. *Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?*

The project site is not located within 0.25 mile of a school. The project site is located in a rural area, primarily surrounded by agricultural land, and is not within the vicinity of urban development. No impact would occur.

NO IMPACT

- d. *Would the project be located on a site that is included on a list of hazardous material 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?*

The Phase I ESA conducted for the proposed project, included a reconnaissance survey of the project site to observe existing conditions and obtain information indicating the presence of RECs and a regulatory database search for sites that generate, store, treat or dispose of hazardous materials or sites for which a release or incident has occurred. According to the database search, the project site was not included on a list of hazardous materials compiled pursuant to Government Code Section 65962.5. One adjacent property, Home Ranch/Weststeyn Farm, was listed on the Statewide Environmental Evaluation and Planning System for Underground Storage Tanks (SWEETS UST), the Historical UST, the Certified Unified Program Agency (CUPA) Listings, and the California Environmental Reporting System (CERS) databases. These listings are not indicative of a release; however, they indicate that underground storage tanks have been present and hazardous materials and/or petroleum products may have been stored at the property. The adjacent property is not listed on any database indicating an unauthorized release has occurred; therefore, the facility is not expected to impact the project site. Therefore, impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- 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?*

The project site is not located within the planning area and boundary of the Stanislaus County Airport Land Use Plan (Stanislaus County 1978). The nearest airport to the project site is the Modesto City/County Airport located approximately five miles north. The proposed project is not located within an airport land use plan or within two miles of a public or public use airport. The proposed project would not subject persons working at the site to safety hazards, and there would be no impact from potential air traffic safety risks.

NO IMPACT

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

As described above in the project description, one of the primary objectives of the proposed project is to replace the existing bridge structure to improve public safety, since the existing bridge has reached the end of its useful lifespan. Consequently, the proposed project would have a positive impact on ensuring that future emergency response actions and the implementation of evacuation plans along safe transportation routes is continued in Stanislaus County. While the proposed project would result in a temporary road closure along Keyes Road in the vicinity of the project site, a detour route is planned and would be noticed and available to the traveling public. Additionally, with implementation of a traffic control plan per Mitigation Measure TRA-1 (See Section 17, *Transportation*), this impact would be less than significant with mitigation incorporated.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

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

The project site is not located within or near a Very High Fire Hazard Severity Zone or state responsibility area. The nearest Very High Fire Hazard Severity Zone is located in the western portion of Stanislaus County approximately over 20 miles west of the project site (California Department of Forestry and Fire [CalFire] 2007). Because the site is not within or near a state responsibility area or a Very High Fire Hazard Severity Zone, no impacts related to wildland fires would occur.

NO IMPACT

10 Hydrology and Water Quality

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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 off-site;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(iv) Impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- a. *Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?*
- e. *Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?*

The proposed project would replace the existing Keyes Road Bridge over the TID Ceres Main Canal. This concrete lined agricultural canal runs north to south across the approximate center of the TID service area and serves as an interceptor canal for spillage from the upper lateral canals that originate from the Turlock Main Canal and Turlock Lake to the northeast of the project site. Development of the proposed project has the potential to expose bare soil and potentially generate other water quality pollutants that could be exposed to precipitation and subsequently result in surface runoff to the Ceres Main Canal. Construction activities involving soil disturbance, excavation, cutting/filling, and grading activities could result in increased erosion and sedimentation to the canal and waters downstream. Construction materials such as asphalt, concrete, and equipment fluids could be exposed to precipitation and subsequent runoff. If precautions are not taken to contain contaminants, construction could produce contaminated storm water runoff (nonpoint source pollution), a major contributor to the degradation of water quality.

Construction would take place over an approximate three-month period, from the fall of 2019 to the end of January 2020. Demolition and construction for the proposed project is anticipated to begin in November, concurrent with the annual pause in TID conveyance to customers along the Ceres Main Canal, when water levels are low (TID 2012). Dewatering the construction area would help minimize the potential for transport of sediments and pollutants from construction activities. Additionally, a variety of design measures (including limiting the size and location of project staging areas away from the canal channel) and compliance with federal, state, and local regulations regarding the storage, handling, use, and disposal of hazardous materials would significantly minimize these water quality impacts as part of the proposed project. While erosion and inadvertent spills of oil or fuels from construction equipment could be a source of contamination to the Ceres Main Canal, implementation of Mitigation Measure W-1 would ensure that no project-related water quality impacts would occur. Therefore, the impact would be less than significant with the incorporation of mitigation.

W-1 Implement Water Quality Best Management Practices (BMPs)

The County shall comply with the requirements of a National Pollution Discharge Elimination System (NPDES) permit from the Regional Water Quality Control Board (RWQCB), Central Valley Region. As part of the permit, the County or its contractor shall either prepare and implement a SWPPP into their construction plans prior to initiating construction activities that would identify Best Management Practices (BMPs) to be used to avoid or minimize any adverse effects before, during, and after construction to surface water; or if a SWPPP is not prepared for the proposed project, the County or its contractor shall incorporate BMPs into the project as part of the construction specifications. Those BMPs shall include:

- Implement appropriate measures to prevent debris, soil, rock, or other material from entering the water. Use a water truck or other appropriate measures to control dust on applicable access roads, construction areas, and stockpiles.
- Properly dispose of oil or other liquids.

- Fuel and maintain vehicles in a specified area that is designed to capture spills. All fueling and maintenance of vehicles and other equipment, will be located at least 20 meters from Ceres Main Canal and any other drainages onsite.
- Fuels and hazardous materials will not be stored onsite.
- Inspect and maintain vehicles and equipment to prevent the dripping of oil or other fluids.
- If rains are forecasted during construction, additional erosion and sedimentation control measures will be implemented.
- Maintain sediment and erosion control measures during construction. Inspect the control measures before, during, and after a rain event.
- Train construction workers in storm water pollution prevention practices.
- Re-vegetate disturbed areas in a timely manner to control erosion.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

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

The proposed project involves the replacement of the existing Keyes Road Bridge over the TID Main Ceres Canal in the same location. The proposed project is intended to increase the load limit and permit rating of the bridge and thus, improve safety for motorists. The project does not include any residential or commercial development and would not place an increase demand for groundwater supplies. A small amount of groundwater may be pumped from excavations during construction of the abutment footings of the proposed bridge, however this would not affect the quantity of groundwater in the basin or interfere with groundwater recharge. Therefore, the proposed project would not impede sustainable groundwater management of the basin, and no impact would occur.

NO IMPACT

- c.(i) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on- or off-site?*
- c.(ii) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?*
- c.(iii) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner that would 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?*

The proposed project would remove the existing bridge and replace it with a wider structure, by approximately 10 feet. The proposed project would result in a slight increase in runoff over existing conditions from the increase in surface area of the new bridge. However, the replacement bridge

would not result in a significant increase in drainage and erosion from the project site that would generate a substantial amount of runoff. These changes would also not exceed the capacity of Ceres Main Canal or agricultural ditches near the project site. Therefore, impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- c.(iv) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would impede or redirect flood flows?*
- d. In flood hazard, tsunami, or seiche zones, would the project risk release of pollutants due to project inundation?*

The proposed project would not substantially alter the existing drainage pattern of the project site or surrounding area and would not involve the addition of impervious surfaces beyond existing conditions. The project site is not located within a flood hazard or inundation area as shown on Figures V-3 and V-4 of the Stanislaus County General Plan Safety Element (Stanislaus County 2016). Therefore, the project site would not be affected by flooding, and the proposed project would not impede or redirect flood flows.

The project site is not at risk of inundation by a tsunami, being located approximately 4.5 miles south of the Tuolumne River. In addition, the project site is not located near a large inland body of water that could be subject to seiches or standing waves. Therefore, the proposed project would not risk release of pollutants due to inundation by seiche or tsunami. The project site is likewise not located within a flood zone and impacts concerning flood hazards would be less than significant.

LESS THAN SIGNIFICANT IMPACT

This page intentionally left blank.

11 Land Use and Planning

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a. Would the project physically divide an established community?

The proposed project involves the replacement of the existing Keyes Road Bridge over the TID Main Ceres Canal and would not physically divide an established community. There would be no impact.

NO IMPACT

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

The proposed project involves the replacement of an existing bridge, with the same number of travel lanes and same basic configuration and is entirely compatible with surrounding land uses. Stanislaus County has not adopted goals or policies that specifically address bridges, although the County's General Plan Circulation Element notes that nearly half of the rural bridges longer than 20 feet nationwide are structurally deficient (Stanislaus County 2016). Implementation of the proposed project would be consistent with County goals and policies to ensure public safety and improve infrastructure in the circulation system. Therefore, the proposed project would not conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. No impact would occur.

NO IMPACT

This page intentionally left blank.

12 Mineral Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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

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

There are no known mineral resources on or surrounding the project site (DOC 1993). There would be no impact.

NO IMPACT

This page intentionally left blank.

13 Noise

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project result in:				
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Fundamentals of Noise

The unit of measurement used to describe a noise level is the decibel (dB), and a method called “A weighting” is used to approximate the response of the average human ear to most ordinary everyday sounds. When people make relative judgments of the loudness or annoyance of a sound, their judgments correlate well with the A-weighted noise levels. Therefore, the A-weighted noise levels (dBA) are used for measurements and standards involving the human perception of noise.

dB is also measured on a logarithmic scale that quantifies sound intensity in a manner similar to the Richter scale used for earthquake magnitudes. A 10 dB increase represents a 10-fold increase in sound intensity, i.e. power, a 20 dB change is a 100-fold difference, 30 dB is a 1,000-fold increase, etc. Under this scale, a doubling of the energy of a noise source, such as doubling of traffic volume, would increase the noise level by 3 dB; a halving of the energy would result in a 3 dB decrease.

Human perception of noise has no simple correlation with energy under the logarithmic scale. The perception of noise is not linear. Two equivalent noise sources combined do not sound twice as loud as one source. Rather, a doubling of the noise level energy, i.e. a 3 dBA increase, would be barely perceivable. This is because, the average healthy ear can barely perceive changes of 3 dB(A), increase or decrease; that a change of 5 dB(A) are readily perceptible; and increases (decreases) of 10 dBA sounds twice (half) as loud (Caltrans 2013).

Descriptors

The impact of noise is not a function of loudness alone. The time of day when noise occurs, and the duration of the noise are also important. In addition, most noise that lasts for more than a few seconds is variable in its intensity. Consequently, a variety of noise descriptors has been developed. The noise descriptors used for this analysis are the one-hour equivalent noise level (L_{eq}) and the community noise equivalent level (CNEL).

- The L_{eq} is the level of a steady sound that, in a stated time period and at a stated location, has the same A-weighted sound energy as the time-varying sound. For example, $L_{eq(1h)}$ is the equivalent noise level over a 1-hour period and $L_{eq(8h)}$ is the equivalent noise level over an 8-hour period.
- The CNEL is a 24-hour equivalent sound level. The CNEL calculation applies an additional 5 dBA penalty to noise occurring during evening hours, between 7:00 p.m. and 10:00 p.m., and an additional 10 dBA penalty is added to noise occurring during the night, between 10:00 p.m. and 7:00 a.m. These increases for certain times are intended to account for the added sensitivity of humans to noise during the evening and night.

Propagation

Sound from a small, localized source (approximating a “point” source) radiates uniformly outward as it travels away from the source in a spherical pattern, known as geometric spreading. The sound level decreases or drops off at a rate of 6 dBA for each doubling of the distance.

Traffic noise is not a single, stationary point source of sound. Over some time interval, the movement of vehicles makes the source of the sound appear to emanate from a line (line source) rather than a point. The drop-off rate for a line source is 3 dBA for each doubling of distance.

The propagation of noise is also affected by the intervening ground, known as ground absorption. A hard site (such as parking lots or smooth bodies of water) receives no additional ground attenuation and the changes in noise levels with distance (drop-off rate) are simply the geometric spreading of the source. A soft site (such as soft dirt, grass, or scattered bushes and trees) receives an additional ground attenuation value of 1.5 dB(A) per doubling of distance.

Vibration

Vibration levels are usually expressed as single-number measure of vibration magnitude, in terms of velocity or acceleration, which describes the severity of the vibration. It takes some time for the human body to respond to vibrations. In a sense, the human body responds to an average vibration (Federal Transit Administration [FTA] 2018). Because vibration is oscillatory, the net average of a vibration signal is zero, i.e. the highest and lowest peaks are equal and thus zero. Therefore, the root mean square (rms) is used to describe the “smoothed” vibration (FTA 2018). As with noise levels, rms values use decibel notation to compress the range of numbers required to describe vibration. The abbreviation VdB is used in this analysis for vibration decibels to reduce the potential for confusion with sound decibels.

For human impacts, vibration significance ranges from approximately 50 VdB, which is the typical background vibration-velocity level, to 100 VdB, the general threshold where minor damage can occur in fragile buildings (FTA 2018). The general human response to different levels of groundborne vibration velocity levels is described in Table 9.

Table 9 Human Response to Different Levels of Groundborne Vibration

Vibration Velocity Level	Human Reaction
65 VdB	Approximate threshold of perception for many people
75 VdB	Approximate dividing line between barely perceptible and distinctly perceptible. Many people find that transportation-related vibration at this level is unacceptable
85 VdB	Vibration acceptable only if there are an infrequent number of events per day
Source: FTA 2018	

Continued vibration of building components can also take the form of an audible low-frequency rumbling noise, which is referred to as groundborne noise. Groundborne noise is usually only a problem when foundations or utilities, such as sewer and water pipes, connect the structure and the vibration source.

Regulatory Setting

State Regulations

Noise associated with construction is controlled by Caltrans Standard Specifications (2015) Section 14-8.02, "Noise Control," which states the following:

- Control and monitor noise resulting from work activities
- Do not exceed 86 dBA Lmax at 50 feet from the job site from 9:00 p.m. to 6:00 a.m.

Local Regulations

To identify, appraise, and remedy noise and vibration problems in local communities, Stanislaus County is required to adopt a noise element as part of its General Plan. The noise element is required to analyze and quantify current and projected noise levels associated with local noise sources, including, but not limited to, highways and freeways, primary arterials and major local streets, rail operations, air traffic associated with the airports, local industrial plants, and other ground stationary sources that contribute to the community noise environment.

A summary of goals in the Stanislaus County General Plan Noise Element are provided as follows:

- Goal One. Prevent the encroachment of incompatible land uses near known noise producing industries, railroads, airports and other sources to protect the economic base of the County.
- Goal Two. Protect the citizens of Stanislaus County from the harmful effects of exposure to excessive noise.

Stanislaus County has adopted policies and standards for both interior and exterior noise. The Land Use Compatibility for Community Noise Environments in the County's General Plan, as shown below in Table 10, establishes criteria the County uses to evaluate land use compatibility based on noise levels.

Table 10 Stanislaus County Land Use Compatibility for Community Noise Environments

Exterior Noise Exposure Levels (Ldn or CNEL, dBA)
--

Stanislaus County
Keyes Road at Turlock Irrigation District Ceres Main Canal Bridge Replacement Project

Land Use Category	Normally Acceptable	Conditionally Acceptable	Normally Unacceptable	Clearly Unacceptable
Residential – Low Density Single Family, Duplex, and Mobile Homes	50-60	60-70	70-75	75-85
Multi-Family Residential	50-65	65-70	70-75	75-85
Hotels and Motels	50-65	60-70	70-80	80-85
Schools, Libraries, Museums, Hospitals, Personal Care, Meeting Halls, Churches	50-70	N/A	70-80	80-85
Auditoriums, Concert Halls, and Amphitheaters	N/A	50-70	N/A	70-85
Sports Arena and Outdoor Spectator Sports	N/A	50-75	N/A	75-85
Playgrounds and Neighborhood Parks	50-70	N/A	70-75	75-85
Golf Courses, Riding Stables, Water Recreation, and Cemeteries	50-75	N/A	75-80	80-85
Office Buildings, Business Commercial, and Professional	50-70	70-75	N/A	75-85
Industrial, Manufacturing, Utilities, and Agriculture	50-75	N/A	75-80	80-85

*Interior noise levels shall not exceed 45 Ldn in all new residential units (single- and multi-family).

Source: Stanislaus County General Plan, Noise Element, Figure 3 (2016).

In addition to regulating noise through noise element policies, local jurisdictions regulate noise through enforcement of local ordinance standards. These standards generally relate to noisy activities (e.g., use of loudspeakers and construction) and stationary noise sources and facilities (e.g., air conditioning units and industrial activities).

The Stanislaus County Code Chapter 10.46 establishes permissible noise levels for the county. Exterior noise limits for receiving land uses are included in Section 10.46.050, as shown in Table 11.

Table 11 Stanislaus County Code Exterior Noise Level Standards

Designated Noise Zone ¹	Time	Maximum A-Weighted Sound level as Measured on a Sound Level Meter (L _{max})
Noise Sensitive ²	Anytime	45
Residential	7 AM to 9:59 PM 10 PM to 6:59 AM	50 45
Commercial	7 AM to 9:59 PM 10 PM to 6:59 AM	60 55
Industrial	Anytime	75

¹The noise zone definition of any parcel not located within a residential, commercial, highway frontage, or industrial land use zoning district shall be determined by the director of Stanislaus County planning and community development or designee, based on the permitted uses of land use zoning district in which the parcel is located.

²Noise Sensitive = Any public or private school, hospital, church, convalescent home, cemetery, sensitive wildlife habitat, or public library regardless of its location within any land use zoning district.

Source: Stanislaus County Code Section 10.46.050 Exterior noise level standards.

Additionally, according to Section 10.46.050 of the Stanislaus County Code, exterior noise levels shall not exceed cumulative duration allowance standards, as shown below in Table 12.

Table 12 Stanislaus County Code Cumulative Duration Allowance Standards

Cumulative Duration	Allowance Decibels
Equal to or greater than 30 minutes per hour	Table 11 plus 0 dBA
Equal to or greater than 15 minutes per hour	Table 11 plus 5 dBA
Equal to or greater than 5 minutes per hour	Table 11 plus 10 dBA
Equal to or greater than 1 minute per hour	Table 11 plus 15 dBA
Less than 1 minute per hour	Table 11 plus 20 dBA

Source: Stanislaus County Code Section 10.46.050 Cumulative duration allowance standards.

County Code includes noise source standards for specific sources, including construction. Section 10.46.060 (E) Construction Equipment, states “[n]o person shall operate any construction equipment so as to cause at or beyond the property line of any property upon which a dwelling unit is located an average sound level greater than seventy-five decibels between the hours of seven p.m. and seven a.m.”

Existing Setting

The proposed project is located in a rural area primarily surrounded by agricultural cropland. The existing bridge consists of two lands and spans the Ceres Main Canal. Sensitive land uses (or noise-sensitive receptors) that could be affected by noise from construction of the proposed project would be two residences; one located approximately 670 feet west of the project site along East Keyes Road, and one located 350 feet southwest of the project site accessible via the dirt access road along the canal.

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

The proposed project could generate temporary noise increases during construction; however, as discussed below, construction related noise would be less than significant with mitigation incorporated. The proposed project would have no long-term effects on noise levels, since the proposed project would not increase capacity along the roadway and would not change the location of the bridge and travel lanes. Once construction is completed noise levels would return to levels similar to the existing noise environment.

Nearby residential receptors are located as close as approximately 350 feet southwest of the project site. These sensitive receptors would be exposed to temporary construction noise, including demolition, grading, and installation of the new bridge along Keyes Road. Construction noise at the project site would be intermittent and its intensity would vary. The majority of noise would be from demolition and clearing the project site, along with the placement of the new bridge structure. Pile driving is not proposed as a part of the project.

Table 13 summarizes noise levels produced by construction equipment that is commonly used on bridge replacement projects and is representative of the equipment necessary for proposed project construction. Construction equipment is expected to generate noise levels ranging from 80 to 85 dBA L_{eq} at a distance of 50 feet and noise produced by construction equipment would be reduced over distance at a rate of about 6 dBA per doubling of distance.

Table 13 Typical Construction Equipment Noise Levels

Construction Equipment	Noise Level (dBA L_{eq} at 50 feet)	Estimated Noise at 350 feet (dBA L_{eq})
Scraper	85	68
Dozer	85	68
Truck	84	67
Backhoe	80	63
Pneumatic Tools	85	68
Concrete Pump	82	65

Source: FTA 2018

As the nearest residence is located approximately 350 feet from the project site, construction related levels from bridge removal and replacement would range between 65 to 68 dBA L_{eq} at the residential location. Although this noise level would be above the acceptable daytime exterior noise level for residential land uses as specified in Stanislaus County Code Section 10.46.050, noise generated due to construction activities would be temporary and typical of industrial and agricultural operations in the surrounding area. Mitigation Measure N-1 would ensure that construction noise occurs during daytime hours and would reduce construction equipment related noise at the nearby sensitive receptor in accordance with the levels required by Stanislaus County Code Section 10.46.050.

N-1 Construction Related Noise Reduction Measures

The applicant shall implement the following measures during construction of the project:

- **Construction Hours.** Construction operations shall be limited to Monday through Friday, 7:00 AM to 7:00 PM.
- **Mufflers.** Construction equipment shall be properly maintained and all internal combustion engine driven machinery with intake and exhaust mufflers and engine shrouds, as applicable, shall be in good condition and appropriate for the equipment. During construction, all equipment, fixed or mobile, shall be operated with closed engine doors and shall be equipped with properly operating and maintained mufflers, consistent with manufacturers' standards.
- **Electrical Power.** Electrical power, rather than diesel equipment, shall be used to run compressors and similar power tools and to power any temporary structures, such as construction trailers or caretaker facilities.
- **Equipment Staging.** All stationary equipment shall be staged as far away from the adjacent multi-family residential development as feasible.

- **Equipment Idling.** Construction vehicles and equipment shall not be left idling for longer than five minutes when not in use.
- **Workers' Radios.** All noise from workers' radios shall be controlled to a point that they are not audible at sensitive receptors near construction activity.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

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

Construction of the proposed project would intermittently generate vibration on and adjacent to the project site. Vibration-generating equipment may include bulldozers and loaded trucks to move materials and debris, and vibratory rollers for paving. It is assumed that pile drivers, which generate strong groundborne vibration, would not be used during construction. The project site is in a rural area of Stanislaus County to the west of the community of Keyes and is zoned for agricultural use. The nearest sensitive receptor to the project site is the rural residence located approximately 350 feet to the southwest. As shown in Table 14, at 350 feet from the source, estimated vibration levels associated with construction equipment would be 60 VdB. As mentioned above, 75 VdB is the approximate dividing line between barely perceptible and distinctly perceptible levels for many people. Additionally, the nearest residents are 350 feet from the project site. Therefore, construction vibration would not be perceptible to nearby sensitive receptors. No pile-driving, use of explosives, or substantial grading or earth movement would occur during construction. Impacts would be less than significant.

Table 14 Vibration Levels for Construction Equipment at Noise-Sensitive Receptors

Construction Equipment	Estimated VdB at 25 feet from Source	Estimated VdB at 350 feet from Source
Vibratory roller	94	60
Large bulldozer	87	53
Loaded trucks	86	51
Small bulldozer	58	23

Source: FTA 2018

LESS THAN SIGNIFICANT IMPACT

- 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?*

The project site is not located within the planning area and boundary of the Stanislaus County Airport Land Use Plan (Stanislaus County 1978). The nearest airport to the project site is the Modesto City/County Airport located approximately five miles north. The proposed project is not located within an airport land use plan, private airstrip, or within two miles of an airport. There would be no impact.

NO IMPACT

This page intentionally left blank.

14 Population and Housing

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
--	--------------------------------------	--	------------------------------------	-----------

Would the project:

- a. Induce substantial unplanned population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?

☐
☐
☐
☒

- b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

☐
☐
☐
☒

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

The proposed project involves the replacement of an existing bridge in the same location. It would not facilitate or result in unplanned direct or indirect population growth or changes in the spatial configuration of the existing population. No impact would occur.

NO IMPACT

- b. *Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?*

The proposed project would not displace any dwellings or require new housing construction, as no population growth would result from the proposed project. No impact would occur.

NO IMPACT

15 Public Services

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the 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:				
1 Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2 Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3 Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4 Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5 Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a.1. *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered fire protection facilities, or the need for new or physically altered fire protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?*
- a.2. *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered police protection facilities, or the need for new or physically altered police protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?*
- a.3. *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered schools, or the need for new or physically altered schools, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives?*
- a.4. *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered parks, or the need for new or physically altered parks, the*

construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives?

- a.5. *Would the project result in substantial adverse physical impacts associated with the provision of other new or physically altered public facilities, or the need for other new or physically altered public facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?*

The proposed project involves the replacement of the Keyes Road Bridge over the TID Main Ceres Canal. The proposed project does not include any residential or commercial development, or any facilities that would require fire or police protection, health care services, school facilities or additional parks. Existing service levels would not be affected by the project, as it would not result in new residents or employees in the area. Therefore, the project would have no impact on these public services and facilities.

NO IMPACT

This page intentionally left blank.

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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- 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?*

The proposed project involves the replacement of the Keyes Road Bridge over the TID Main Ceres Canal. There are no recreational uses on or surrounding the project site. The project would not conflict with established recreational uses. No impact would occur.

NO IMPACT

This page intentionally left blank.

17 Transportation

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	<input type="checkbox"/>	<input type="checkbox"/>	■	<input type="checkbox"/>
b. Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	<input type="checkbox"/>	<input type="checkbox"/>	■	<input type="checkbox"/>
c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	■
d. Result in inadequate emergency access?	<input type="checkbox"/>	■	<input type="checkbox"/>	<input type="checkbox"/>

- a. *Would the project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?*
- b. *Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?*

The proposed project involves the replacement of an existing bridge, with the same basic configuration. The proposed project would not change the number of lanes on the Keyes Road Bridge or increase traffic capacity on the bridge. By replacing the existing bridge, the proposed project would improve vehicular circulation as well as driver safety. Because the functional classification of the roadway would remain the same and new development would not be induced, the proposed project would conflict with any plan or policy established for addressing the circulation system. Additionally, the proposed project would not result in an increase in vehicle miles travelled and would therefore, not conflict with CEQA Guidelines section 15064.3, subdivision (b). Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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

The proposed project would replace an aging and decaying bridge, while maintaining the same basic configuration of the existing bridge. A primary purpose of the proposed project is to replace the deficient bridge and improve safety. This would include the construction of improved guard rails. As the replacement bridge would be built with the same roadway capacity and configuration as the existing bridge, no new hazards due to a geometric design feature or incompatible use would occur.

Traffic hazards would be decreased as a result of the proposed project and roadway operations are expected to improve along Keyes Road as a result. No impact would occur.

NO IMPACT

d. Would the project result in inadequate emergency access?

Keyes Road is primarily used as an east-west connector between lands in the general region of the project site and the SR-99. As discussed above in the *Description of Project*, construction would temporarily detour traffic around the bridge area (approximately three months). The detour would require vehicles to travel north or south on Central Avenue in order to access SR-99. This would maintain access to SR-99 and would only marginally add to travel time for through traffic.

Emergency access would be maintained during construction by nearby alternative routes including the proposed detour; however, emergency access to the vicinity of the project site may be subject to minor delays during construction of the proposed project. Implementation of Mitigation Measure TRA-1 would ensure that traffic impacts are minimized to a less than significant level.

TRA-1 Traffic Control Plan

To mitigate temporary traffic disruption and ensure public safety, the construction contractor for the proposed project shall develop and implement a standard traffic management plan, in coordination with the County, to minimize traffic disruption and ensure adequate access is maintained to the surrounding area. The traffic control plan shall specify how access for emergency providers shall be maintained during construction. Emergency service providers shall be continually informed and updated of all detours and other traffic modifications or delays.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

This page intentionally left blank.

18 Tribal Cultural Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in a Public Resources Code Section 21074 as either a site, feature, place, or 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:				
a. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k), or	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

As of July 1, 2015, California Assembly Bill 52 of 2014 (AB 52) was enacted and expands CEQA by defining a new resource category, "tribal cultural resources." AB 52 establishes that "A project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment" (PRC Section 21084.2). It further states that the lead agency shall establish measures to avoid impacts that would alter the significant characteristics of a tribal cultural resource, when feasible (PRC Section 21084.3).

PRC Section 21074 (a)(1)(A) and (B) defines tribal cultural resources as "sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe" and is:

1. 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
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 Public Resources Code Section 5024.1. In applying these criteria, the lead agency shall consider the significance of the resource to a California Native American tribe.

AB 52 also establishes a formal consultation process for California tribes regarding those resources. The consultation process must be completed before a CEQA document can be certified. Under AB 52, lead agencies are required to “begin consultation with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project.” Native American tribes to be included in the process are those that have requested notice of projects proposed within the jurisdiction of the lead agency.

- a. *Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code Section 21074 that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?*
- b. *Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code Section 21074 that is 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?*

On June 10, 2019, the County provided the following tribal governments with an AB 52 consultation letter (via certified mail):

- California Valley Miwok Tribe Sheep Rancheria of Me-Wuk Indians
- Northern Valley Yokuts Tribe
- Southern Sierra Miwuk Nation
- Tule River Indian Tribe
- Tuolumne Band of Me-Wuk Indians

Under AB 52, tribes have 30 days to respond and request further project information and request formal consultation. Copies of AB 52 correspondence for this project are included in Appendix E. No other Tribes have requested notification under AB 52 from Stanislaus County. Thus, the County assumes that no known tribal cultural resources are present on the project site. However, the proposed excavation of the project site could potentially result in impacts on unanticipated tribal cultural resources. Impacts from the unanticipated discovery of tribal cultural resources during construction would be less than significant with Mitigation Measure TCR-1.

Mitigation Measures

The following mitigation measure would reduce impacts to unanticipated tribal cultural resources to a less than significant level.

TCR-1 Unanticipated Discovery of Tribal Cultural Resources

In the event that cultural resources of Native American origin are identified during construction, all earth disturbing work within the vicinity of the find must be temporarily suspended or redirected until an archaeologist has evaluated the nature and significance of the find and an appropriate Native American representative, based on the nature of the find, is consulted. If the County determines that the resource is a tribal cultural resource and thus significant under CEQA, a mitigation plan shall be prepared and implemented in accordance with state guidelines and in consultation with Native American groups. The plan would include avoidance of the resource or, if avoidance of the resource is infeasible, the plan would outline the appropriate treatment of the

resource in coordination with the archeologist and the appropriate Native American tribal representative.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

19 Utilities and Service Systems

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

- a. *Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?*
- b. *Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?*
- c. *Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?*

The proposed project involves the replacement of the existing Keyes Road Bridge over the TID Main Ceres Canal in the same location. The project does not include any residential or commercial development and would not place an increase on demand for any utilities or service systems. The proposed project is intended to increase the load limit and permit rating of the bridge and thus, improve safety for motorists. While the proposed project would minimize vehicular accidents and improve vehicular circulation, it would maintain the same lane configuration and would not increase capacity of the bridge or result in an increase in vehicular trips across the bridge. Additionally, because the proposed project involves improvements to an existing bridge, it would not generate any wastewater or require any additional operational water supply. The only utilities that would be relocated during project construction are the AT&T telephone pole in the public right-of-way and the private irrigation line/air vent. No new utilities would be added under the proposed project. No impacts would occur.

NO IMPACT

- d. Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?*
- e. Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?*

Solid waste in the County is managed by the Stanislaus County Environmental Resources Department, Solid Waste Division. The County owns and operates the Fink Road Sanitary Landfill, a Class III Landfill for the disposal of nonhazardous municipal solid waste including household and commercial garbage, construction debris, roofing materials, non-friable Asbestos, treated wood waste, animal remains, and concrete/inert materials.

Construction of the proposed project would result in solid waste from excavation and demolition of the existing bridge. Solid waste generated by project construction would be transported to the Fink Road Sanitary Landfill, approximately 16 miles southwest of the project site. The Fink Road Sanitary Landfill has a permitted capacity of 2,400 tons per day (California Department of Resources Recycling and Recovery [CalRecycle] 2019). Because the proposed project would place the excavated soils onsite during construction, the amount of construction and demolition diverted to the Landfill would be minimal. Therefore, the proposed project would not 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. Additionally, the proposed project would be required to comply with California Green Building Code and SB 1016, which requires that construction operations recycle a minimum of 50 percent of waste generated. Therefore, the proposed project would not conflict with federal, state, or local management and reduction statutes and regulations related to solid waste. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

20 Wildfire

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a. Substantially impair an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Expose people or structures to significant risks, including downslopes or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a. *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project substantially impair an adopted emergency response plan or emergency evacuation plan?*
- b. *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project due to slope, prevailing winds, and other factors, exacerbate wildfire risks and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?*
- c. *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?*

- d. *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project expose people or structures to significant risks, including downslopes or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?*

The project site is not located within or near a Very High Fire Hazard Severity Zone or state responsibility area. The nearest Very High Fire Hazard Severity Zone is located in the western portion of Stanislaus County approximately over 20 miles west of the project site (CalFire 2007). Because the site is not within or near a state responsibility area or a Very High Fire Hazard Severity Zone, no impacts related to wildfires would occur.

NO IMPACT

21 Mandatory Findings of Significance

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Does the project:				
a. 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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- 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?*

The project site largely consists of the existing Keyes Road Bridge over the TID Ceres Main Canal, surrounded by rural and agricultural land uses. Based on the information and analysis provided throughout this Initial Study, implementation of the proposed project would not substantially degrade the quality of the environment and would not substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of rare or endangered plants or animals, or eliminate important examples of California history or prehistory.

Cultural resources, which illustrate examples of California history and prehistory, are discussed in Section 5, *Cultural Resources*, and Section 18, *Tribal Cultural Resources*. Mitigation Measures CUL-1 and TCR-1 have been designed to reduce potential impacts of disturbing archaeological and tribal cultural resources and human remains. Biological resources are addressed in Section 4, *Biological Resources*. With Mitigation Measures BIO-1 through BIO-3 related to special status species, nesting birds and state or federally protected wetlands, the proposed project would not substantially reduce wildlife habitat or impact jurisdictional waters. Based on the ability of the identified mitigation measures to reduce potential impacts to less than significant levels, the proposed project's impacts would be less than significant with mitigation incorporated.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

- 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)?*

The proposed project was determined to have no impact in comparison to existing conditions for Land Use and Planning, Mineral Resources, Population and Housing, Public Services, and Recreation issue areas. Therefore, there would be no direct or indirect impacts, the proposed project would not contribute to cumulative impacts to these issue areas.

For all other issue areas, the proposed project would have either direct or indirect impacts that have been determined to be less than significant, with or without mitigation incorporated. The proposed project consists of the replacement of the existing Keyes Road Bridge. Thus, impacts of the proposed project are generally restricted to the existing footprint and impacts to the canal, and would not adversely affect biological, cultural, or other physical resources outside of the project area. Other impacts, such as increases in noise, air pollutants, and GHG emissions would be temporary and short-term during the construction period. Thus, the effects of the project would not combine with impacts from other projects in the vicinity to result in a significant cumulative impact.

LESS THAN SIGNIFICANT IMPACT

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

Effects on human beings are generally associated with impacts related to such issue areas as air quality, geology and soils, noise, traffic safety, and hazards. As discussed in this Initial Study, the project would result in a less than significant impact in each of these resource areas. As discussed in Section 3, *Air Quality*, the project would not generate air quality pollutants above SJVAPCD thresholds, and impacts would be less than significant. As discussed in Section 7, *Geology and Soils*, the project would not expose people or structures to potential adverse effects including risk of loss, injury, or death involving seismic-related ground failure, including liquefaction. As discussed in Section 17, *Transportation*, the project would not alter any existing transportation infrastructure or have any impact on traffic safety with implementation of the Traffic Control Plan included with Mitigation Measure TRA-1. The project would not cause substantial adverse effects on human beings, either directly or indirectly. Impacts would be less than significant.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

References

Bibliography

- Association of Environmental Professionals (AEP). 2016. Beyond 2020 and Newhall: A Field Guide to New CEQA Greenhouse Gas Thresholds and Climate Action Plan Targets for California. https://www.califaep.org/images/climate-change/AEP-2016_Final_White_Paper.pdf (Accessed June 2019).
- Bay Area Air Quality Management District (BAAQMD). 2017. California Environmental Quality Act Air Quality Guidelines. http://www.baaqmd.gov/~media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en (Accessed June 2019).
- California Air Pollution Control Officers Association (CAPCOA). 2009. Health Risk Assessments for Proposed Land Use Project. CAPCOA Guidance Document. Prepared by: CAPCOA Planning Managers. Approved for Release July 2009. http://www.capcoa.org/wp-content/uploads/2012/03/CAPCOA_HRA_LU_Guidelines_8-6-09.pdf (Accessed June 2019).
- California Air Resources Board (CARB). 2005. Air Quality and Land Use Handbook: A Community Health Perspective. April 2005. <https://www.arb.ca.gov/ch/handbook.pdf> (Accessed June 2019).
- _____. 2015. California modified Greenhouse Gases, Regulated Emissions, and Energy Use in Transportation (CA-GREET) 2.0 Model. September 2015.
- _____. 2017. California's 2017 Climate Change Scoping Plan. December 14, 2017. https://www.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf (Accessed June 2019).
- California Department of Conservation (DOC). 1993. Division of Mines and Geology. Mineral Lands Classification of Stanislaus County. ftp://ftp.consrv.ca.gov/pub/dmg/pubs/sr/SR_173/ (Accessed May 2019).
- _____. 2015. California Geologic Survey Information Warehouse. Regulatory Maps. 2015. <http://maps.conservation.ca.gov/cgs/informationwarehouse/> (Accessed June 2019).
- _____. 2016. California Important Farmland Finder. <https://maps.conservation.ca.gov/dlrp/ciff/> (Accessed June 2019).
- California Department of Fish and Wildlife (CDFW). 2018. Natural Communities List Arranged Alphabetically by Life Form (PDF). Available from <https://www.wildlife.ca.gov/Data/VegCAMP/Natural-Communities#sensitive%20natural%20communities> (Accessed May 2019).
- _____. 2019a. Wildlife Habitats – California Wildlife Habitat Relationships System. Available from <https://www.wildlife.ca.gov/Data/CWHR/Wildlife-Habitats> (Accessed May 2019).
- _____. 2019b. California Natural Diversity Database, Rarefind 5.
- California Department of Forestry and Fire (CalFire). 2007. Fire Hazard Severity Zones in SRA. http://frap.fire.ca.gov/webdata/maps/stanislaus/fhszs_map.50.pdf (Accessed May 2019).

- California Department of Resources Recycling and Recovery (CalRecycle). 2019. SWIS Facility Detail, Find Road Landfill (50-AA-0001). <https://www2.calrecycle.ca.gov/SWFacilities/Directory/50-AA-0001/Detail/> (Accessed June 2019).
- California Department of Transportation (Caltrans). California Scenic Highway Mapping System. County of Stanislaus. September 9, 2011. http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/ (Accessed June 2019).
- _____. 2013. Technical Noise Supplement to the Traffic Noise Analysis Protocol. (CT-HWANP-RT-13-069.25.2) September. http://www.dot.ca.gov/hq/env/noise/pub/TeNS_Sept_2013B.pdf (Accessed June 2019).
- California Energy Commission (CEC). 2017a. Electricity Consumption by County. <http://ecdms.energy.ca.gov/elecbycounty.aspx> (Accessed June 2019).
- _____. 2017b. Gas Consumption by County. <http://ecdms.energy.ca.gov/gasbycounty.aspx>. (Accessed June 2019).
- _____. 2018. 2019 Building Energy Efficiency Standards. March. https://www.energy.ca.gov/title24/2019standards/documents/2018_Title_24_2019_Building_Standards_FAQ.pdf (Accessed June 2019).
- _____. 2019a. Total System Electric Generation. https://www.energy.ca.gov/almanac/electricity_data/total_system_power.html (Accessed June 2019).
- _____. 2019b. California Energy Almanac. <https://www.energy.ca.gov/almanac/> (Accessed June 2019).
- Chavez, David. 1976. An Archaeological Reconnaissance of the Robert's Ferry Reservoir and Water Extraction and Conveyance Systems, Stanislaus County, California: Phase II
- Cornerstone Structural Engineering Group. 2019. Keyes Road at Ceres Main Canal Bridge Replacement Type Section Memorandum. Updated May 22, 2019.
- Federal Transit Administration (FTA). 2018. Transit Noise and Vibration Impact Assessment Manual. https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf (Accessed June 2019).
- Haas, Hannah and Williams, James. 2019. Cultural Resources Technical Memorandum for the Keyes Road over Turlock Irrigation District Ceres Main Canal Bridge Replacement Project, near the Community of Keyes, Stanislaus County, California.
- Marchand, D.E., 1980, Preliminary geologic maps showing Quaternary deposits of the Ceres, Denair, and Montpelier 7 1/2' quadrangles, Stanislaus and Merced Counties, California: U.S. Geological Survey, Open-File Report OF-80-607, scale 1:24,000.
- Marchand, D. E., and Allwardt, A., 1981, Late Cenozoic stratigraphic units, northeastern San Joaquin Valley, California: U.S. Geological Survey Bulletin 1470.
- McLeod, S. 2019. Collections search of the Natural History Museum of Los Angeles County for the Keyes Road Over Ceres Main Canal Bridge Replacement Project, Stanislaus County, California

- National Park Service. 1983. Archaeological and Historic Preservation: Secretary of the Interior's Standards and Guidelines. Electronic document. https://www.nps.gov/history/local-law/arch_stnds_0.htm (Accessed June 2019).
- San Joaquin Valley Air Pollution Control District (SJVAPCD). 2009. *Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA*. December 17, 2009. <http://www.valleyair.org/Programs/CCAP/12-17-09/3%20CCAP%20-%20FINAL%20LU%20Guidance%20-%20Dec%2017%202009.pdf> (Accessed June 2019).
- _____. 2015. Guidance for Assessing and Mitigating Air Quality Impacts. March 19, 2015. http://www.valleyair.org/transportation/GAMAQI_3-19-15.pdf (Accessed June 2019).
- _____. 2016a. 2016 Ozone Plan for 2008 8-Hour Standard. Adopted June 16, 2016. http://valleyair.org/Air_Quality_Plans/Ozone-Plan-2016/Adopted-Plan.pdf (Accessed June 2019).
- _____. 2016b. 2016 Moderate Area Plan for the 2012 PM_{2.5} Standard. http://www.valleyair.org/Air_Quality_Plans/docs/PM25-2016/2016-Plan.pdf (Accessed June 2019).
- Society of Vertebrate Paleontology (SVP). 2010. Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources. Society of Vertebrate Paleontology Impact Mitigation Guidelines Revision Committee.
- Stanislaus Council of Governments (StanCOG). 2018. 2018 Regional Transportation Plan Sustainable Communities Strategy.
- Stanislaus County. 1978. Land Use Commission Plan. Adopted August 3, 1978. Amended May 20, 2004. <http://www.stancounty.com/planning/agenda-aluc/alucplan.pdf> (Accessed May 2019).
- _____. 2016. Stanislaus County General Plan 2015. Adopted August 23, 2016. <http://www.stancounty.com/planning/pl/general-plan.shtm> (Accessed May 2019).
- State Water Resources Control Board (SWRCB). 2019. State Wetland Definition and Procedures for Discharge of Dredged or Fill Material to Waters of the State. https://www.waterboards.ca.gov/water_issues/programs/cwa401/docs/procedures_conformed.pdf (Accessed May 2019).
- Swainson's Hawk Technical Advisory Committee. 2000. Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley.
- Turlock Irrigation District (TID). 2012. 2012 Agricultural Water Management Plan. <https://www.tid.org/wp-content/uploads/2017/04/Final-TID-AWMP.pdf> (Accessed May 2019).
- United States Department of Transportation (DOT), Bureau of Transportation Statistics. 2018. National Transportation Statistics. <https://www.bts.gov/topics/national-transportation-statistics> (Accessed June 2019).
- United States Energy Information Administration (EIA). 2019. Annual Energy Outlook 2019 with projections to 2050, January 24. <https://www.eia.gov/outlooks/aeo/pdf/aeo2019.pdf> (Accessed June 2019).
- United States Environmental Protection Agency (USEPA). 2018. Criteria Air Pollutants. <https://www.epa.gov/criteria-air-pollutants> (Accessed June 2019).

United States Geological Survey. 2019. Areas of Land Subsidence in California, Map.
http://ca.water.usgs.gov/land_subsidence/california-subsidence-areas.html (Accessed June 2019).

University of California Museum of Paleontology (UCMP) Online Database. 2019. UCMP specimen search portal, <http://ucmpdb.berkeley.edu/>.

Wagner, D.L., Bortugno, E.J., and McJunkin, R.D., 1991, Geologic map of the San Francisco-San Jose quadrangle, California: California Division of Mines and Geology Regional Geologic Map 5A, scale 1:250,000.

Weissmann, G. S., Mount, J. F., and Fogg, G. E., 2002, Glacially driven cycles in accumulation space and sequence stratigraphy of a stream-dominated alluvial fan, San Joaquin Valley, California, U.S.A: *Journal of Sedimentary Research*, v. 72, no. 2, p. 240–251.

Weissmann, G. S., Bennett, G. L., and Lansdale, A. L., 2005, Factors controlling sequence development on quaternary fluvial fans, San Joaquin Basin, California, U.S.A, *in* Harvey, A., Mather, B., and Stokes, M., eds., *Alluvial Fans: Geomorphology, Sedimentology, Dynamics*: Geological Society of London Special Publication 251, p. 169–186.

List of Preparers

Rincon Consultants, Inc. prepared this IS-MND under contract to Stanislaus County Public Works. Persons involved in data gathering analysis, project management, and quality control are listed below.

RINCON CONSULTANTS, INC.

Richard Daulton, Principal
Eric VonBerg, Senior Project Manager
Beth Wilson, Associate Environmental Planner
Kirsten Bates, Associate Biologist
Carolynn Daman, Associate Biologist/ Associate Regulatory Specialist
Colby Boggs, Principal/Senior Regulatory Specialist
David Daitch, Program Manager, Senior Biologist
Hannah Haas, Senior Archaeologist
James Williams, Architectural Historian
Mary Pfeiffer, Associate Archaeologist
Jorge Mendieta, Associate Environmental Scientist
Jessica DeBusk, Principal Investigator, Paleontologist
Gib Fates, Principal
Lauren Kodama Roenicke, Environmental Scientist

This page intentionally left blank.

Appendix A

Air Quality and GHG Modelling Worksheets

Keyes Road Bridge at TID Ceres Main Canal Project - Stanislaus County, Annual

Keyes Road Bridge at TID Ceres Main Canal Project

Stanislaus County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	0.46	Acre	0.46	20,037.60	0

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	46
Climate Zone	3			Operational Year	2020
Utility Company	Turlock Irrigation District				
CO2 Intensity (lb/MW hr)	790	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Client provided information.

Construction Phase - Assumes an approximate 3 month construction period total, per client information.

Grading - Client provided information regarding materials imported.

Demolition - Per client provided information on demolition of bridge.

Construction Off-road Equipment Mitigation - Per regulation SJVAPCD Rule VIII.

Keyes Road Bridge at TID Ceres Main Canal Project - Stanislaus County, Annual

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	5.00	25.00
tblConstructionPhase	NumDays	100.00	42.00
tblConstructionPhase	NumDays	10.00	5.00
tblConstructionPhase	PhaseEndDate	4/22/2020	1/24/2020
tblConstructionPhase	PhaseEndDate	4/8/2020	1/10/2020
tblConstructionPhase	PhaseEndDate	11/15/2019	11/8/2019
tblConstructionPhase	PhaseEndDate	11/20/2019	11/13/2019
tblConstructionPhase	PhaseEndDate	4/15/2020	1/17/2020
tblConstructionPhase	PhaseEndDate	11/18/2019	11/11/2019
tblConstructionPhase	PhaseStartDate	4/16/2020	12/23/2019
tblConstructionPhase	PhaseStartDate	11/21/2019	11/14/2019
tblConstructionPhase	PhaseStartDate	11/19/2019	11/12/2019
tblConstructionPhase	PhaseStartDate	4/9/2020	1/13/2020
tblConstructionPhase	PhaseStartDate	11/16/2019	11/11/2019
tblGrading	MaterialImported	0.00	593.00
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural

2.0 Emissions Summary

Keyes Road Bridge at TID Ceres Main Canal Project - Stanislaus County, Annual

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	0.0244	0.2438	0.1783	3.6000e-004	0.0179	0.0130	0.0308	3.4900e-003	0.0121	0.0155	0.0000	33.1103	33.1103	7.0800e-003	0.0000	33.2873
2020	0.0118	0.0705	0.0685	1.2000e-004	1.2500e-003	4.0900e-003	5.3400e-003	3.3000e-004	3.8500e-003	4.1900e-003	0.0000	10.0212	10.0212	2.2200e-003	0.0000	10.0766
Maximum	0.0244	0.2438	0.1783	3.6000e-004	0.0179	0.0130	0.0308	3.4900e-003	0.0121	0.0155	0.0000	33.1103	33.1103	7.0800e-003	0.0000	33.2873

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	0.0244	0.2438	0.1783	3.6000e-004	0.0179	0.0130	0.0308	3.4900e-003	0.0121	0.0155	0.0000	33.1103	33.1103	7.0800e-003	0.0000	33.2873
2020	0.0118	0.0705	0.0685	1.2000e-004	1.2500e-003	4.0900e-003	5.3400e-003	3.3000e-004	3.8500e-003	4.1900e-003	0.0000	10.0211	10.0211	2.2200e-003	0.0000	10.0765
Maximum	0.0244	0.2438	0.1783	3.6000e-004	0.0179	0.0130	0.0308	3.4900e-003	0.0121	0.0155	0.0000	33.1103	33.1103	7.0800e-003	0.0000	33.2873

[illegible]

Keyes Road Bridge at TID Ceres Main Canal Project - Stanislaus County, Annual

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	11-4-2019	2-3-2020	0.3209	0.3209
		Highest	0.3209	0.3209

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.7100e-003	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	0.0000	1.0000e-005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	1.7100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	0.0000	1.0000e-005

Keyes Road Bridge at TID Ceres Main Canal Project - Stanislaus County, Annual

2.2 Overall Operational**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.7100e-003	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	0.0000	1.0000e-005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	1.7100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	0.0000	1.0000e-005

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail**Construction Phase**

Keyes Road Bridge at TID Ceres Main Canal Project - Stanislaus County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	11/4/2019	11/8/2019	5	5	
2	Site Preparation	Site Preparation	11/11/2019	11/11/2019	5	1	
3	Grading	Grading	11/12/2019	11/13/2019	5	2	
4	Building Construction	Building Construction	11/14/2019	1/10/2020	5	42	
5	Architectural Coating	Architectural Coating	12/23/2019	1/24/2020	5	25	
6	Paving	Paving	1/13/2020	1/17/2020	5	5	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 0

Acres of Paving: 0.46

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 1,202
(Architectural Coating – sqft)

OffRoad Equipment

Keyes Road Bridge at TID Ceres Main Canal Project - Stanislaus County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Site Preparation	Graders	1	8.00	187	0.41
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Demolition	Rubber Tired Dozers	1	1.00	247	0.40
Grading	Rubber Tired Dozers	1	1.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	4	10.00	0.00	117.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	74.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	8.00	3.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	2.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

Keyes Road Bridge at TID Ceres Main Canal Project - Stanislaus County, Annual

3.1 Mitigation Measures Construction

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2019**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0126	0.0000	0.0126	1.9100e-003	0.0000	1.9100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.3800e-003	0.0215	0.0192	3.0000e-005		1.3400e-003	1.3400e-003		1.2800e-003	1.2800e-003	0.0000	2.6301	2.6301	5.0000e-004	0.0000	2.6426
Total	2.3800e-003	0.0215	0.0192	3.0000e-005	0.0126	1.3400e-003	0.0140	1.9100e-003	1.2800e-003	3.1900e-003	0.0000	2.6301	2.6301	5.0000e-004	0.0000	2.6426

Keyes Road Bridge at TID Ceres Main Canal Project - Stanislaus County, Annual

3.2 Demolition - 2019**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	5.0000e-004	0.0174	2.4300e-003	5.0000e-005	1.0000e-003	7.0000e-005	1.0700e-003	2.7000e-004	7.0000e-005	3.4000e-004	0.0000	4.4867	4.4867	2.9000e-004	0.0000	4.4938
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.7000e-004	1.3000e-004	1.3100e-003	0.0000	3.1000e-004	0.0000	3.1000e-004	8.0000e-005	0.0000	8.0000e-005	0.0000	0.2919	0.2919	1.0000e-005	0.0000	0.2922
Total	6.7000e-004	0.0175	3.7400e-003	5.0000e-005	1.3100e-003	7.0000e-005	1.3800e-003	3.5000e-004	7.0000e-005	4.2000e-004	0.0000	4.7786	4.7786	3.0000e-004	0.0000	4.7860

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0126	0.0000	0.0126	1.9100e-003	0.0000	1.9100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.3800e-003	0.0215	0.0192	3.0000e-005		1.3400e-003	1.3400e-003		1.2800e-003	1.2800e-003	0.0000	2.6301	2.6301	5.0000e-004	0.0000	2.6426
Total	2.3800e-003	0.0215	0.0192	3.0000e-005	0.0126	1.3400e-003	0.0140	1.9100e-003	1.2800e-003	3.1900e-003	0.0000	2.6301	2.6301	5.0000e-004	0.0000	2.6426

Keyes Road Bridge at TID Ceres Main Canal Project - Stanislaus County, Annual

3.2 Demolition - 2019**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	5.0000e-004	0.0174	2.4300e-003	5.0000e-005	1.0000e-003	7.0000e-005	1.0700e-003	2.7000e-004	7.0000e-005	3.4000e-004	0.0000	4.4867	4.4867	2.9000e-004	0.0000	4.4938
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.7000e-004	1.3000e-004	1.3100e-003	0.0000	3.1000e-004	0.0000	3.1000e-004	8.0000e-005	0.0000	8.0000e-005	0.0000	0.2919	0.2919	1.0000e-005	0.0000	0.2922
Total	6.7000e-004	0.0175	3.7400e-003	5.0000e-005	1.3100e-003	7.0000e-005	1.3800e-003	3.5000e-004	7.0000e-005	4.2000e-004	0.0000	4.7786	4.7786	3.0000e-004	0.0000	4.7860

3.3 Site Preparation - 2019**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.7000e-004	0.0000	2.7000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.6000e-004	4.4600e-003	2.0700e-003	0.0000		1.8000e-004	1.8000e-004		1.7000e-004	1.7000e-004	0.0000	0.4378	0.4378	1.4000e-004	0.0000	0.4413
Total	3.6000e-004	4.4600e-003	2.0700e-003	0.0000	2.7000e-004	1.8000e-004	4.5000e-004	3.0000e-005	1.7000e-004	2.0000e-004	0.0000	0.4378	0.4378	1.4000e-004	0.0000	0.4413

Keyes Road Bridge at TID Ceres Main Canal Project - Stanislaus County, Annual

3.3 Site Preparation - 2019**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-005	1.0000e-005	1.3000e-004	0.0000	3.0000e-005	0.0000	3.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0292	0.0292	0.0000	0.0000	0.0292
Total	2.0000e-005	1.0000e-005	1.3000e-004	0.0000	3.0000e-005	0.0000	3.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0292	0.0292	0.0000	0.0000	0.0292

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.7000e-004	0.0000	2.7000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.6000e-004	4.4600e-003	2.0700e-003	0.0000		1.8000e-004	1.8000e-004		1.7000e-004	1.7000e-004	0.0000	0.4378	0.4378	1.4000e-004	0.0000	0.4413
Total	3.6000e-004	4.4600e-003	2.0700e-003	0.0000	2.7000e-004	1.8000e-004	4.5000e-004	3.0000e-005	1.7000e-004	2.0000e-004	0.0000	0.4378	0.4378	1.4000e-004	0.0000	0.4413

Keyes Road Bridge at TID Ceres Main Canal Project - Stanislaus County, Annual

3.3 Site Preparation - 2019**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-005	1.0000e-005	1.3000e-004	0.0000	3.0000e-005	0.0000	3.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0292	0.0292	0.0000	0.0000	0.0292
Total	2.0000e-005	1.0000e-005	1.3000e-004	0.0000	3.0000e-005	0.0000	3.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0292	0.0292	0.0000	0.0000	0.0292

3.4 Grading - 2019**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					7.9000e-004	0.0000	7.9000e-004	4.2000e-004	0.0000	4.2000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.5000e-004	8.6000e-003	7.6900e-003	1.0000e-005		5.4000e-004	5.4000e-004		5.1000e-004	5.1000e-004	0.0000	1.0520	1.0520	2.0000e-004	0.0000	1.0570
Total	9.5000e-004	8.6000e-003	7.6900e-003	1.0000e-005	7.9000e-004	5.4000e-004	1.3300e-003	4.2000e-004	5.1000e-004	9.3000e-004	0.0000	1.0520	1.0520	2.0000e-004	0.0000	1.0570

Keyes Road Bridge at TID Ceres Main Canal Project - Stanislaus County, Annual

3.4 Grading - 2019**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.2000e-004	0.0110	1.5400e-003	3.0000e-005	6.3000e-004	4.0000e-005	6.7000e-004	1.7000e-004	4.0000e-005	2.1000e-004	0.0000	2.8377	2.8377	1.8000e-004	0.0000	2.8423
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.0000e-005	5.0000e-005	5.2000e-004	0.0000	1.2000e-004	0.0000	1.3000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.1168	0.1168	0.0000	0.0000	0.1169
Total	3.9000e-004	0.0110	2.0600e-003	3.0000e-005	7.5000e-004	4.0000e-005	8.0000e-004	2.0000e-004	4.0000e-005	2.4000e-004	0.0000	2.9545	2.9545	1.8000e-004	0.0000	2.9591

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					7.9000e-004	0.0000	7.9000e-004	4.2000e-004	0.0000	4.2000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.5000e-004	8.6000e-003	7.6900e-003	1.0000e-005		5.4000e-004	5.4000e-004		5.1000e-004	5.1000e-004	0.0000	1.0520	1.0520	2.0000e-004	0.0000	1.0570
Total	9.5000e-004	8.6000e-003	7.6900e-003	1.0000e-005	7.9000e-004	5.4000e-004	1.3300e-003	4.2000e-004	5.1000e-004	9.3000e-004	0.0000	1.0520	1.0520	2.0000e-004	0.0000	1.0570

Keyes Road Bridge at TID Ceres Main Canal Project - Stanislaus County, Annual

3.4 Grading - 2019**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.2000e-004	0.0110	1.5400e-003	3.0000e-005	6.3000e-004	4.0000e-005	6.7000e-004	1.7000e-004	4.0000e-005	2.1000e-004	0.0000	2.8377	2.8377	1.8000e-004	0.0000	2.8423
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.0000e-005	5.0000e-005	5.2000e-004	0.0000	1.2000e-004	0.0000	1.3000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.1168	0.1168	0.0000	0.0000	0.1169
Total	3.9000e-004	0.0110	2.0600e-003	3.0000e-005	7.5000e-004	4.0000e-005	8.0000e-004	2.0000e-004	4.0000e-005	2.4000e-004	0.0000	2.9545	2.9545	1.8000e-004	0.0000	2.9591

3.5 Building Construction - 2019**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0163	0.1670	0.1282	1.9000e-004		0.0103	0.0103		9.4700e-003	9.4700e-003	0.0000	17.3911	17.3911	5.5000e-003	0.0000	17.5286
Total	0.0163	0.1670	0.1282	1.9000e-004		0.0103	0.0103		9.4700e-003	9.4700e-003	0.0000	17.3911	17.3911	5.5000e-003	0.0000	17.5286

Keyes Road Bridge at TID Ceres Main Canal Project - Stanislaus County, Annual

3.5 Building Construction - 2019**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.3000e-004	6.5500e-003	1.1900e-003	1.0000e-005	3.1000e-004	5.0000e-005	3.5000e-004	9.0000e-005	4.0000e-005	1.3000e-004	0.0000	1.2736	1.2736	1.2000e-004	0.0000	1.2767
Worker	9.3000e-004	6.9000e-004	7.1200e-003	2.0000e-005	1.6900e-003	1.0000e-005	1.7000e-003	4.5000e-004	1.0000e-005	4.6000e-004	0.0000	1.5881	1.5881	5.0000e-005	0.0000	1.5895
Total	1.1600e-003	7.2400e-003	8.3100e-003	3.0000e-005	2.0000e-003	6.0000e-005	2.0500e-003	5.4000e-004	5.0000e-005	5.9000e-004	0.0000	2.8617	2.8617	1.7000e-004	0.0000	2.8661

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0163	0.1670	0.1282	1.9000e-004		0.0103	0.0103		9.4700e-003	9.4700e-003	0.0000	17.3911	17.3911	5.5000e-003	0.0000	17.5286
Total	0.0163	0.1670	0.1282	1.9000e-004		0.0103	0.0103		9.4700e-003	9.4700e-003	0.0000	17.3911	17.3911	5.5000e-003	0.0000	17.5286

Keyes Road Bridge at TID Ceres Main Canal Project - Stanislaus County, Annual

3.5 Building Construction - 2019**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.3000e-004	6.5500e-003	1.1900e-003	1.0000e-005	3.1000e-004	5.0000e-005	3.5000e-004	9.0000e-005	4.0000e-005	1.3000e-004	0.0000	1.2736	1.2736	1.2000e-004	0.0000	1.2767
Worker	9.3000e-004	6.9000e-004	7.1200e-003	2.0000e-005	1.6900e-003	1.0000e-005	1.7000e-003	4.5000e-004	1.0000e-005	4.6000e-004	0.0000	1.5881	1.5881	5.0000e-005	0.0000	1.5895
Total	1.1600e-003	7.2400e-003	8.3100e-003	3.0000e-005	2.0000e-003	6.0000e-005	2.0500e-003	5.4000e-004	5.0000e-005	5.9000e-004	0.0000	2.8617	2.8617	1.7000e-004	0.0000	2.8661

3.5 Building Construction - 2020**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.4500e-003	0.0354	0.0296	5.0000e-005		2.0900e-003	2.0900e-003		1.9200e-003	1.9200e-003	0.0000	4.0024	4.0024	1.2900e-003	0.0000	4.0348
Total	3.4500e-003	0.0354	0.0296	5.0000e-005		2.0900e-003	2.0900e-003		1.9200e-003	1.9200e-003	0.0000	4.0024	4.0024	1.2900e-003	0.0000	4.0348

Keyes Road Bridge at TID Ceres Main Canal Project - Stanislaus County, Annual

3.5 Building Construction - 2020**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.0000e-005	1.4100e-003	2.4000e-004	0.0000	7.0000e-005	1.0000e-005	8.0000e-005	2.0000e-005	1.0000e-005	3.0000e-005	0.0000	0.2972	0.2972	3.0000e-005	0.0000	0.2979
Worker	2.0000e-004	1.4000e-004	1.4900e-003	0.0000	4.0000e-004	0.0000	4.0000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.3622	0.3622	1.0000e-005	0.0000	0.3625
Total	2.4000e-004	1.5500e-003	1.7300e-003	0.0000	4.7000e-004	1.0000e-005	4.8000e-004	1.3000e-004	1.0000e-005	1.4000e-004	0.0000	0.6594	0.6594	4.0000e-005	0.0000	0.6604

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.4500e-003	0.0354	0.0296	5.0000e-005		2.0900e-003	2.0900e-003		1.9200e-003	1.9200e-003	0.0000	4.0024	4.0024	1.2900e-003	0.0000	4.0348
Total	3.4500e-003	0.0354	0.0296	5.0000e-005		2.0900e-003	2.0900e-003		1.9200e-003	1.9200e-003	0.0000	4.0024	4.0024	1.2900e-003	0.0000	4.0348

Keyes Road Bridge at TID Ceres Main Canal Project - Stanislaus County, Annual

3.5 Building Construction - 2020**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.0000e-005	1.4100e-003	2.4000e-004	0.0000	7.0000e-005	1.0000e-005	8.0000e-005	2.0000e-005	1.0000e-005	3.0000e-005	0.0000	0.2972	0.2972	3.0000e-005	0.0000	0.2979
Worker	2.0000e-004	1.4000e-004	1.4900e-003	0.0000	4.0000e-004	0.0000	4.0000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.3622	0.3622	1.0000e-005	0.0000	0.3625
Total	2.4000e-004	1.5500e-003	1.7300e-003	0.0000	4.7000e-004	1.0000e-005	4.8000e-004	1.3000e-004	1.0000e-005	1.4000e-004	0.0000	0.6594	0.6594	4.0000e-005	0.0000	0.6604

3.6 Architectural Coating - 2019**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.1700e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.3000e-004	6.4200e-003	6.4400e-003	1.0000e-005		4.5000e-004	4.5000e-004		4.5000e-004	4.5000e-004	0.0000	0.8936	0.8936	8.0000e-005	0.0000	0.8955
Total	2.1000e-003	6.4200e-003	6.4400e-003	1.0000e-005		4.5000e-004	4.5000e-004		4.5000e-004	4.5000e-004	0.0000	0.8936	0.8936	8.0000e-005	0.0000	0.8955

Keyes Road Bridge at TID Ceres Main Canal Project - Stanislaus County, Annual

3.6 Architectural Coating - 2019**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.0000e-005	4.0000e-005	3.7000e-004	0.0000	9.0000e-005	0.0000	9.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0817	0.0817	0.0000	0.0000	0.0818
Total	5.0000e-005	4.0000e-005	3.7000e-004	0.0000	9.0000e-005	0.0000	9.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0817	0.0817	0.0000	0.0000	0.0818

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.1700e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.3000e-004	6.4200e-003	6.4400e-003	1.0000e-005		4.5000e-004	4.5000e-004		4.5000e-004	4.5000e-004	0.0000	0.8936	0.8936	8.0000e-005	0.0000	0.8955
Total	2.1000e-003	6.4200e-003	6.4400e-003	1.0000e-005		4.5000e-004	4.5000e-004		4.5000e-004	4.5000e-004	0.0000	0.8936	0.8936	8.0000e-005	0.0000	0.8955

Keyes Road Bridge at TID Ceres Main Canal Project - Stanislaus County, Annual

3.6 Architectural Coating - 2019**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.0000e-005	4.0000e-005	3.7000e-004	0.0000	9.0000e-005	0.0000	9.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0817	0.0817	0.0000	0.0000	0.0818
Total	5.0000e-005	4.0000e-005	3.7000e-004	0.0000	9.0000e-005	0.0000	9.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0817	0.0817	0.0000	0.0000	0.0818

3.6 Architectural Coating - 2020**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	3.0100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.1800e-003	0.0152	0.0165	3.0000e-005		1.0000e-003	1.0000e-003		1.0000e-003	1.0000e-003	0.0000	2.2979	2.2979	1.8000e-004	0.0000	2.3024
Total	5.1900e-003	0.0152	0.0165	3.0000e-005		1.0000e-003	1.0000e-003		1.0000e-003	1.0000e-003	0.0000	2.2979	2.2979	1.8000e-004	0.0000	2.3024

Keyes Road Bridge at TID Ceres Main Canal Project - Stanislaus County, Annual

3.6 Architectural Coating - 2020**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1000e-004	8.0000e-005	8.4000e-004	0.0000	2.2000e-004	0.0000	2.3000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.2038	0.2038	1.0000e-005	0.0000	0.2039
Total	1.1000e-004	8.0000e-005	8.4000e-004	0.0000	2.2000e-004	0.0000	2.3000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.2038	0.2038	1.0000e-005	0.0000	0.2039

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	3.0100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.1800e-003	0.0152	0.0165	3.0000e-005		1.0000e-003	1.0000e-003		1.0000e-003	1.0000e-003	0.0000	2.2979	2.2979	1.8000e-004	0.0000	2.3024
Total	5.1900e-003	0.0152	0.0165	3.0000e-005		1.0000e-003	1.0000e-003		1.0000e-003	1.0000e-003	0.0000	2.2979	2.2979	1.8000e-004	0.0000	2.3024

Keyes Road Bridge at TID Ceres Main Canal Project - Stanislaus County, Annual

3.6 Architectural Coating - 2020**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1000e-004	8.0000e-005	8.4000e-004	0.0000	2.2000e-004	0.0000	2.3000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.2038	0.2038	1.0000e-005	0.0000	0.2039
Total	1.1000e-004	8.0000e-005	8.4000e-004	0.0000	2.2000e-004	0.0000	2.3000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.2038	0.2038	1.0000e-005	0.0000	0.2039

3.7 Paving - 2020**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.9300e-003	0.0181	0.0178	3.0000e-005		9.9000e-004	9.9000e-004		9.2000e-004	9.2000e-004	0.0000	2.3482	2.3482	6.8000e-004	0.0000	2.3653
Paving	6.0000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	2.5300e-003	0.0181	0.0178	3.0000e-005		9.9000e-004	9.9000e-004		9.2000e-004	9.2000e-004	0.0000	2.3482	2.3482	6.8000e-004	0.0000	2.3653

Keyes Road Bridge at TID Ceres Main Canal Project - Stanislaus County, Annual

3.7 Paving - 2020**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.8000e-004	2.0000e-004	2.1000e-003	1.0000e-005	5.6000e-004	0.0000	5.6000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.5094	0.5094	2.0000e-005	0.0000	0.5098
Total	2.8000e-004	2.0000e-004	2.1000e-003	1.0000e-005	5.6000e-004	0.0000	5.6000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.5094	0.5094	2.0000e-005	0.0000	0.5098

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.9300e-003	0.0181	0.0178	3.0000e-005		9.9000e-004	9.9000e-004		9.2000e-004	9.2000e-004	0.0000	2.3482	2.3482	6.8000e-004	0.0000	2.3653
Paving	6.0000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	2.5300e-003	0.0181	0.0178	3.0000e-005		9.9000e-004	9.9000e-004		9.2000e-004	9.2000e-004	0.0000	2.3482	2.3482	6.8000e-004	0.0000	2.3653

Keyes Road Bridge at TID Ceres Main Canal Project - Stanislaus County, Annual

3.7 Paving - 2020**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.8000e-004	2.0000e-004	2.1000e-003	1.0000e-005	5.6000e-004	0.0000	5.6000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.5094	0.5094	2.0000e-005	0.0000	0.5098
Total	2.8000e-004	2.0000e-004	2.1000e-003	1.0000e-005	5.6000e-004	0.0000	5.6000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.5094	0.5094	2.0000e-005	0.0000	0.5098

4.0 Operational Detail - Mobile**4.1 Mitigation Measures Mobile**

Keyes Road Bridge at TID Ceres Main Canal Project - Stanislaus County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Asphalt Surfaces	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	0.501303	0.035285	0.172289	0.136094	0.027047	0.006047	0.027345	0.084787	0.001820	0.001183	0.004865	0.000869	0.001067

5.0 Energy Detail

Historical Energy Use: N

Keyes Road Bridge at TID Ceres Main Canal Project - Stanislaus County, Annual

5.1 Mitigation Measures Energy

[illegible]

5.2 Energy by Land Use - NaturalGas

Unmitigated

[illegible]

Keyes Road Bridge at TID Ceres Main Canal Project - Stanislaus County, Annual

5.2 Energy by Land Use - NaturalGas**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

5.3 Energy by Land Use - Electricity**Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Keyes Road Bridge at TID Ceres Main Canal Project - Stanislaus County, Annual

5.3 Energy by Land Use - Electricity**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

6.0 Area Detail**6.1 Mitigation Measures Area**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.7100e-003	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	0.0000	1.0000e-005
Unmitigated	1.7100e-003	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	0.0000	1.0000e-005

Keyes Road Bridge at TID Ceres Main Canal Project - Stanislaus County, Annual

6.2 Area by SubCategory**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	4.2000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.3000e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	0.0000	1.0000e-005
Total	1.7200e-003	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	0.0000	1.0000e-005

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	4.2000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.3000e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	0.0000	1.0000e-005
Total	1.7200e-003	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	0.0000	1.0000e-005

7.0 Water Detail

Keyes Road Bridge at TID Ceres Main Canal Project - Stanislaus County, Annual

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Keyes Road Bridge at TID Ceres Main Canal Project - Stanislaus County, Annual

7.2 Water by Land Use**Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

8.0 Waste Detail**8.1 Mitigation Measures Waste****Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

Keyes Road Bridge at TID Ceres Main Canal Project - Stanislaus County, Annual

8.2 Waste by Land Use**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	-----------	-------------	-------------	-----------

Keyes Road Bridge at TID Ceres Main Canal Project - Stanislaus County, Annual

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	------------	-------------	-------------	-----------

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
----------------	--------	----------------	-----------------	---------------	-----------

User Defined Equipment

Equipment Type	Number
----------------	--------

11.0 Vegetation

Appendix B

Biological Resources Assessment



Rincon Consultants, Inc.

7080 North Whitney Avenue
Suite 101
Fresno, California 93720

559 228 9925 OFFICE AND FAX

info@rinconconsultants.com
www.rinconconsultants.com

May 28, 2019
Rincon Project No. 18-07035

Chris Brady
Stanislaus County
Department of Public Works
1716 Morgan Road
Modesto, California 95358

**Subject: Biological Resources Assessment for the Keyes Road at Turlock Irrigation District (TID)
Ceres Main Canal Bridge Replacement Project, Stanislaus County, California**

Dear Mr. Brady:

This report documents the findings of a biological resources assessment conducted by Rincon Consultants, Inc. (Rincon) for the Keyes Road at Turlock Irrigation District (TID) Ceres Main Canal Bridge Replacement Project (project) located in Stanislaus County, California. The purpose of this report is to document existing conditions at the project site and to evaluate the potential for impacts to special-status biological resources in compliance with the California Environmental Quality Act (CEQA) review process.

Project Location and Description

The project site is located in Stanislaus County between Moffett Road and Esmar Road, approximately one mile west of the community of Keyes (Figure 1). Keyes Road is a two-lane road classified as a major collector and is used as an east-west connector in the region with an interchange at California State Route 99 (SR-99) approximately 1.5 miles to the east of the project site. Adjacent land uses include agricultural (almond orchards), sparse rural development and residences. The site is completely disturbed with a manmade irrigation canal with dirt access roads bordering the canal. The project consists of demolishing the existing Keyes Road Bridge over the TID Ceres Main Canal and replacing it with a similarly configured concrete bridge with the same number of travel lanes.

Regulatory Background

Regulatory authority over biological resources is shared by federal, state, and local authorities under a variety of statutes and guidelines. Primary authority for general biological resources lies within the land use control and planning authority of local jurisdictions (in this instance, Stanislaus County and TID). The California Department of Fish and Wildlife (CDFW) is a trustee agency for biological resources throughout the state under CEQA and also has direct jurisdiction under the California Fish and Game Code (CFGC). Under the California and federal Endangered Species Acts (CESA/ESA), the CDFW and the U.S. Fish and Wildlife Service (USFWS) also have direct regulatory authority over species formally listed as Threatened or Endangered. The U.S. Army Corps of Engineers (USACE) has regulatory authority over specific biological resources, namely wetlands and waters of the United States, under Section 404 of the



federal Clean Water Act. The CDFW and Regional Water Quality Control Board (RWQCB) protect waters and streambeds at the state level. The analysis in this biological resources assessment is guided by the requirements of these laws, and by the operating standards of the implementing agencies.

Methods

The biological resources study for the project consisted of a review of relevant literature and background information, followed by a field reconnaissance survey. The potential presence of special-status species is based on the literature review and a survey designed to assess habitat suitability for special status species and the presence or potential for occurrence of special status species. The findings and opinions conveyed in this report are based on this methodology. The study area evaluated for this biological resources assessment is defined as containing all the project components (impact areas) as outlined in the project description that includes the bridge replacement and staging areas, plus a 100-foot survey buffer as shown in Figure 2 (Attachment B).

Literature Review

The literature review included database research on special-status resources occurrences within the *Ceres, California* U.S. Geological Survey 7.5-minute quadrangle and surrounding eight quadrangles. Sources included the CDFW California Natural Diversity Data Base (CNDDDB), Biogeographic Information and Observation System (BIOS – <http://www.bios.dfg.ca.gov>), USFWS National Wetlands Inventory (NWI) (USFWS 2019a), USFWS Information for Planning and Consultation (IPaC) (USFWS 2019b), and USFWS Critical Habitat Portal (<http://criticalhabitat.fws.gov>) (USFWS 2019c). Other resources included the California Native Plant Society (CNPS) online Inventory of Rare and Endangered Plants of California (CNPS 2019), CDFW Special Animals List (November 2018), and CDFW Special Vascular Plants, Bryophytes, and Lichens List (March 2019). Aerial photographs, topographic maps, soil survey maps, geologic maps, and climatic data in the area were also examined. References are included as Attachment A.

Field Survey

A biological resource reconnaissance survey was conducted to assess the habitat suitability for potential special-status species, map the existing vegetation, map any evident sensitive biological resources currently onsite, note the presence of potential jurisdictional waters or wetlands, document any wildlife connectivity/movement features, and record all observations of plant and wildlife species within the study area as defined in Figure 2. Rincon Biologists Carolyn Daman and Kirsten Bates conducted the site visit on May 7, 2019, between the hours of 1:15 pm and 3:00 pm. Weather conditions were fair at the time of the survey, with temperatures ranging from 73°F to 74°F with wind speeds of 3-8 mph. Site photos from the survey are included as Attachment D.

All plant vegetation communities observed within the study area were recorded and mapped. The survey included a directed search for special-status plants that would have been apparent and identifiable during the time of the survey, but the survey does not meet the standards of a protocol floristic survey for rare plants. Floral nomenclature for native and non-native plants in this report follows Baldwin et al. (2012) as updated by The Jepson Online Interchange (University of California, Berkeley 2019).

Biologists documented wildlife species that were observed directly or detected from calls, tracks, scat, nests, or other sign. The detection of wildlife species was limited by seasonal and temporal factors. The



survey was conducted in the spring; therefore, potentially occurring winter migrants may not have been observed. As the survey was performed during the day, identification of nocturnal animals was limited to sign if present on-site. In this report, zoological nomenclature is based upon Dunn and Alderfer (2011) for birds, and Burt and Grossenheider (1980) for mammals.

Existing Conditions

Topography and Soils

At an elevation of approximately 95 feet above mean sea level, the topography of the project area and its immediate surroundings is characterized by low-lying, agricultural pasture lands. Based on the most recent U.S. Department of Agriculture, Natural Resources Conservation Service (USDA, NRCS) soil survey for Stanislaus County (USDA, NRCS 2018), the study area contains one soil map unit.

Dinuba sandy loam, 0 to 1 percent slopes occur on toeslopes of alluvial fans. This soil type is derived from Alluvium derived from granite rock. This soil type makes up most of the study area. A typical soil profile consists of sandy loam to 30 inches, with a layer of very fine sand and silt loam from 30 to 60 inches. This soil is considered moderately well drained. Depth to restrictive feature is more than 80 inches. This soil is not considered hydric.

Vegetation

The survey area is completely disturbed and consists of a manmade irrigation canal and almond orchards with dirt access roads bordering the canal. Sparse disturbed vegetation is present at the road margins, but most of the area outside of the orchards is barren land cover, as described by the California Wildlife Habitat Relationships System (CDFW 2019d). Ruderal vegetation identified within the survey area includes Canadian horseweed (*Conyza canadensis*) and cutleaf evening primrose (*Oenothera laciniata*).

General Wildlife

The survey area and its surroundings provide habitat for wildlife species that commonly occur in San Joaquin Valley grassland and agricultural habitats. Avian species observed/detected on or adjacent to the site include red-tailed hawk (*Buteo jamaicensis*) and house finch (*Haemorrhous mexicanus*).

Wetlands

The study area is located within the Lake Ramona-San Joaquin River Hydrologic Unit Code (HUC), Salado Creek-San Joaquin River watershed (HUC12 number 180400020403). The canal located within the Study Area, the Ceres Main Canal, is an artificial channel downstream of Main Canal. The Main Canal transports irrigation water from the Turlock Lake to the Ceres Main Canal and throughout the Turlock area. The Ceres Main Canal serves as an interceptor canal for spillage from upper lateral canals within the TID service area (TID 2012). The Ceres Main Canal has no connectivity to other waters of the United States downstream. Other than this agricultural canal, no other wetlands are present in the study area.

Special-Status Biological Resources

This section discusses sensitive biological resources within the study area and evaluates the potential for the study area to support special status biological resources.



Special-Status Species

Local, state, and federal agencies regulate special-status species and may require an assessment of their presence or potential presence to be conducted prior to the approval of proposed development on a property. Assessments for the potential occurrence of special-status species are based upon known ranges, habitat preferences for the species, species occurrence records from the CNDDDB species occurrence records from other sites in the vicinity of the study area, and previous reports for the study area. The potential for each special status species to occur in the study area was evaluated according to the following criteria:

- **Not expected.** Habitat on and adjacent to the site is clearly unsuitable for the species' requirements (foraging, breeding, cover, substrate, elevation, hydrology, plant community, site history, disturbance regime).
- **Low Potential.** Few of the habitat components meeting the species' requirements are present, and/or the majority of habitat on and adjacent to the site is unsuitable or of very poor quality. The species is not likely to be found on the site.
- **Moderate Potential.** Some of the habitat components meeting the species' requirements are present, and/or only some of the habitat on or adjacent to the site is unsuitable. The species has a moderate probability of being found on the site.
- **High Potential.** All of the habitat components meeting the species' requirements are present and/or most of the habitat on or adjacent to the site is highly suitable. The species has a high probability of being found on the site.
- **Present.** Species is observed on the site or has been recorded (e.g., CNDDDB, other reports) on the site recently (within the last 5 years).

For the purpose of this report, special-status species are those plants and animals listed, proposed for listing, or candidates for listing as Threatened or Endangered by the USFWS or NMFS under the ESA; those listed or candidates for listing as Rare, Threatened, or Endangered under the CESA or Native Plant Protection Act; those identified as Fully Protected by the CFGC (Sections 3511, 4700, 5050, and 5515); those identified as Species of Special Concern (SSC) by the CDFW; and plants occurring on lists 1 and 2 of the CNPS California Rare Plant Rank (CRPR) system per the following definitions:

- **Rank 1A** = Plants presumed extinct in California;
- **Rank 1B.1** = Rare or endangered in California and elsewhere; seriously endangered in California (over 80% of occurrences threatened/high degree and immediacy of threat);
- **Rank 1B.2** = Rare or endangered in California and elsewhere; fairly endangered in California (20-80% occurrences threatened);
- **Rank 1B.3** = Rare or endangered in California and elsewhere, not very endangered in California (<20% of occurrences threatened, or no current threats known);
- **Rank 2** = Rare, threatened or endangered in California, but more common elsewhere

Based on a query of the CNDDDB, there are 14 special-status plant species and 20 special-status wildlife species documented within the *Ceres, California* USGS 7.5-minute quadrangle and the eight surrounding quadrangles. All 34 special-status species have been evaluated for potential to occur within the study area (Attachment C).

Special-Status Plant Species



No federal or state listed plants were observed during the reconnaissance-level field survey. A protocol botanical survey for all species has not been completed, and the reconnaissance survey was conducted outside the bloom period for some of these species. The database and literature review performed for the project indicated that 14 special-status plant species have been documented within the Ceres quad and eight surrounding quads. These species occur in a variety of habitats such as vernal pools, riparian woodlands and forests, meadows and grasslands. The survey area is completely disturbed and consists of a manmade irrigation canal and agricultural land with dirt access roads bordering the canal. Minimal sparse disturbed or ruderal vegetation is present at the road margins; however, this does not represent suitable habitat for any of the evaluated special-status plant species with potential to occur in the region. Given the existing site conditions and lack of suitable habitat, no special-status plant species are expected to occur within the survey area (see Attachment C).

Special-Status Wildlife Species

The database and literature review performed for the project indicated that 20 special-status wildlife species have been documented within the Ceres quad and eight surrounding quads, five of which have been documented within five miles of the study area. No federal or state listed, or other special-status wildlife species were observed during the survey. Of the 20 species evaluated only the Swainson's hawk (*Buteo swainsoni*; state threatened) is considered to have potential to occur on the site. This species is discussed in further detail below. See Attachment C for a summary of the potential to occur for all 20 special-status wildlife species.

Swainson's Hawk

Swainson's hawk is a state threatened species with a low potential to nest within 0.5 mile of the project site. In the Central Valley this species breeds in areas containing large expanses of foraging habitat (grasslands, agriculture and other open lands) with scattered trees, riparian areas, other groves or windrows of trees suitably large to support nesting. Suitable foraging areas such as grasslands, or agricultural fields such as fallow fields, alfalfa, low-growing crops such as beet and tomato, and irrigated and dryland pasture, are required adjacent to the nesting habitat.

The literature review identified 40 occurrences of this species within the nine-quad search radius and ten occurrences within five miles of the project site. No Swainson's hawks were observed on or adjacent to the project site during the field visit. The almond orchards surrounding the project site on adjacent parcels represent marginal nesting habitat. Power poles are present within 0.5 mile of the project and may potentially be used for nesting when higher quality nesting habitat is absent, but are generally not preferred by this species, and nesting on standard power poles is uncommon. Open grassland and agricultural fields suitable for foraging are absent from the project site and adjacent areas.

Nesting Birds

The study area also contains some suitable nesting habitat for a variety of native avian species common to agricultural fields. Species of birds common to the area that typically utilize agricultural areas for foraging and nesting habitat, such as red-tailed hawk and house finch, were detected during the reconnaissance survey. The orchards and ruderal areas (including barren ground) within and adjacent to the study area could be utilized for nesting by a variety of common birds protected by CFGC Section 3503. The nesting season generally extends from February through August but can vary based upon annual climatic conditions.



Special-Status Vegetation Communities

Plant communities are also considered sensitive biological resources if they have limited distributions, have high wildlife value, include sensitive species, or are particularly susceptible to disturbance. CDFW ranks sensitive communities as "threatened" or "very threatened" and keeps records of their occurrences in CNDDDB. CNDDDB vegetation alliances are ranked 1 through 5 based on NatureServe's (2010) methodology, with those alliances ranked globally (G) or statewide (S) as 1 through 3 considered sensitive. Some alliances with the rank of 4 and 5 have also been included in the 2018 sensitive natural communities list under CDFW's revised ranking methodology (CDFW 2018).

No native vegetation communities were mapped within the survey area and no sensitive vegetation communities are present.

Jurisdictional Waters and Wetlands

Based upon the findings of Rincon's jurisdictional delineation, a single anthropogenic, agricultural irrigation canal is present in the study area. The Ceres Main Canal located within the study area is an artificial channel downstream of Main Canal, which transports irrigation water from the Turlock Lake to the Ceres Main Canal and through the Turlock area. The Ceres Main Canal has no connectivity to other waters of the United States downstream.

The Ceres Main Canal is a trapezoidal-shaped channel with steep, vertical concrete-lined banks visible above the water level. The canal is approximately 25 feet from bank to bank. Due to the high water level observed during the survey, the canal bed was not observed and is assumed to be made of concrete similar to its banks. Waterlines along the banks of the canal were visible approximately four inches above the current surface water elevation. Vegetation was only observed at one small location (less than 0.01 acre) within a crack in the eastern bank of the canal, south of Keyes Road and included annual bluegrass (*Poa annua*), southern evening primrose (*Oenothera laciniata*), Canada horseweed (*Erigeron canadensis*), and tall flatsedge (*Cyperus eragrostis*). The areas directly adjacent to the canal are maintained access roadways with compacted soils that lack vegetation.

The Ceres Main Canal does not have direct connectivity to or outfall back into a navigable waterway or any other jurisdictional water feature and is an artificially irrigated area that would revert to dry land should application of water to the area cease. Therefore, the Ceres Main Canal, in the study area, is not considered jurisdictional waters of the U.S. pursuant to the Clean Water Act. Although this feature contains a defined bed and banks, this feature does not appear to support aquatic life due to a strong flow velocity and a lack of in-channel and riparian vegetation; therefore, it is also not considered to be under CDFW jurisdiction pursuant to CFGC Section 1600 et seq.; however, the irrigation canal may be regulated by RWQCB as waters of the state under the Porter-Cologne Water Quality Control Act (Porter-Cologne Act).

Potentially jurisdictional areas within the study area are identified below in Table 1 and shown on Figure 3.



Table 1 RWQCB Jurisdictional Area

Feature	Waters of the U.S. ¹			CDFW Jurisdictional Streambed ² (acres /linear feet)
	Non-wetland Waters of the U.S. (acres/linear feet)	Wetland Waters of the U.S. (acres/linear feet)	Waters of the State ¹ (acres /linear feet)	
Ceres Main Canal	--/--	--/--	0.12/205	--/--

¹Calculated to OHWM or edge of wetland

²Calculated to top of bank or edge of riparian

Wildlife Movement

Wildlife movement corridors, or habitat linkages, are generally defined as connections between habitat patches that allow for physical and genetic exchange between otherwise isolated animal populations or those populations that are at risk of becoming isolated. Such linkages may serve a local purpose, such as providing a linkage between foraging and denning areas, or they may be regional in nature. Some habitat linkages may serve as migration corridors, wherein animals periodically move away from an area and then subsequently return. Others may be important as dispersal corridors for young animals. A group of habitat linkages in an area can form a wildlife corridor network.

According to the Stanislaus County General Plan Conservation/Open Space Element the eastern and western ends of the county represent important wildlife movement corridors within the region (Stanislaus County 2016). The study area is located just west of the community of Keyes, in the center of the County, and is not located within a significant habitat linkage or corridor. The project site is completely surrounded by agricultural land in orchard production. Therefore, the study area is not considered an important regional wildlife movement area.

Local Policies and Ordinances

The study area is not within or proximate to any critical habitat or other ecologically sensitive area, as identified by local, regional, state or federal agencies. Furthermore, there are no trees within the study area and therefore, all County ordinances and guidelines protecting trees do not apply.

Habitat Conservation Plans

The study area is not subject to any Habitat Conservation Plans, Natural Community Conservation Plans, or other approved local, regional, state or federal conservation plans.

Impact Analysis and Mitigation Measures

This section discusses the potential impacts and effects to biological resources that may occur from implementation of the proposed project and recommends mitigation measures that would reduce those impacts where applicable.

Special-Status Species

The proposed project would have a significant effect on biological resources if it would:



- a) *Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife (CDFW) or U.S. Fish and Wildlife Service (USFWS).*

Special-Status Plants

No special-status plants occur on-site or have potential to occur on-site. Therefore, **no impacts to special-status plant species are expected.**

Special-Status Wildlife

The study area contains suitable habitat for Swainson's hawk and other nesting birds. Project activities could directly impact Swainson's hawk nests if activities occur during the nesting season and an active nest is present in the vicinity (within 0.5 mile) of the project. Impacts may occur through increased injury or mortality or disruption of normal adult behaviors resulting in the abandonment or harm to eggs and nestlings. Because this species is state-listed, direct impacts to individuals would be considered significant under CEQA. Direct impacts to this species from project activities would be considered **potentially significant but mitigable** through implementation of the mitigation measure BIO-1 outlined below.

Native birds and raptors protected by the CFGC have the potential to occur and nest in the study area. If nesting birds are present on-site during construction, direct effects could include injury or mortality from construction activity, or nest abandonment from construction noise, dust, and other project activities. Impacts of this type would not be considered significant for common species; however, they would be in violation of CFGC.

Implementation of the following recommended measures would reduce potential impacts to Swainson's hawk and nesting birds to less than significant levels:

BIO-1 Swainson's Hawk Pre-Construction Survey and Monitoring. To avoid impacts to nesting Swainson's hawk, all construction activities should be limited to the time period between September 15 and March 1. If construction activities cannot be completed within this timeframe, a protocol-level survey shall be conducted in accordance with the *Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley* (Swainson's Hawk Technical Advisory Committee 2000). If nesting Swainson's hawks are detected within 0.5 mile of project activities, CDFW shall be consulted regarding the establishment of an avoidance buffer. If construction activities are necessary within the buffer zone, monitoring of the nest site by a qualified biologist will be required. If the biologist determines the nest is abandoned and the nestlings are still alive, the project sponsor shall fund the recovery and hacking (controlled release of captive reared young) of the nestling(s). Construction activities occurring within the 0.5-mile radius of an active nest may require a 2081 Incidental Take Permit from the CDFW if there is the likelihood that construction would cause the failure or abandonment of the nest.

BIO-2 Nesting Bird Impact Pre-Construction Survey and Monitoring. To avoid disturbance of nesting and special status birds, or migratory species protected by Sections 3503, 3503.5, and 3513 of the CFGC, activities related to the project, including, but not limited to, vegetation and/or tree removal should occur outside of the bird breeding season (February 1 through August 30). If ground disturbance, vegetation removal or heavy equipment work must begin within the breeding season, then a pre-



construction nesting bird survey should be conducted no more than 14 days prior. The nesting bird pre-construction survey should be conducted within the disturbance footprint and a 300-foot buffer surveyed by binoculars. The survey should be conducted by a biologist familiar with the identification of avian species known to occur in the region.

If nests are found, an avoidance buffer should be established by a qualified biologist. The buffer should be established to ensure nesting activity is not disturbed by construction activity and should be determined by the qualified biologist based on the species' known tolerances, the proposed work activity, and existing disturbances associated with land uses outside of the site. The buffer should be demarcated by the biologist with bright construction fencing, flagging, construction lathe, or other means to mark the boundary. All construction personnel should be notified as to the existence of the buffer zone and to avoid entering the buffer zone during the nesting season. No ground disturbing activities should occur within this buffer until the avian biologist has confirmed that breeding/nesting is completed, and the young have fledged the nest, or the nest has become otherwise inactive. Encroachment into the buffer should occur only at the discretion of the qualified biologist.

Special Status Vegetation

The proposed project would have a significant effect on biological resources if it would:

- b) Have a substantial adverse impact on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or US Fish and Wildlife Service.*

No CDFW listed sensitive natural communities or riparian habitats are present within the study area. Therefore, **no impacts to sensitive natural communities are expected.**

Jurisdictional Waters and Wetlands

The proposed project would have a significant effect on biological resources if it would:

- 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.*

The segment of the Ceres Main Canal that runs directly through the project site under the Keyes Road Bridge is a potentially jurisdictional feature. Impacts from development could occur if runoff were allowed to enter the canal. Based on the jurisdictional delineation, the Ceres Main Canal has no hydrologic connection to any navigable or interstate waters and it does not appear to support wildlife. Accordingly, the canal is not under the jurisdiction of the USACE/RWQCB jurisdiction pursuant to the Clean Water Act or the CDFW jurisdiction pursuant to the CFGC; however, the canal may be subject to the RWQCB jurisdiction pursuant to the Porter-Cologne Act. If project activities would result in impacts to the bed, banks, and/or or channel of the canal, or deposit any pollutants or material into it, coordination and permitting with RWQCB to obtain a Waste Discharge Requirements (WDRs) permit may be required.

Although the SWRCB's Wetland Definition and Procedures for Discharges of Dredge and Fill Material to Waters of the State are adopted, but not yet implemented, the implementation of these procedures may affect the jurisdiction of the Ceres Main Canal. Under the adopted procedures, the Ceres Main Canal may qualify as an area excluded from the application procedures because the canal is an artificially irrigated area that would revert to dry land should application of water to that area cease



(SWRCB 2019). In the event that the procedures are implemented, the delineation of waters of the state should be reviewed in light of the final adopted language and revised if necessary.

Impacts to the canal have been avoided and minimized through design of the project. Construction of the proposed project would occur during the annual pause in TID conveyance of irrigation water to customers along the canal. Dewatering the construction area would help to minimize the potential for transport of sediments and pollutants from construction activities.

Mitigation Measure BIO-3 requires implementation of avoidance and minimization measures that would avoid direct impacts and reduce indirect impacts to potentially jurisdictional features during and after construction activities. The following measure would reduce impacts to jurisdictional waters and wetlands to a **less than significant level**.

BIO-3 Jurisdictional Waters Avoidance and Minimization. Project actions should be designed to prevent indirect impacts to drainage features within and adjacent to the project site. General project staging, and laydown activities should not occur within drainages during construction. To avoid unnecessary encroachment into drainages, these features should be clearly depicted on project plan sets and the limits of these features within the project site should be marked with highly visible flagging, rope, or similar materials in the field. Silt fencing or other measures will be used to protect these areas from sediment transport or other indirect impacts that could result from adjacent construction.

Wildlife Movement

The proposed project would have a significant effect on biological resources if it would:

- d) Interfere substantially with the movement of any resident or migratory fish or wildlife species or with established resident or migratory wildlife corridors or impede the use of wildlife nursery sites.*

No significant wildlife movement corridors or habitat linkages are present in the survey area. Due to the relatively small size of the project footprint, and its location within existing regional agricultural development, the project is not likely to interfere substantially with the movement of wildlife species.

Impacts to wildlife movement would be less than significant.

Local Policies and Ordinance

The proposed project would have a significant effect on biological resources if it would:

- e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

There are no additional local policies or ordinances protecting biological resources beyond those outlined in CEQA, therefore **no conflicts with local policies or ordinances protecting biological resources are expected.**

Habitat Conservation Plan

The proposed project would have a significant effect on biological resources if it would:

- g) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

The project is not within any adopted habitat conservation plans, or natural community conservation plans. **No conflicts with federal, state, regional, or local habitat conservation plans are expected.**



Mr. Chris Brady
Keyes Road at Turlock Irrigation District (TID)
Ceres Main Canal Bridge Replacement Project
Biological Resources Assessment

Sincerely,
Rincon Consultants, Inc.

Beth Wilson
Associate Environmental Planner

David Daitch, Ph.D.
Program Manager/Senior Biologist

Attachments

Attachment A	References
Attachment B	Figures
Attachment C	Special-Status Species Evaluation Tables
Attachment D	Representative Site Photographs



Attachment A References

- Baldwin, B.G., D.H. Goldman, D.J. Keil, R. Patterson, T.J. Rosatti, and D.H. Wilken, editors. 2012. The Jepson Manual: vascular plants of California, second edition. University of California Press, Berkeley.
- Burt, W.H., and R. P. Grossenheider. 1980. A Field Guide to the Mammals. Houghton Mifflin Company, Boston.
- California Department of Fish and Wildlife. 2018. November. Special Animals List. Periodic publication. 67 pp. (Accessed May 2019).
- _____. 2018. Natural Communities List Arranged Alphabetically by Life Form (PDF). Available from <https://www.wildlife.ca.gov/Data/VegCAMP/Natural-Communities#sensitive%20natural%20communities>. (Accessed May 2019).
- _____. 2019a. California Natural Diversity Database, Rarefind 5.
- _____. 2019b. Biogeographic Information and Observation System (BIOS). <http://bios.dfg.ca.gov>. (Accessed May 2019).
- _____. 2019c. March. Special Vascular Plants, Bryophytes, and Lichens List. Quarterly publication. 140 pp. (Accessed May 2019).
- _____. 2019d. Wildlife Habitats – California Wildlife Habitat Relationships System. Available from <https://www.wildlife.ca.gov/Data/CWHR/Wildlife-Habitats>. (Accessed May 2019).
- California Native Plant Society. 2019. Inventory of Rare and Endangered Plants. V8-02. <http://www.rareplants.cnps.org/>. (Accessed May 2019).
- Dunn, J.L, J. Alderfer. 2011. National Geographic Field Guide to the Birds of North America, Sixth Edition.
- Stanislaus County. 2016. General Plan 2015. Chapter 3 Conservation/Open Space Element. <http://www.stancounty.com/planning/pl/gp/current/gp-chapter3.pdf>. (Accessed May 2019).
- State Water Resources Control Board. 2019. State Wetland Definition and Procedures for Discharge of Dredged or Fill Material to Waters of the State. https://www.waterboards.ca.gov/water_issues/programs/cwa401/docs/procedures_conformed.pdf. (Accessed May 2019).
- Swainson's Hawk Technical Advisory Committee. 2000. Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley.
- Turlock Irrigation District. 2012. 2012 Agricultural Water Management Plan. <https://www.tid.org/wp-content/uploads/2017/04/Final-TID-AWMP.pdf>. (Accessed May 2019).
- United States Department of Agriculture, Natural Resources Conservation Service. 2018. Web Soil Survey. Soil Survey Area: Eastern Stanislaus Area, California. Soil Survey Data: Version 8. Available at: <http://websoilsurvey.nrcs.usda.gov/app/>. (Accessed May 2019).
- United States Fish and Wildlife Service. 2019a. National Wetlands Inventory (NWI) Wetlands mapper. Available at: <https://www.fws.gov/wetlands/data/mapper.html> (Accessed May 2019).



_____. 2019b. Information for Planning and Consultation (IPaC). Available at: <https://ecos.fws.gov/ipac/>. (Accessed May 2019).

_____. 2019c. Critical Habitat Portal. Available at: <http://criticalhabitat.fws.gov>. (Accessed May 2019).



Attachment B Figures



Figure 1. Regional Location

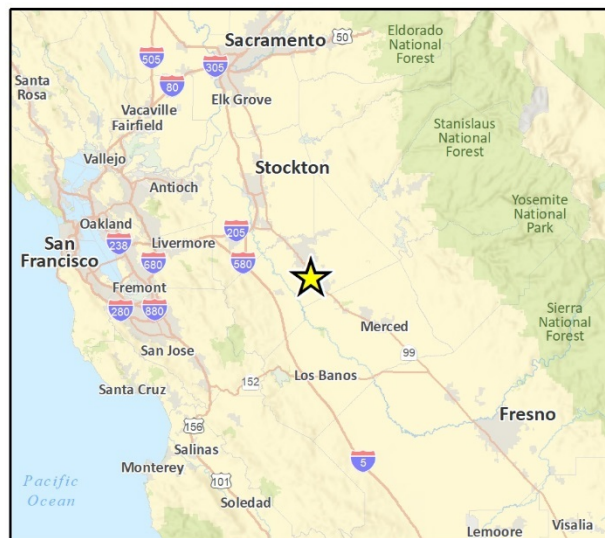
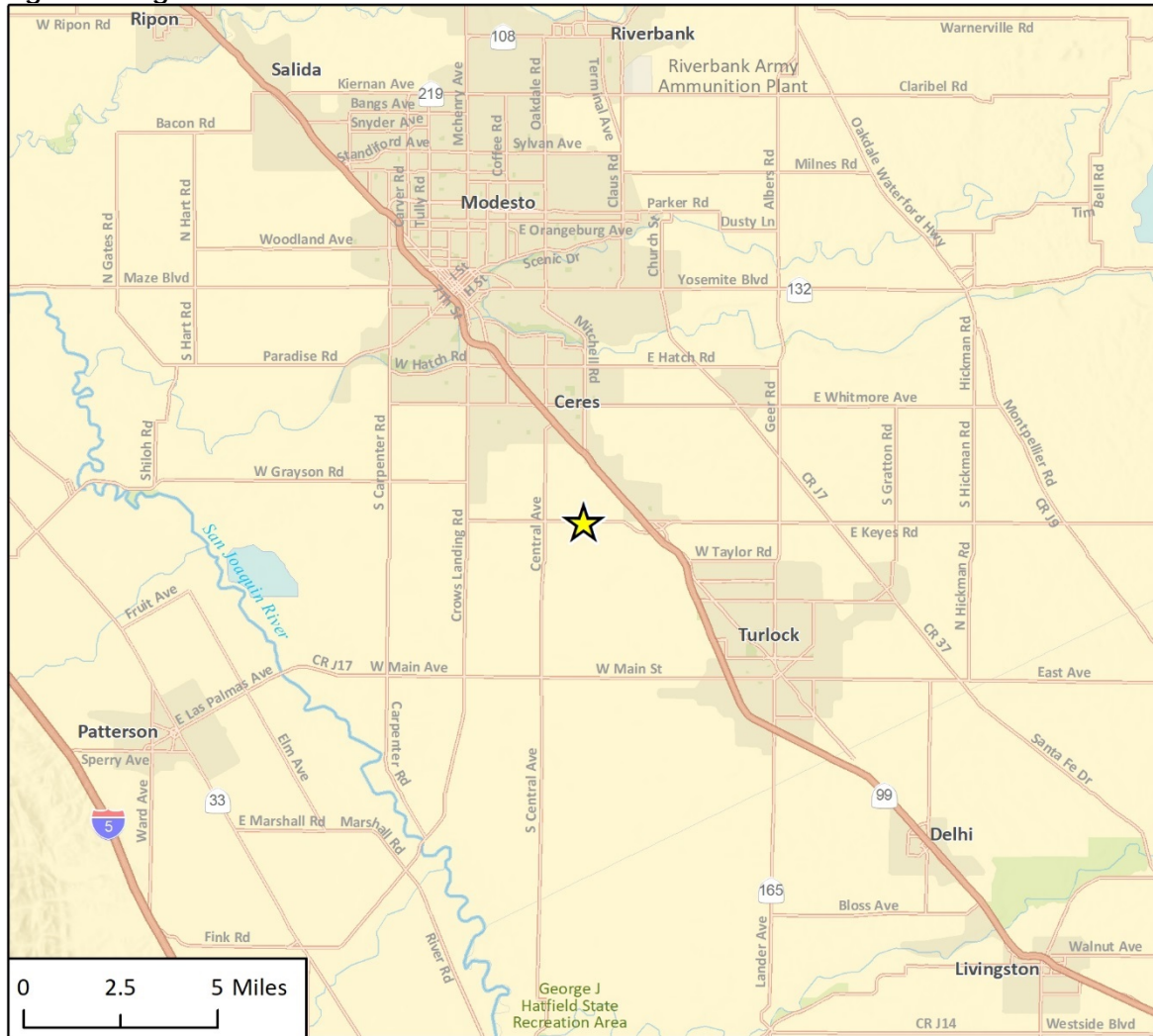


Fig 1 Regional Location



Figure 2. Study Area

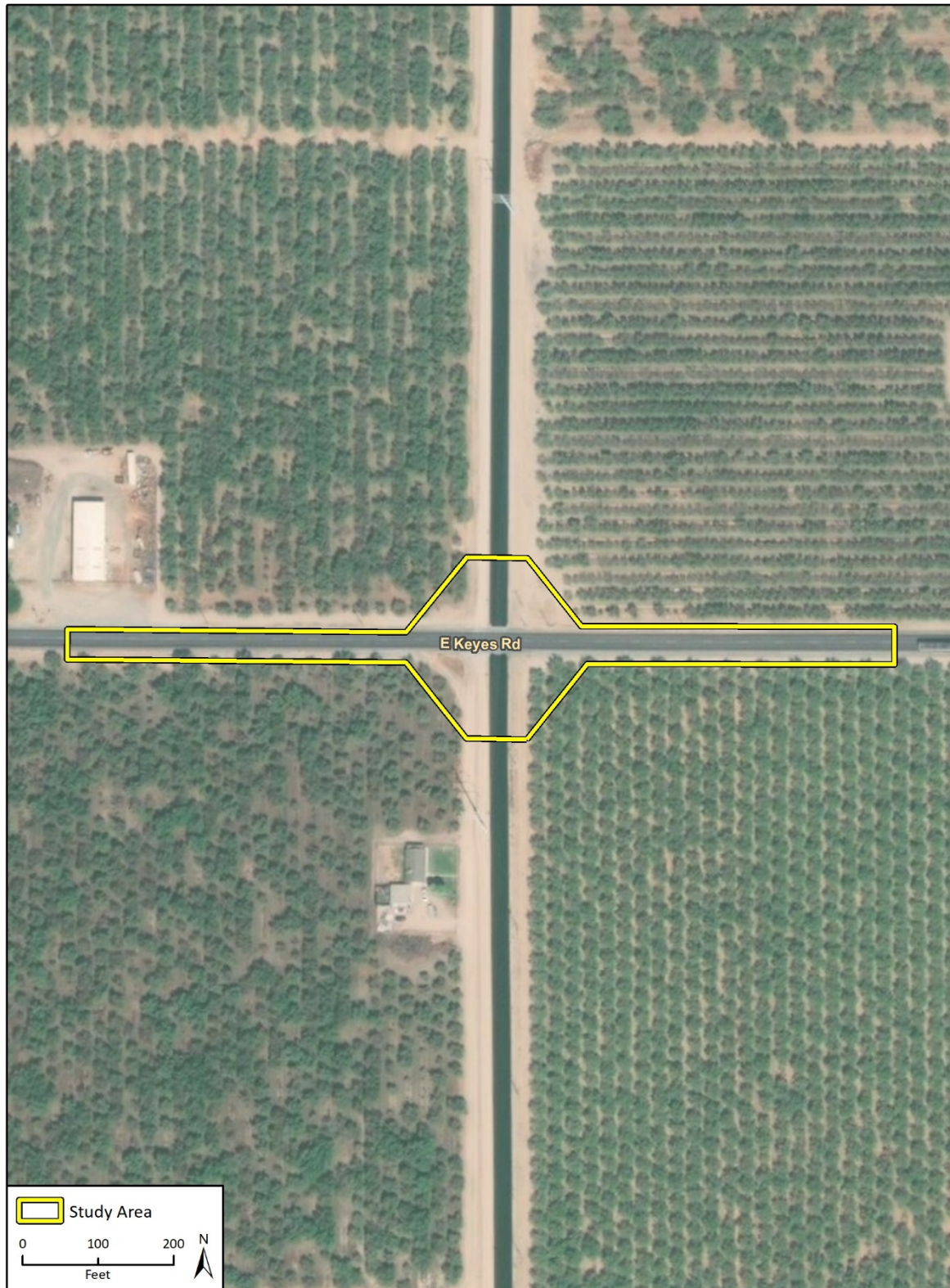
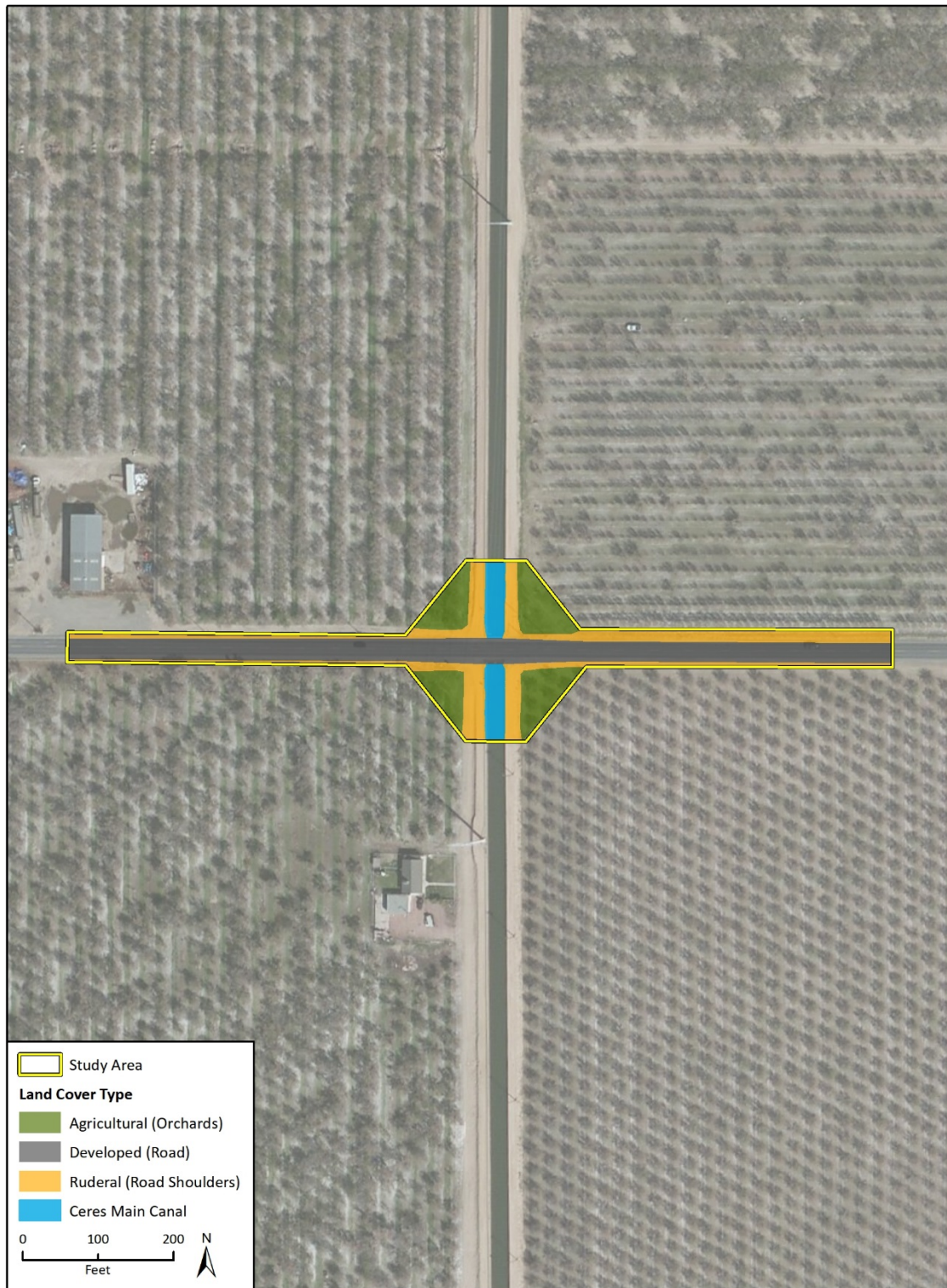




Figure 3. Land Cover Types



Imagery provided by Esri and its licensors © 2019.

Fig 3 Biological Resources



Attachment C Special-Status Species Evaluation Tables



Special-Status Plant Species in the Regional Vicinity (Nine Quad) of the Study Area

Scientific Name Common Name	Status Fed/State ESA G-Rank/S-Rank CRPR	Habitat Requirements	Potential for Impact	Rationale
<i>Astragalus tener</i> var. <i>tener</i> alkali milk- vetch	None/None G2T1 / S1 1B.2	Alkali playa, valley and foothill grassland, vernal pools. Low ground, alkali flats, and flooded lands; in annual grassland or in playas or vernal pools. 0-168 m. annual herb. Blooms Mar-Jun	Not Expected	Alkali playa and vernal pools are not present. The site does not contain suitable habitat on alkali flats or in annual grasslands.
<i>Atriplex cordulata</i> var. <i>cordulata</i> heartscale	None/None G3T2 / S2 1B.2	Chenopod scrub, valley and foothill grassland, meadows and seeps. Alkaline flats and scalds in the Central Valley, sandy soils. 3-275 m. annual herb. Blooms Apr-Oct	Not Expected	Chenopod scrub, meadows and seeps are not present. The site does not contain alkaline flats and scalds.
<i>Atriplex minuscula</i> lesser saltscale	None/None G2 / S2 1B.1	Chenopod scrub, playas, valley and foothill grassland. In alkali sink and grassland in sandy, alkaline soils. 0-225 m. annual herb. Blooms May-Oct	Not Expected	Chenopod scrub and playas are not present. The site does not have suitable habitat or sandy, alkaline soils.
<i>Atriplex persistens</i> vernal pool smallscale	None/None G2 / S2 1B.2	Vernal pools. Alkaline vernal pools. 3-115 m. annual herb. Blooms Jun, Aug, Sep, Oct	Not Expected	Vernal pools are not present.
<i>Atriplex subtilis</i> subtle orache	None/None G1 / S1 1B.2	Valley and foothill grassland. Alkaline soils. 20-100 m. annual herb. Blooms Jun, Aug, Sep (Oct)	Not Expected	Valley and foothill grassland with associated alkaline soil is not present at the site.
<i>Clarkia rostrata</i> beaked clarkia	None/None G2G3 / S2S3 1B.3	Cismontane woodland, valley and foothill grassland. North-facing slopes; sometimes on sandstone. 60-915 m. annual herb. Blooms Apr-May	Not Expected	Cismontane woodland is not present. The site is flat and does not feature north-facing slopes. The site is also outside of this species typical elevation range.
<i>Eryngium racemosum</i> Delta button- celery	None/Endangered G1 / S1 1B.1	Riparian scrub. Seasonally inundated floodplain on clay. 1-335 m. annual / perennial herb. Blooms Jun-Oct	Not Expected	Riparian scrub is not present, and the site is not located on or near a seasonably inundated floodplain with clay soils.
<i>Juglans hindsii</i> Northern California black walnut	None/None G1 / S1 1B.1	Riparian forest, riparian woodland. Few extant native stands remain; widely naturalized. Deep alluvial soil associated with a creek or stream. 0-640 m. perennial deciduous tree. Blooms Apr-May	Not Expected	Riparian forest and woodlands are not present. The site is not located near a stream that would support this species.



Scientific Name Common Name	Status Fed/State ESA G-Rank/S-Rank CRPR	Habitat Requirements	Potential for Impact	Rationale
<i>Monardella leucocephala</i> Merced monardella	None/None GH / SH 1A	Valley and foothill grassland. Known from riverbeds, moist sandy depressions; requires moist subalkaline sands associated w/low elevation grassland. 35-100 m. annual herb. Blooms May-Aug	Not Expected	Riverbeds with moist sandy depressions are not present.
<i>Neostapfia colusana</i> Colusa grass	Threatened/Endangered G1 / S1 1B.1	Vernal pools. Usually in the bottoms of large, or deep vernal pools; adobe soils. 5-125 m. annual herb. Blooms May-Aug	Not Expected	Vernal pools are not present.
<i>Orcuttia inaequalis</i> San Joaquin Valley Orcutt grass	Threatened/Endangered G1 / S1 1B.1	Vernal pools. 10-755 m. annual herb. Blooms Apr-Sep	Not Expected	Vernal pools are not present.
<i>Puccinellia simplex</i> California alkali grass	None/None G3 / S2 1B.2	Meadows and seeps, chenopod scrub, valley and foothill grasslands, vernal pools. Alkaline, vernal mesic. Sinks, flats, and lake margins. 1-915 m. annual herb. Blooms Mar-May	Not Expected	Meadows, chenopod scrub, and vernal pools are not present. Alkaline, vernal mesic soils are not present on the site.
<i>Sphenopholis obtusata</i> prairie wedge grass	None/None G5 / S2 2B.2	Cismontane woodland, meadows and seeps. Open moist sites, along rivers and springs, alkaline desert seeps. 15-2625 m. perennial herb. Blooms Apr-Jul	Not Expected	Cismontane woodland is not present. The site does not feature open moist sites along a river or spring.
<i>Tuctoria greenei</i> Greene's tuctoria	Endangered/Rare G1 / S1 1B.1	Vernal pools. Vernal pools in open grasslands. 25-1325 m. annual herb. Blooms May-Jul (Sep)	Not Expected	Vernal pools are not present.

Regional Vicinity refers to within a [5] mile radius of site.

FE = Federally Endangered FT = Federally Threatened

SE = State Endangered ST = State Threatened SR = State Rare

G-Rank/S-Rank = Global Rank and State Rank as per NatureServe and CDFW's CNDDB RareFind3.

CRPR (CNPS California Rare Plant Rank):

1A=Presumed Extinct in California

1B=Rare, Threatened, or Endangered in California and elsewhere

2A=Plants presumed extirpated in California, but more common elsewhere

2B=Plants Rare, Threatened, or Endangered in California, but more common elsewhere

3=Need more information (a Review List)

4=Plants of Limited Distribution (a Watch List)

CRPR Threat Code Extension:

.1=Seriously endangered in California (over 80% of occurrences threatened / high degree and immediacy of threat)

.2=Fairly endangered in California (20-80% occurrences threatened)

.3=Not very endangered in California (<20% of occurrences threatened)



Special-Status Animal Species in the Regional Vicinity (Nine Quad) of the Study Area

	Status Fed/State ESA			
Scientific Name	G-Rank/S-Rank		Potential for Impact	
Common Name	CDFW	Habitat Requirements		Potential for Occurrence
Mammals				
<i>Corynorhinus townsendii</i>	None/None	Throughout California in a wide variety of habitats. Most common in mesic sites. Roosts in the open, hanging from walls and ceilings. Roosting sites limiting. Extremely sensitive to human disturbance.	Not Expected	No suitable roosting habitat is present, and the site is extremely disturbed by humans.
<i>Townsend's big-eared bat</i>	G3G4 / S2			
	SSC			
Birds				
<i>Agelaius tricolor</i>	None/Threatened	Highly colonial species, most numerous in Central Valley & vicinity. Largely endemic to California. Requires open water, protected nesting substrate, and foraging area with insect prey within a few km of the colony.	Not Expected	One occurrence was reported from Crows Landing; however suitable nesting habitat in dense vegetation adjacent to open water is not present.
<i>tricolored blackbird</i>	G2G3 / S1S2			
	SSC			
<i>Athene cunicularia</i>	None/None	Open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel.	Not Expected	Open, dry grasslands and scrublands are not present. No large ground squirrel burrows were observed onsite.
<i>burrowing owl</i>	G4 / S3			
	SSC			
<i>Buteo swainsoni</i>	None/Threatened	Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, & agricultural or ranch lands with groves or lines of trees. Requires adjacent suitable foraging areas such as grasslands, or alfalfa or grain fields supporting rodent populations.	Low Potential	Two occurrences were reported from within five miles.
<i>Swainson's hawk</i>	G5 / S3			
<i>Vireo bellii pusillus</i>	Endangered/Endangered	Summer resident of Southern California in low riparian in vicinity of water or in dry river bottoms; below 2000 ft. Nests placed along margins of bushes or on twigs projecting into pathways, usually willow, Baccharis, mesquite.	Not Expected	The habitat on site is largely agricultural orchard trees and does not provide suitable nesting habitat, this species also prefers larger river bottoms. No occurrences have been reported within five miles.
<i>least Bell's vireo</i>	G5T2 / S2			
Reptiles				
<i>Anniella pulchra</i>	None/None	Sandy or loose loamy soils under sparse vegetation. Soil moisture is essential. They prefer soils with a high moisture content.	Not Expected	Moist loose sandy or loamy soils are not present.
<i>northern California legless lizard</i>	G3 / S3			
	SSC			



Scientific Name Common Name	Status Fed/State ESA G-Rank/S-Rank CDFW	Habitat Requirements	Potential for Impact	Potential for Occurrence
<i>Emys marmorata</i> western pond turtle	None/None G3G4 / S3 SSC	A thoroughly aquatic turtle of ponds, marshes, rivers, streams and irrigation ditches, usually with aquatic vegetation, below 6000 ft elevation. Needs basking sites and suitable (sandy banks or grassy open fields) upland habitat up to 0.5 km from water for egg-laying.	Not Expected	Permanent water such as ponds, marshes, rivers are not present.
<i>Phrynosoma blainvillii</i> coast horned lizard	None/None G3G4 / S3S4 SSC	Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes. Open areas for sunning, bushes for cover, patches of loose soil for burial, and abundant supply of ants and other insects.	Not Expected	Washes with suitable habitat and loose soils are not present.
Amphibians				
<i>Ambystoma californiense</i> California tiger salamander	Threatened/Threatened G2G3 / S2S3 WL	Central Valley DPS federally listed as threatened. Santa Barbara and Sonoma counties DPS federally listed as endangered. Need underground refuges, especially ground squirrel burrows, and vernal pools or other seasonal water sources for breeding.	Not Expected	Suitable vernal pool and aquatic habitats are not present.
Fish				
<i>Cottus gulosus</i> rifle sculpin	None/None G5 / S3S4 SSC	Live in permanent, cool, headwater streams where riffles and rocky substrates are predominate. Mostly present in mid-elevation reaches, although they are present below dams with cold water releases (e.g. Kings and Tuolumne rivers).	Not Expected	Suitable aquatic habitats are not present.
<i>Lavinia exilicauda</i> exilicauda Sacramento hitch	None/None G4T2T4 / S2S4 SSC	Inhabit warm, lowland, waters including clear streams, turbid sloughs, lakes and reservoirs. Absent from the San Joaquin River and the lower reaches of its tributaries from Friant Dam down to the Merced River.	Not Expected	Suitable aquatic habitats are not present.
<i>Mylopharodon conocephalus</i> hardhead	None/None G3 / S3 SSC	Low to mid-elevation streams in the Sacramento-San Joaquin drainage. Also present in the Russian River. Clear, deep pools with sand-gravel-boulder bottoms and slow water velocity. Not found where exotic centrarchids predominate.	Not Expected	Suitable aquatic habitats are not present.



Scientific Name Common Name	Status Fed/State ESA G-Rank/S-Rank CDFW	Habitat Requirements	Potential for Impact	Potential for Occurrence
<i>Oncorhynchus mykiss irideus pop. 11</i> steelhead - Central Valley DPS	Threatened/None G5T2Q / S2	Populations in the Sacramento and San Joaquin rivers and their tributaries.	Not Expected	One occurrence was recorded from the Tuolumne River approximately four miles north of the site. Suitable aquatic habitats are not present however.
<i>Oncorhynchus tshawytscha pop. 13</i> chinook salmon - Central Valley fall / late fall-run ESU	None/None G5 / S2 SSC	Populations spawning in the Sacramento and San Joaquin rivers and their tributaries.	Not Expected	Suitable aquatic habitats are not present.
<i>Oncorhynchus tshawytscha pop. 6</i> chinook salmon - Central Valley spring-run ESU	Threatened/Threatened G5 / S1	Adult numbers depend on pool depth and volume, amount of cover, and proximity to gravel. Water temps >27 C are lethal to adults. Federal listing refers to populations spawning in Sacramento River and tributaries.	Not Expected	Suitable aquatic habitats are not present.
<i>Pogonichthys macrolepidotus</i> Sacramento splittail	None/None GNR / S3 SSC	Endemic to the lakes and rivers of the Central Valley, but now confined to the Delta, Suisun Bay and associated marshes. Slow moving river sections, dead end sloughs. Requires flooded vegetation for spawning and foraging for young.	Not Expected	Suitable aquatic habitats are not present.
Invertebrates				
<i>Branchinecta lynchi</i> vernal pool fairy shrimp	Threatened/None G3 / S3	Endemic to the grasslands of the Central Valley, Central Coast mountains, and South Coast mountains, in astatic rain-filled pools. Inhabit small, clear-water sandstone-depression pools and grassed swale, earth slump, or basalt-flow depression pools.	Not Expected	Suitable vernal pool habitat is not present.
<i>Desmocerus californicus dimorphus</i> valley elderberry longhorn beetle	Threatened/None G3T2 / S2	Occurs only in the Central Valley of California, in association with blue elderberry (<i>Sambucus mexicana</i>). Prefers to lay eggs in elderberries 2-8 inches in diameter; some preference shown for "stressed" elderberries.	Not Expected	Two occurrences were reported from within five miles, however no suitable habitat is available as no blue elderberry shrubs are present at the site.



Scientific Name Common Name	Status Fed/State ESA G-Rank/S-Rank CDFW	Habitat Requirements	Potential for Impact	Potential for Occurrence
<i>Lepidurus packardii</i> <i>vernal pool</i> <i>tadpole shrimp</i>	Endangered/None G4 / S3S4	Inhabits vernal pools and swales in the Sacramento Valley containing clear to highly turbid water. Pools commonly found in grass-bottomed swales of unplowed grasslands. Some pools are mud-bottomed and highly turbid.	Not Expected	Suitable vernal pool habitat is not present.

Regional Vicinity refers to within a [5] mile radius of site.

FT = Federally Threatened SE = State Endangered

FC = Federal Candidate Species ST = State Threatened

FE = Federally Endangered SR = State Rare

FS = Federally Sensitive SS = State Sensitive

G-Rank/S-Rank = Global Rank and State Rank as per NatureServe and CDFW's CNDDDB RareFind3

SC = CDFW Species of Special Concern

FP = Fully Protected

WL = Watch List



Attachment D Representative Site Photographs



Photograph 1. Ceres Main Canal under Keyes Road. View to the north west.



Photograph 2. Open pipe along Ceres Main Canal with sparse ruderal vegetation shown. View to the north.



Photograph 3. Ceres Main Canal with surrounding almond orchards and sparse marginal vegetation shown near the sign. View to the south.

Appendix C

Cultural Resources Technical Memorandum



Rincon Consultants, Inc.

4825 J Street, Suite 200
Sacramento, California 95819

916 706 1374 OFFICE AND FAX

info@rinconconsultants.com
www.rinconconsultants.com

June 4, 2019

Project No: 18-07035

Paul Saini, P.E./Q.S.D./Q.S.P./M.B.A.

Project Manager

Stanislaus County Public Works

1716 Morgan Road

Modesto, California

Subject: Cultural Resources Technical Memorandum for the Keyes Road over Turlock Irrigation District Ceres Main Canal Bridge Replacement Project, near the Community of Keyes, Stanislaus County, California

Dear Mr. Saini:

Rincon Consultants, Inc. (Rincon) was retained by Cornerstone Structural Engineering Group, Inc. on behalf of the Stanislaus County Department of Public Works to complete a cultural resources technical memorandum in support of a bridge replacement project near the community of Keyes, Stanislaus County, California. The purpose of this technical memorandum is to document the results of the tasks performed by Rincon; specifically, a cultural resources records search, Native American outreach, archival research, cultural resources field survey, and resource documentation and evaluation. This study was completed in accordance with the requirements of the California Environmental Quality Act (CEQA). The Stanislaus County Department of Public Works is the lead agency for the project.

Project Location

The project site is located on a developed roadway within the San Joaquin Valley along East Keyes Road near the community of Keyes, Stanislaus County, California (Figure 1). The property is identified as Assessor's Parcel Numbers 041-038-010, 041-041-037, 041-051-032 and 041-053-001. The project site is depicted on Township 04 South, Range 09 East, Sections 25, 26, 35 and 36 of the United States Geological Survey (USGS) Ceres CA 7.5-minute quadrangle (Figure 2).

Project Description

The project would reconstruct the extant Keyes Road Bridge (Bridge No. 38C-193) to correct structural damage found during recent inspections. The new bridge would be built in accordance with the latest California Department of Transportation (Caltrans) Structure Design standards as well as in conformance with Turlock Irrigation District (TID) and County requirements. The project would increase the load limit and permit rating of the bridge, improve safety for motorists and minimize vehicular accidents.



Personnel

Rincon Senior Architectural Historian Steven Treffers, MHP, provided management oversight for this cultural resources study. Mr. Treffers meets the Secretary of the Interior's Professional Qualifications Standards for history and architectural history (National Park Service [NPS] 1983). Senior Archaeologist Hannah Haas, MA, Registered Professional Archaeologist (RPA), completed the archaeological pedestrian survey. Archaeologist Lindsay Porras, MA, RPA, conducted the records search. Associate Archaeologist Mary Pfeiffer, BA, co-authored the report. Architectural Historian James Williams, MA, conducted archival research and co-authored the report. Geographic Information Systems Analysts Erik Holtz, Jonathon Schuhrke, and Allysen Valencia prepared the figures found in this report. Principal Shannon Carmack reviewed this report for quality control and quality assurance.

Environmental Setting

The project site is situated approximately 95 feet above mean sea level, on alluvial fan and toeslope remnants. The soils of the project site include a Dinuba series that consists of moderately well-drained noncalcareous brown soils that formed from coarse textured granitic alluvium (California Soil Resource Lab 2019). The nearest water source is the Tuolumne River, approximately 4.3 miles north of the project site. Vegetation within the project site and surrounding vicinity consists of almond trees used for agricultural purposes.

Regulatory Setting

California Environmental Quality Act

CEQA requires a lead agency to determine if a project may have a significant effect on historical resources (Public Resources Code [PRC] §21084.1) or tribal cultural resources (PRC §21074[a][1][A]-[B]). A historical resource is a resource listed or determined to be eligible for listing in the California Register of Historical Resources (CRHR); a resource included in a local register of historical resources; or an object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be *historically significant* (State CEQA Guidelines §15064.5[a][1-3]).

A resource shall be considered *historically significant* if it meets any of the following criteria:

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

In addition, 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 resources cannot be left undisturbed, mitigation measures are required (PRC §21083.2[a], [b]).



PRC §21083.2(g) defines a *unique archaeological resource* as an 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

A historical resource is one listed in or determined to be eligible for listing in the CRHR, a resource included in a local register of historical resources or any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant (CEQA Guidelines §15064.5[a][1-3]). Section 15064.5(a)(3) also states that a resource shall be considered by the lead agency to be “historically significant” if the resource meets the criteria for listing on the CRHR.

Background Research

Cultural Resources Records Search

On April 30, 2019, Rincon requested a records search of the California Historical Resources Information System (CHRIS) at the Central California Information Center (CCIC) located at California State University, Stanislaus. The purpose of the records search was to identify previously recorded cultural resources, as well as previously conducted cultural resources studies of the project site and a 0.5-mile radius surrounding it. The search also included a review of the National Register of Historic Places (NRHP), the California Register of Historical Resources (CRHR), California Points of Historical Interest list, the California Historical Landmarks list, the Archaeological Determination of Eligibility (ADOE) list, and the California State Historic Resources Inventory. A summary of the record search results is included in Appendix A of this report.

The CCIC records search identified one previously conducted cultural resources study within a 0.5-mile radius of the project site; this study was conducted on the project site. The study found “no visible surface indications of the presence of archaeological remains” (Chavez 1976). Table 1 provides a summary of the report within the search radius.

Table 1 Previous Cultural Resource Studies within 0.5-mile of the Project Site

Report Number	Author(s)	Year	Title	Relationship to Project Site
ST-00859	D. Chavez	1976	<i>An Archaeological Reconnaissance of the Robert's Ferry Reservoir and Water Extraction and Conveyance Systems, Stanislaus County, California: Phase II</i>	Within

Source: CCIC April 2019



The CCIC records search identified three previously recorded cultural resources within a 0.5-mile radius of the project site. Of these resources, one is located within the project site and a brief description is provided below. The reports associated with these reports were not identified in the records search results. Table 2 provides a summary of the previously recorded cultural resources within the search radius.

Table 2 Previously Recorded Cultural Resources within 0.5-mile of the Project Site

Primary Number	Trinomial	Resource Type	Description	Recorder(s) and Year(s)	NRHP/CRHR Eligibility Status	Relationship to Project Site
P-50-000071	-	Historic Structure (HP20)	Turlock Irrigation District's Upper and Lower Lateral No. 2 ½ (canal)	N. Lawson, 2009; P. Daly, 2009; JRP Historical Consulting, 1993	Unknown	Outside
P-50-000072	-	Historic Structure (HP20)	Turlock Irrigation District's Upper and Lower Lateral No. 3 (canal)	N. Lawson, 2009; JRP Historical Consulting, 1993; Judith Marvin, 2000	Unknown	Outside
P-50-000073	CA-STA-000426/H	Historic Structure (HP20)	Turlock Irrigation District's Water Conveyance Systems: Ceres Main Canal	JRP Historical Consulting, 1993; P. Daly, 2009; M. Patrick, 2016; J. Marvin, 1999, 2009 and 2015; N. Lawson and J. Feldman, 2009	(6Z) Found ineligible for NR, CR or Local designation through survey evaluation	Within

Source: CCIC April 2019

P-50-000073

A segment of the Ceres Main Canal (CMC) (P-50-000073) is located in the project site. The CMC is a component of the wider Turlock Irrigation District (TID). The CMC and its laterals were constructed between 1894 and 1904 to irrigate farmland in Stanislaus County. Several segments of the CMC and its laterals were recorded between 1993 and 2016. In some cases the resources were identified using the TID name. The previous findings are summarized below.

In 1993, JRP Historical Consulting recorded the CMC at its intersection with State Route 99 as part of the Mojave Natural Gas Pipeline, Northern Extension Project, finding the resource ineligible for listing in the NRHP. JRP found the canal was significant under Criterion A as an early canal built under the Wright Act of 1887 and for its associations with agricultural development in Stanislaus County. However, due to the concrete lining of the originally earthen canal and extensive development in its vicinity (including the construction of modern bridges and culverts), JRP argued the CMC lacked sufficient integrity of design, materials, workmanship, setting, and feeling for listing in the NRHP (JRP 1993).

Judith Marvin of Foothill Resources recorded and evaluated the TID system in 1999 for the *Historic Resource Survey Report (positive) for the Keyes Road Bridge at Turlock Irrigation District Ceres Main*



Canal Project. As part of this effort, Marvin recorded a segment of the CMC at Keyes Road, though the record does not specify the segment's precise length or location. She found the TID system eligible for listing in the NRHP under Criterion A as the first California irrigation district established under the Wright Act and for its role in the development of agriculture in Stanislaus County. Marvin also recommended the TID eligible under Criterion C because it "[conveys] a sense of the time and place when small farms replaced the large grazing ranches of the nineteenth century, forever altering the demographics of the area" (Marvin 1999).

In 2009, Judith Marvin, of Foothill Resources completed a record update for the CMC segment between Mitchell and Boothe roads, reversing her 1999 recommendation of eligibility for the NRHP. Marvin cited integrity considerations owing to the resurfacing of the canal in 1927, 1958, and 1958 as the reason for her revised finding (Marvin 2009).

Natalie Lawson and Jessica Feldman of CH2M Hill recorded a segment of TID Lateral No. 2 located between Crow's Landing and Ustick roads in 2009. This was part of the TID Almond Power Plant No. 2. AFC Application. Lawson and Feldman found that although the canal segment was associated with agricultural development in the region between 1900 and 1920, it appeared ineligible for listing in the NRHP due to a loss of integrity (Lawson and Feldman 2009).

In 2009, as part of the Hughson Grayson 115v Transmission Line and Substation Project, Pamela Daly of Cultural Resource Associates recorded a segment of the CMC just south of Gondering Road; segments of Upper Lateral No. 2 between the Burlington Northern Santa Fe Railroad and Griffen Road and between East Service and Redwood roads; and a segment of Upper Lateral No. 2 ½ on either side of U.S. 99; and Lower Lateral No. 2 between Grayson and West Service roads. According to Daly, although the canal and laterals are significant as part of "the first publicly owned irrigation district in California," continual maintenance of the canal and laterals has so diminished the segments' integrity that they do not meet eligibility standards for the NRHP or CRHR (Daly 2009).

In 2015, Judith Marvin of Foothill Resources recorded a segment of the CMC located between Whitmore Avenue and Roeding Road for the *Historical Resources Evaluation Report for the Mitchell/TID Canal Bike Path Project*. She found that, although the canal segment was significant under Criterion A for its association with the development of the TID, the periodic lining of the canal with concrete and gunite impaired the canal's integrity to its period of significance, 1890-1925. As a result, the canal was recommended canal ineligible for listing in the NRHP (Marvin 2015).

Melinda Pacheco Patrick of Patrick GIS Group and Judith Marvin of Foothill Resources recorded CMC Segment C in 2016. This segment situated between Roeding and Service roads included the canal and two associated features, namely, a "broken concrete foundation" and intake valve and a "metal pipe stand" (Patrick and Marvin 2016). In addition, Patrick located a "moderate-sized scatter of historic debris" that included shattered ceramic and glass. She found the canal and associated features appeared ineligible for listing in the NRHP due to a lack of integrity, while the historic-era scatter appeared ineligible under Criterion D because it lacked information potential (Patrick and Marvin 2016).

Caltrans Historic Bridge Survey

The *Caltrans Historic Bridge Inventory* lists one bridge on the project site, Keyes Road Bridge (Bridge No. 38C-193). It is identified as ineligible for NRHP listing. The bridge was not evaluated for listing in the CRHR (Caltrans n.d.) (Appendix B).



Native American Outreach

As part of the process of identifying cultural resources for this project, Rincon contacted the Native American Heritage Commission (NAHC) on April 29, 2019 and requested a Sacred Lands File (SLF) search and a list of Native American tribal organizations and individuals who may have knowledge of sensitive cultural resources in or near the project site. Pending response from the NAHC, Rincon mailed anticipatory letters on May 23, 2019 to six Native American contacts who may have knowledge of cultural resources in the project site and vicinity. On May 28, 2019, Rincon received a response from the NAHC stating the results of the SLF search were “negative” for site-specific information and included a list of Native American contacts; letters were sent to all listed individuals who had not been previously contacted. As of May 28, 2019, Rincon has not received any responses from Native American contacts. Appendix C provides the full results of the scoping effort.

Historical Map and Imagery Review

Rincon also reviewed available historical topographic maps, aerial imagery and General Land Office records of the project site to determine past land use. The original General Land Office survey plat of 1854 indicates that the project site was designated as Sections 25, 26, 35 and 36 (Bureau of Land Management 2019a). The land within Sections 25, 26 and 35 was presumably unused at this time. One patent within Section 36 encompasses the project site and was issued to the State of California on December 30, 1854 (Bureau of Land Management 2019h). The General Land Office records show six additional land patents within Sections 25, 26 and 35 of Township 04 South, Range 09 East, three of which encompass the project site and were issued to H.H. Hewlett on June 1, 1867 (Bureau of Land Management 2019c, Bureau of Land Management 2019e-f). Topographic maps as early as 1916 depict the Ceres Main Canal traversing the project site from north to south (USGS 2019a-f). Historical aerial imagery available for the project site spans from 1967 through 2014. Imagery from 1967 depicts the Ceres Main Canal, Keyes Road and State Bridge No. 38C-193 in their current alignment and surrounded by agricultural fields (NETRonline 2019).

Cultural Resources Field Survey

On May 9, 2019, Rincon Senior Archaeologist, Hannah Haas, MA, RPA, conducted a pedestrian field survey of the project site. Transect intervals were spaced approximately 15 meters apart, and exposed ground surfaces were examined for artifacts (e.g., flaked stone tools, tool-making debris, stone milling tools, ceramics, fire-affected rock [FAR]), ecofacts (marine shell and bone), 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., standing exterior walls, postholes, foundations) or historic debris (e.g., metal, glass, ceramics). Ground disturbances such as burrows and drainages were also visually inspected. Survey accuracy was maintained using a handheld Global Positioning Satellite unit and a georeferenced map of the project site. Site characteristics and survey conditions were documented using field records and a digital camera. Copies of the survey notes and digital photographs are maintained at the Rincon Sacramento office.

Ground visibility ranged from approximately 80 to 90 percent with 100 percent exposure. The project site is surrounded on all sides by almond orchards. The cultural resources specialist walked transects along the northern and southern side of East Keyes Road for the entire length of the project site.



Transmission lines trend north to south above the canal and east to west along East Keyes Road (Figures 3 and 4). Sporadic vegetation and roadbed gravel were observed along the edge of the road. No archaeological resources were identified during the pedestrian survey. Two built-environment resources, a 240 foot segment of the Turlock Irrigation District's Water Ceres Main Canal (P-50-000073) and Keyes Road Bridge (Bridge No. 38C-193), were identified within the project site. The resources within the project site were inspected to assess overall condition and integrity, and to identify and document any potential character-defining features. Observations were recorded in written notes and digital photographs and are discussed in detail below. Both structures were recorded and evaluated for historic significance on California Department of Parks and Recreation (DPR) 523 series forms, which are included as in Appendix D.

Built Environment Evaluation

Ceres Main Canal

The Ceres Main Canal and its main laterals were constructed between 1894 and 1904 (JRP 1993). A 240 foot-long segment of the canal is located in the project site. Within the subject segment, the concrete-lined canal measures approximately 25 feet wide and flows north to south. Vertical concrete walls extended approximately 2 feet above the water level at the time of the field survey. Keyes Road Bridge crosses the canal perpendicularly near the subject segment's approximate center point. Further details regarding the design and construction of the canal could not be observed due to the water level.

The Turlock Irrigation District system, including the Ceres Main Canal, was among the first irrigation systems constructed under the Wright Act, an 1887 state law that allowed for the formation of bond-funded irrigation districts. Originally built as an earthen canal, the Ceres Main Canal was part of an irrigation system that allowed for the development of intensive agriculture in the surrounding areas of Stanislaus County during the late nineteenth and early twentieth centuries. The canal system was first upgraded with a concrete lining in 1927, with new concrete and gunite linings applied in the 1950s and 1980s (JRP 1993; Patrick 2016).

As was found in previous evaluations, the current study does not recommend the subject segment of the Ceres Main Canal eligible for listing in the NRHP or the CRHR under any significance criteria. It appears significant under Criteria A/1 as one of the first publicly owned canal systems developed under the Wright Act and for its associations with the development of intensive agriculture in Stanislaus County. However, it lacks integrity to its period of significance, which varies in previous evaluations, but consistently falls in the period spanning initial construction in the 1890s and its lining with concrete in the 1920s. Available evidence did not suggest the canal was strongly associated with individuals who have made important contributions to local, state, or national history. Consequently, it does not appear eligible under Criteria B/2. There is no evidence suggesting the canal is a distinguished engineering structure or that it otherwise embodies the distinctive characteristics of a type, period, or method of construction, represent the work of a master, or possess high artistic values. Therefore it does not appear eligible for listing under Criteria C/3. A review of available evidence and records search results did not indicate it may yield important information about prehistory or history, therefore the canal does not appear eligible under Criteria D/4. Additional details are included in the attached California Department of Parks and Recreation 523 forms (Appendix D).



Keyes Road Bridge (Bridge No. 38C-193)

Constructed in 1920, Keyes Road Bridge (Bridge No. 38C-193) is a two-lane concrete slab bridge carrying Keyes Road over the Ceres Main Canal. Following an east-to-west aspect, it measures approximately 27 feet long and 32 feet wide and runs flush with the approaching roadway at either end. Its head and tail walls are constructed of concrete and form walls of approximately 2 feet high flanking the roadway. Further details regarding the design of the bridge could not be ascertained due to the relatively high water level at the time of the field survey.

A crossing over the Ceres Main Canal is depicted at this location in a 1916 USGS topographical map (USGS 2019a). It was replaced in 1920 with the extant bridge. Inexpensive and easy to construct, concrete slab bridges, such as the subject bridge, were built in California through most of the twentieth century and were particularly common in the Central Valley (Caltrans 1986; Caltrans 2003). Aerial photographs and visual inspection suggest no substantial changes have been made to the bridge since it was constructed (NETRonline 2019).

Keyes Road Bridge (Bridge No. 38C-193) is identified as ineligible for NRHP listing in the *Caltrans Historic Bridge Inventory* (Caltrans n.d.). The present study concurs with the Caltrans finding and also finds the bridge does not appear eligible for listing in the CRHR under any significance criteria. Although the bridge is associated with the Ceres Main Canal and, by extension, the development of agriculture in this area of Stanislaus County, research conducted for this study did not indicate it was important in this context. As a result, it does not appear eligible for listing in the CRHR under Criterion 1. Because available evidence did not suggest the bridge was associated with any individuals who made important contributions to local, regional, state, or national history, it does not appear eligible for under Criterion 2. The subject bridge is an undistinguished example of a concrete slab bridge, a type that is ubiquitous in the region. As such, it does not embody the distinctive characteristics of a type, period, or method of construction, represent the work of a master, or possess high artistic values. Consequently, it does not appear eligible for listing under Criterion 3. Finally, a review of available evidence and records search results did not indicate that it may yield important information about prehistory or history. Therefore Keyes Road Bridge does not appear eligible under Criterion 4. Additional information is included in the attached California Department of Parks and Recreation 523 forms (Appendix D).

Findings and Recommendations

Historical Resources

The cultural resources record search and additional background research identified two historic structures within the project site, a segment of the Ceres Main Canal (P-50-000073) and Keyes Road Bridge (Bridge No. 38C-193). Ceres Main Canal has been recommended ineligible for listing on the NRHP and CRHR through previous survey evaluations due to a loss of integrity to its period of significance. Rincon concurs with these previous findings and recommends the subject segment ineligible for listing in the NRHP or CRHR; it therefore is not considered a historical resource under CEQA. Keyes Road Bridge (Bridge No. 38C-193) was previously identified as ineligible for the NRHP in Caltrans' *Historic Bridge Inventory*. Rincon concurs with this finding and further recommends the bridge ineligible for listing in the CRHR because it lacks historical and architectural significance; it therefore is not considered a historical resource under CEQA.



Based on the results of the research conducted for this project, no significant cultural resources were identified on the project site that would be impacted by the project. Therefore, Rincon recommends a finding of ***no impact to historical resources*** under CEQA.

Archaeological Resources

The records search, Native American scoping, and pedestrian survey did not identify any archaeological resources on the project site. The lack of surface evidence of archaeological resources does not preclude their subsurface existence. However, the absence of substantial prehistoric or historic period archaeological resources within the immediate vicinity, along with the existing level of disturbance in the project site, suggests there is a low potential for encountering subsurface archaeological deposits. Although the project site is considered to have low sensitivity for archaeological resources, unanticipated discoveries are always a possibility during ground disturbance. Rincon recommends a standard unanticipated discoveries measure, presented below, to address potential finds during construction and a finding of ***less than significant impact to archaeological resources*** under CEQA.

Unanticipated Discovery of Cultural Resources

If cultural resources are encountered during ground-disturbing activities, work in the immediate area must halt and an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology (National Park Service 1983) should be contacted immediately to evaluate the find. If the discovery proves to be eligible for listing on the California Register of Historical Resources, additional work may be warranted, such as data recovery excavation, Native American consultation, and archaeological monitoring to mitigate any significant impacts under CEQA.

Human Remains

The discovery of human remains is always a possibility during ground disturbing activities. If human remains are found, the State of California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. In the event of an unanticipated discovery of human remains, the County Coroner must be notified immediately. If the human remains are determined to be prehistoric, the Coroner will notify the Native American Heritage Commission, which will determine and notify a most likely descendant (MLD). The MLD has 48 hours from being granted site access to make recommendations for the disposition of the remains. If the MLD does not make recommendations within 48 hours, the land owner shall reinter the remains in an area of the property secure from subsequent disturbance. With adherence to existing regulations, Rincon recommends a finding of ***less than significant impact to human remains***.

Please do not hesitate to contact Rincon Consultants with any questions regarding this cultural resources study.

Sincerely,
Rincon Consultants, Inc.

Handwritten signature of Hannah Haas in cursive.

Hannah Haas, MA, RPA
Senior Archaeologist

Handwritten signature of James Williams in cursive.

James Williams, MA
Architectural Historian



A handwritten signature in black ink, appearing to read "MP", located below the Rincon logo.

Mary Pfeiffer, BA
Associate Archaeologist

Attachments

- Figure 1 Regional Location Map
- Figure 2 Project Location Map
- Figure 3 Transmission Lines along East Keyes Road
- Figure 4 Transmission Lines along TID Canal, Bridge in Foreground

- Appendix A Record Search Results Summary
- Appendix B Caltrans Historic Bridge Inventory
- Appendix C Native American Outreach
- Appendix D California Department of Parks and Recreation 523 forms



References

Bureau of Land Management

- 2019a DM ID: 319467. Electronic document accessed May 20, 2019 from:
https://glorerecords.blm.gov/details/survey/default.aspx?dm_id=319467&sid=z5hkkccf.o4e#surveyDetailsTabIndex=1
- 2019b CACAAA: 097821. Electronic document accessed June 3, 2019 from:
<https://glorerecords.blm.gov/details/patent/default.aspx?accession=CACAAA%20097821&docClass=SER&sid=l2gmii4q.rl4>
- 2019c CACAAA: 097824. Electronic document accessed June 3, 2019 from:
<https://glorerecords.blm.gov/details/patent/default.aspx?accession=CACAAA%20097824&docClass=SER&sid=l2gmii4q.rl4>
- 2019d CACAAA: 097803. Electronic document accessed June 3, 2019 from:
<https://glorerecords.blm.gov/details/patent/default.aspx?accession=CACAAA%20097803&docClass=SER&sid=dtvsyaw2.q0u>
- 2019e CACAAA: 097818. Electronic document accessed June 3, 2019 from:
<https://glorerecords.blm.gov/details/patent/default.aspx?accession=CACAAA%20097818&docClass=SER&sid=dtvsyaw2.q0u>
- 2019f CACAAA: 097829. Electronic document accessed June 3, 2019 from:
<https://glorerecords.blm.gov/details/patent/default.aspx?accession=CACAAA%20097829&docClass=SER&sid=ucyqkpng.sni>
- 2019g CACAAA: 097834. Electronic document accessed June 3, 2019 from:
<https://glorerecords.blm.gov/details/patent/default.aspx?accession=CACAAA%20097834&docClass=SER&sid=ucyqkpng.sni>
- 2019h CACAAA: 000001 J5. Electronic document accessed June 3, 2019 from:
<https://glorerecords.blm.gov/details/patent/default.aspx?accession=CACAAA%20000001%20%20J5&docClass=SER&sid=zq023wpm.fd0>

California Soil Resource Lab

- 2019 State Bridge No. 38C-193, near the community of Keyes, Stanislaus County, California. Electronic document accessed May 20, 2019 from:
<https://casoilresource.lawr.ucdavis.edu/gmap/>

Caltrans

- N.d. Historic Bridge Inventory: Structure Maintenance & Investigations, Historical Significance - Local Agency Bridges. Electronic document, online at
http://www.dot.ca.gov/hq/structur/strmaint/hs_local.pdf, accessed May 24, 2019.
- 1986 Historic Bridges in California: Concrete Arch, Concrete Girder, Concrete Slab, Canticrete, Stone, Masonry, Suspension, Steel Girder and Steel Arch Thematic Determination of Eligibility. Electronic document, online at <http://www.dot.ca.gov/env/cultural/docs/historic-non-truss-bridges-1986.pdf>, accessed May 24, 2019.



- 2003 Caltrans Statewide Historic Bridge Inventory Update: Metal Truss, Movable, and Steel Arch Bridges. Prepared by JRP Historical Consulting, Inc. January. Electronic document, online at <http://www.dot.ca.gov/env/cultural/docs/roadway-bridges-ca-2003.pdf>, accessed May 24, 2019.

Chavez, David

- 1976 An Archaeological Reconnaissance of the Robert's Ferry Reservoir and Water Extraction and Conveyance Systems, Stanislaus County, California: Phase II

Daly, Pamela

- 2009 California Department of Parks and Recreation form 523: Turlock Irrigation District Water Conveyance System (P-05-000073). Record on file at the Central California Information Center, Turlock, CA.

JRP Historical Consulting, Inc.

- 1993 Canal Feature Inventory Form: Ceres Main Canal, Turlock Irrigation District, Stanislaus County (P-05-000073). Record on file at the Central California Information Center, Turlock, CA.

Lawson, Jessica and Natalie Feldman

- 2009 California Department of Parks and Recreation form 523: TID Lateral No. 2 (P-05-000073). Record on file at the Central California Information Center, Turlock, CA.

National Park Service

- 1983 Archaeology and Historic Preservation: Secretary of the Interior's Standards and Guidelines. Electronic document, online at http://www.nps.gov/history/local-law-Arch_Standards.htm, accessed May 20, 2019.

NETRonline

- 2019 State Bridge No. 38C-193. Electronic document accessed May 20, 2019 from: <https://www.historicaerials.com/viewer>

Marvin, Judith

- 1999 California Department of Parks and Recreation form 523: TID System (P-05-000073). Record on file at the Central California Information Center, Turlock, CA.
- 2009 California Department of Parks and Recreation form 523: TID System/Ceres Main Canal (P-05-000073). Record on file at the Central California Information Center, Turlock, CA.
- 2015 California Department of Parks and Recreation form 523: Whitmore Avenue to Roeding Road Segment, TID System/Ceres Main Canal (P-05-000073). Record on file at the Central California Information Center, Turlock, CA.

Pacheco Patrick, Melinda and Judith Marvin

- 2015 California Department of Parks and Recreation form: TID System/Ceres Main Canal Segment C (P-05-000073). Record on file at the Central California Information Center, Turlock, CA.

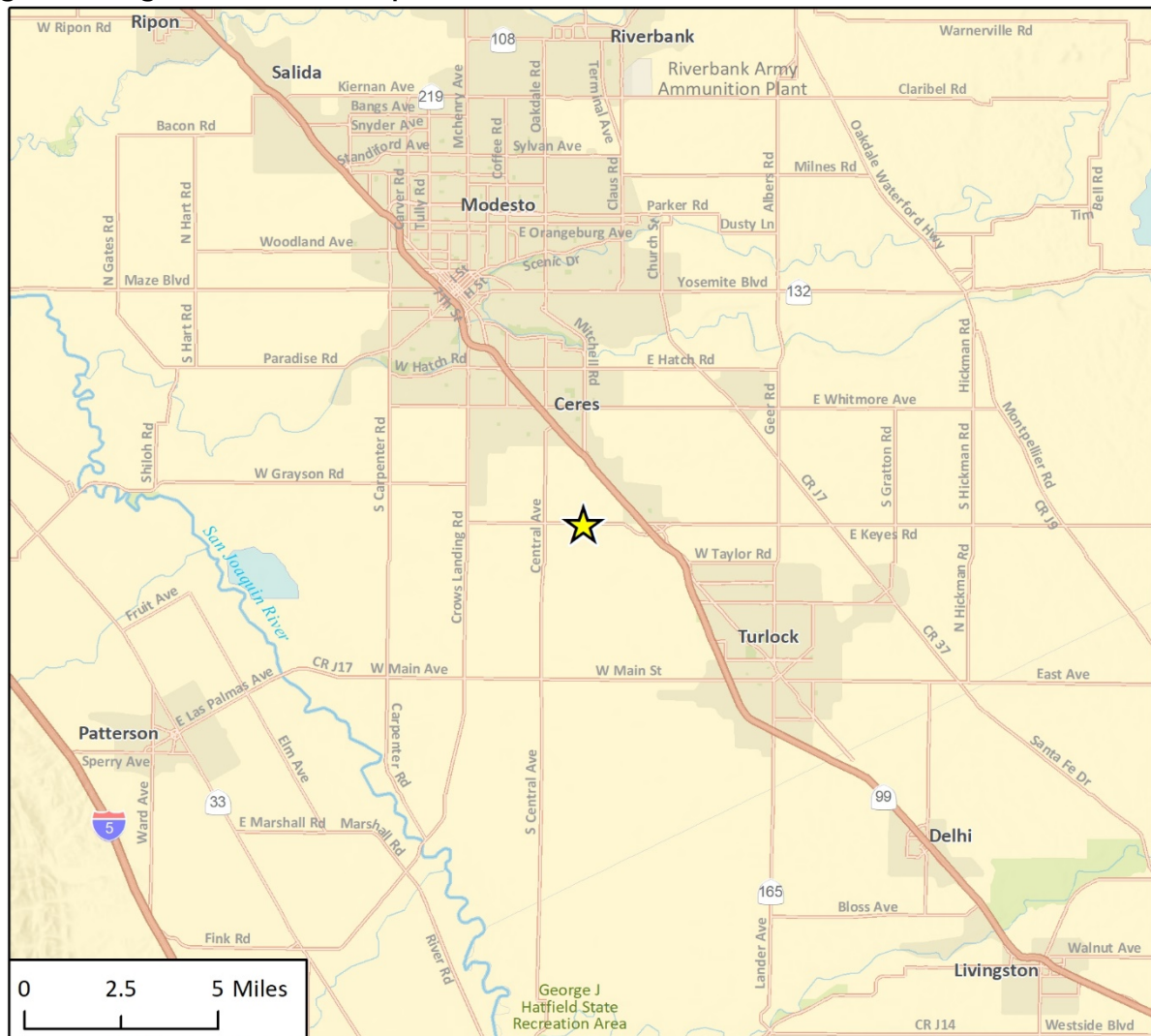


United States Geological Survey (USGS)

- 2019a 1916, Ceres, 1:31680 topographic map. Electronic document accessed May 23, 2019 from:
https://ngmdb.usgs.gov/ht-bin/tv_browse.pl?id=1d8fdf040a73685752e8d1bdf632c097
- 2019b 1939, Modesto East, 1:62500 topographic map. Electronic document accessed May 23, 2019
from: [https://ngmdb.usgs.gov/ht-
bin/tv_browse.pl?id=e56da2a08c12588d48af41583b73fcb4](https://ngmdb.usgs.gov/ht-bin/tv_browse.pl?id=e56da2a08c12588d48af41583b73fcb4)
- 2019c 1947, San Jose, 1:250000 topographic map. Electronic document accessed May 23, 2019
from: [https://ngmdb.usgs.gov/ht-
bin/tv_browse.pl?id=c0133fdf719b7405503a2f94192a3f84](https://ngmdb.usgs.gov/ht-bin/tv_browse.pl?id=c0133fdf719b7405503a2f94192a3f84)
- 2019d 1953, Ceres, 1:24000 topographic map. Electronic document accessed May 23, 2019 from:
https://ngmdb.usgs.gov/ht-bin/tv_browse.pl?id=06f3a38866ce9fe14d08899677f46230
- 2019e 1962, San Jose, 1:250000 topographic map. Electronic document accessed May 23, 2019
from: [https://ngmdb.usgs.gov/ht-
bin/tv_browse.pl?id=18e9d389426cc8f994b5535f5fd83eb8](https://ngmdb.usgs.gov/ht-bin/tv_browse.pl?id=18e9d389426cc8f994b5535f5fd83eb8)
- 2019f 1969, Ceres, 1:24000 topographic map. Electronic document accessed May 23, 2019 from:
https://ngmdb.usgs.gov/ht-bin/tv_browse.pl?id=8b7df7052f09d32ecbdd35d09991db6a

Figures

Figure 1 Regional Location Map



★ Project Location

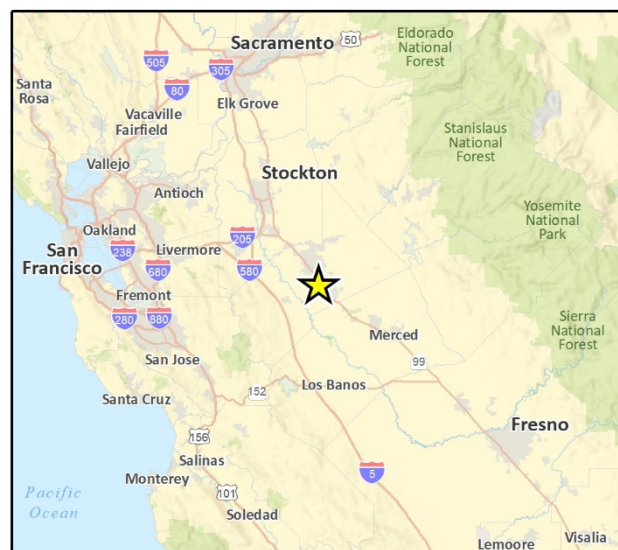
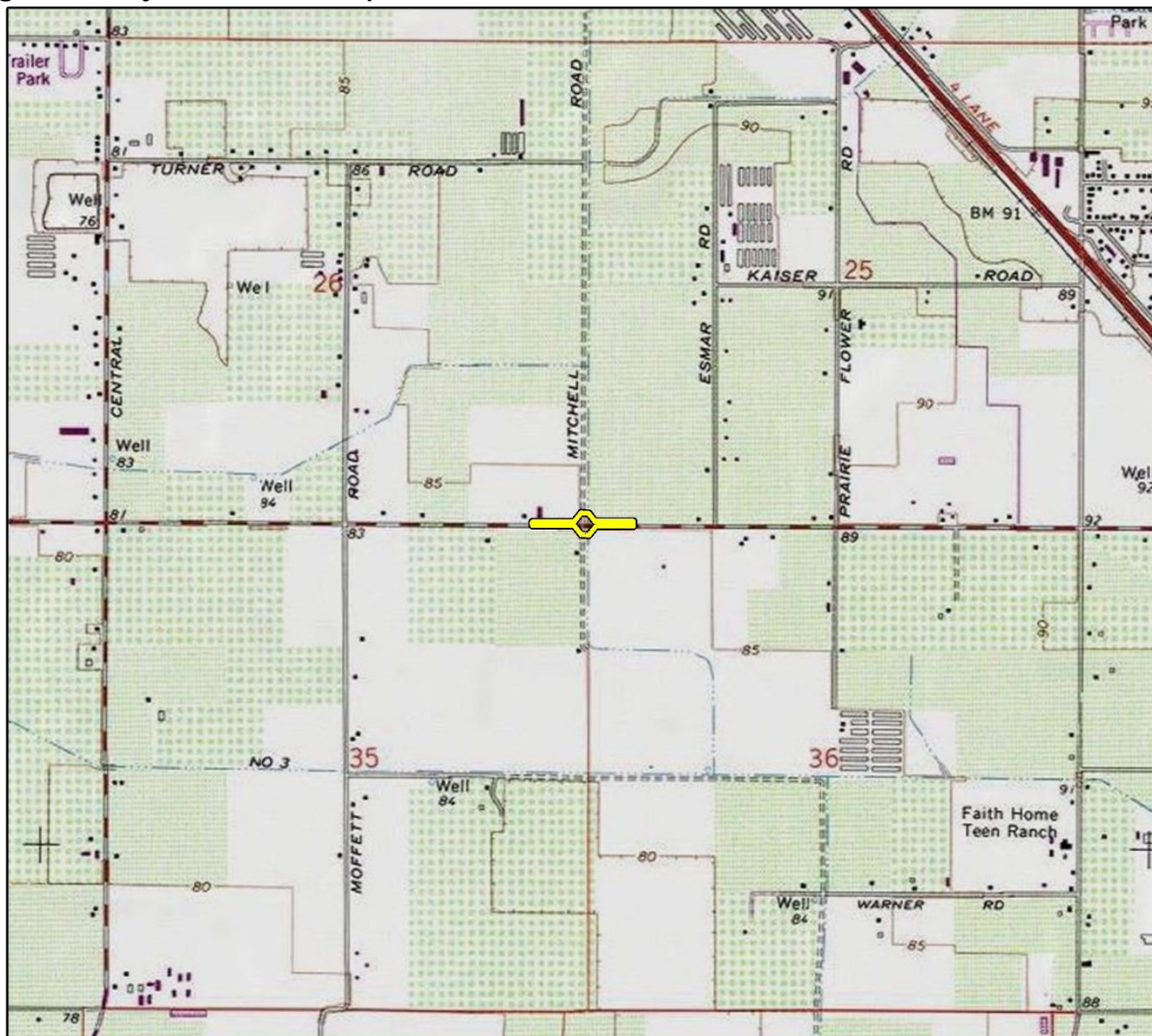


Fig 1. Regional Location

Figure 2 Project Location Map



Imagery provided by National Geographic Society, Esri and its licensors
© 2019. Ceres Quadrangle. T04S R09E S25,26,35,36. The topographic
representation depicted in this map may not portray all of the features
currently found in the vicinity today and/or features depicted in this map
may have changed since the original topographic map was assembled.

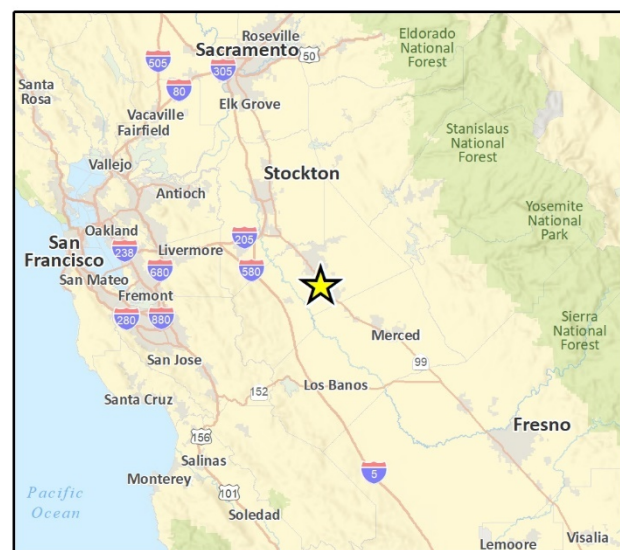
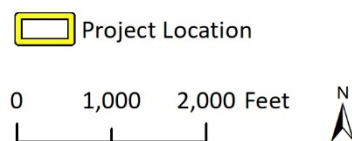


Figure 3 Transmission Lines along East Keyes Road



Figure 4 Transmission Lines along TID Canal, Bridge in Foreground



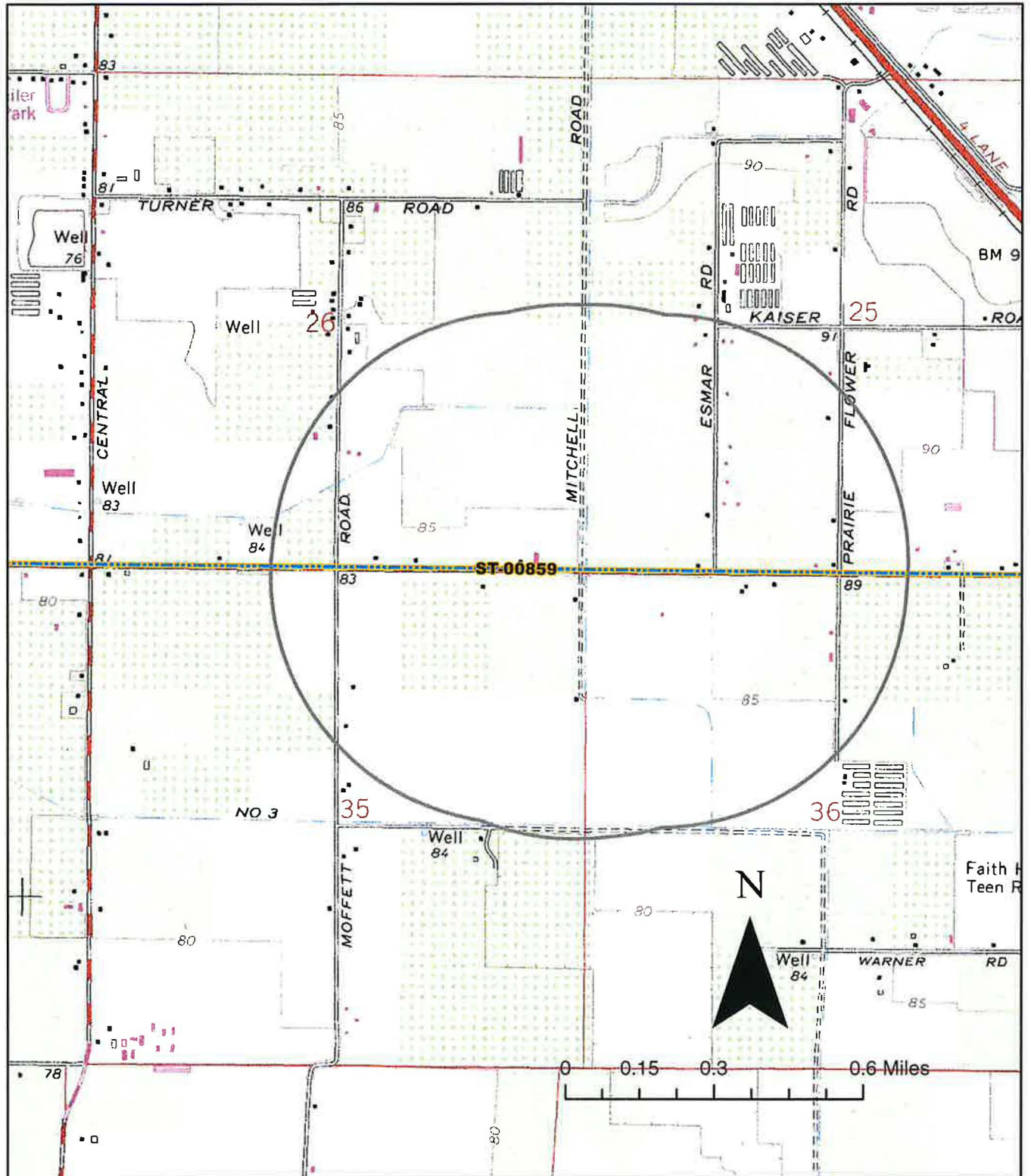
Appendix A

Record Search Results Summary

Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
ST-00859	NADB-R - 1361683	1976	Chavez, D.	An Archaeological Reconnaissance of the Robert's Ferry Reservoir and Water Extraction and Conveyance Systems, Stanislaus County, California: Phase II.	Holman & Chavez Consulting Archaeologists; for URS Research Company	

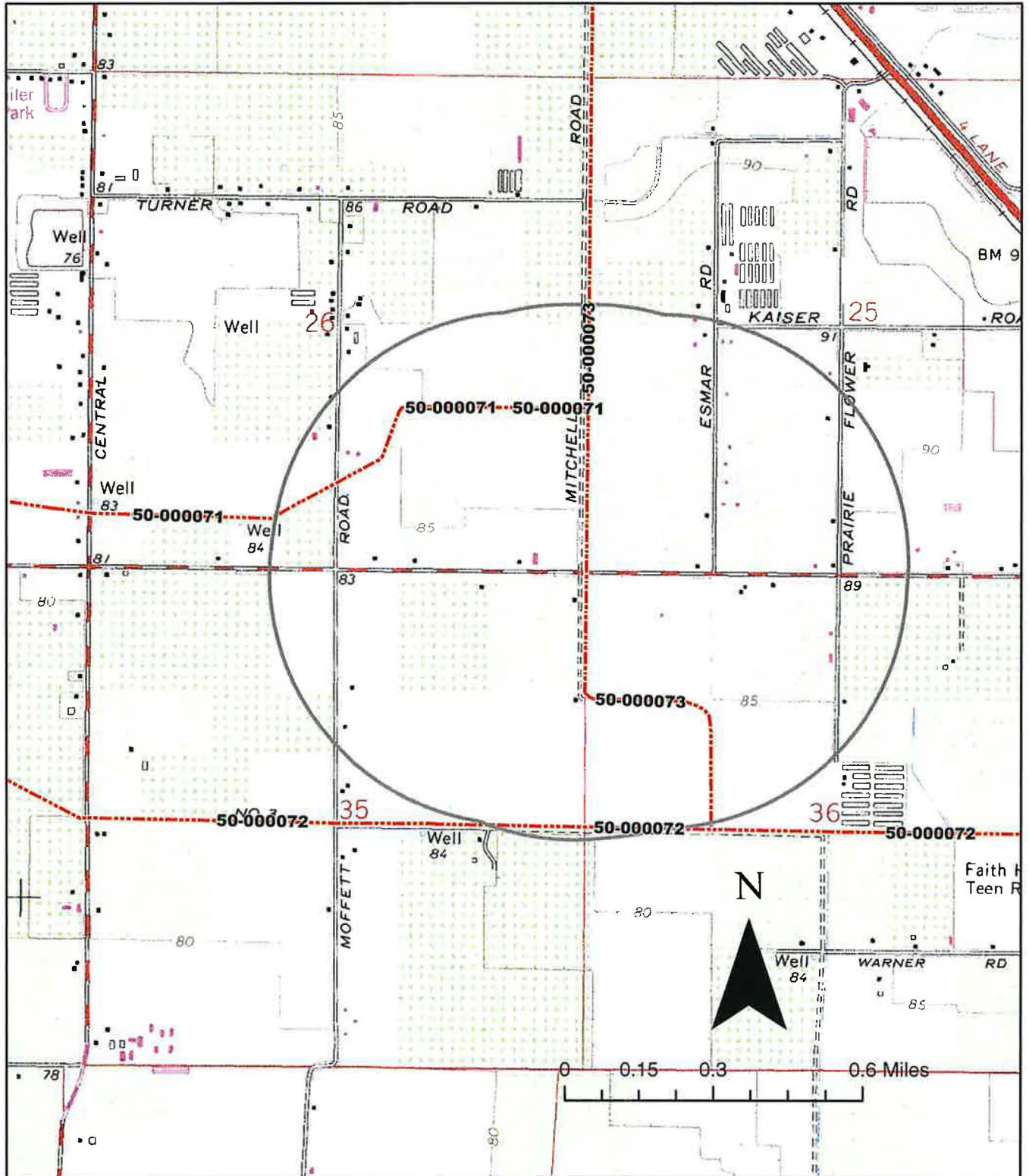
CCaIC #11060N Report
Keyes Road at Turlock Irrigation District Ceres
Main Canal Bridge Replacement
Ceres USGS 7.5' Quadrangle



Resource List

Primary No.	Trinomial	Other IDs	Type	Age	Attribute codes	Recorded by	Reports
P-50-000071		Resource Name - TID Lateral # 2 1/2 (upper and lower)	Structure	Historic	HP20	1993 (JRP Historical Consulting, Woodward-Clyde Consulting); 2009 (Lawson, N., CH2MHILL); 2009 (Pamela Daly, M.S.H.P. Cultural Research Assoc.)	ME-02759, SJ-02759, ST-02759, ST-07775
P-50-000072		Resource Name - TID Laterals No. 3, Upper Lateral 3, & Lower Lateral No. 3	Structure	Historic	HP20	1993 (JRP, JRP); 2009 (Lawson, CH2MHILL)	ME-02759, SJ-02759, ST-02759, ST-07775
P-50-000073	CA-STA-000426H	Resource Name - TID Ceres Main Canal; Resource Name - TID Lower Lateral No. 2; Resource Name - TID Upper Lateral No. 2; Resource Name - Turlock Irrigation District Water Conveyance System	Structure	Historic	HP20	1993 (JRP Historical Consulting Services, JRP Historical Consulting Services; for Woodward-Clyde); 2009 (J. Marvin, Foothill Resources, Ltd.; for City of Ceres); 2009 (N. Lawson, J. Feldman, CH2M HILL; for TID); 2009 (Pamela Daly, Cultural Resources Associates; for PGE); 2015 (J. Marvin, Foothill Resources, Ltd.; for Caltrans District 10 and for the City of Ceres); 2016 (M. Patrick, J. Marvin, Patrick GIS Group, Inc. and Foothill Resources, Ltd.; for Caltrans District 10 and for the City of Ceres)	ME-02759, SJ-02759, ST-02759, ST-06977, ST-06978, ST-07775, ST-08620, ST-08621, ST-08825

CCaIC #11060N Resources
Keyes Road at Turlock Irrigation District Ceres
Main Canal Bridge Replacement
Ceres USGS 7.5' Quadrangle



Appendix B

Caltrans Historic Bridge Inventory



Structure Maintenance & Investigations



Historical Significance - Local Agency Bridges

District 10

Stanislaus County

Bridge Number	Bridge Name	Location	Historical Significance	Year Built	Year Wid/Ext
38C0189	SALADO CREEK	1.0 MI N/O SPERRY AVE	5. Bridge not eligible for NRHP	1928	1958
38C0190	T.I.D. LATERAL #5	JCT AT HARDING AVE	5. Bridge not eligible for NRHP	1920	
38C0191	T.I.D. UPPER LATERAL #4	0.5 MI N/O W. MAIN ST	5. Bridge not eligible for NRHP	1919	
38C0192	T.I.D. CERES MAIN CANAL	0.2 MI W/O FAITH HOME RD	5. Bridge not eligible for NRHP	1920	
38C0193	T.I.D. CERES MAIN CANAL	0.6 MI E/O MOFFET RD	5. Bridge not eligible for NRHP	1920	
38C0194	T.I.D. LOWER LATERAL #2	JCT WITH GNDRNG RD	5. Bridge not eligible for NRHP	1920	
38C0197	M.I.D. LATERAL #8	0.3 MI N/O CICCARELLI RD	5. Bridge not eligible for NRHP	1920	
38C0198	ROCK CREEK	3.4 MI N/O SR 4	5. Bridge not eligible for NRHP	1918	1968
38C0199	ROCK CREEK TRIBUTARY	1.3 MI NO SR 4	5. Bridge not eligible for NRHP	1918	1968
38C0200	CALIFORNIA AQUEDUCT	1.68 MI WEST OF EASTIN RD	5. Bridge not eligible for NRHP	1964	
38C0201	CALIFORNIA AQUEDUCT	2.6 MI WEST OF EASTIN RD	5. Bridge not eligible for NRHP	1966	
38C0202	DELTA-MENDOTA CANAL CPM 056.60	1.7 Mi W of Eastin Road	4. Historical Significance not determined	1949	
38C0203	CCID MAIN CANAL	0.25 MI S ORESTIMBA RD	5. Bridge not eligible for NRHP	1939	
38C0204	CCID MAIN CANAL	0.1 MI E DRAPER RD	5. Bridge not eligible for NRHP	1919	1962
38C0205	DELTA-MENDOTA CANAL CPM 052.01	0.2 Mi West of Bell Road	4. Historical Significance not determined	1949	
38C0206	DELTA-MENDOTA CANAL CPM 051.40	100' East of Bell Road	4. Historical Significance not determined	1949	
38C0207	CALIFORNIA AQUEDUCT	1.1 MI WEST OF I-5	5. Bridge not eligible for NRHP	1966	
38C0208	CCID MAIN CANAL	AT JUNC W /ARMSTRONG RD	5. Bridge not eligible for NRHP	1926	
38C0209	DELTA-MENDOTA CANAL CPM 045.77	0.6 MI NORTH OF FINK RD	4. Historical Significance not determined	1944	
38C0210	CALIFORNIA AQUEDUCT	1.0 MI NORTH OF FINK RD	5. Bridge not eligible for NRHP	1966	
38C0211	CALIFORNIA AQUEDUCT	0.4 MI WEST OF WARD AVE	5. Bridge not eligible for NRHP	1966	
38C0212	DELTA-MENDOTA CANAL CPM 043.24	0.4 Mi East of Ward Ave	4. Historical Significance not determined	1949	
38C0213	DELTA-MENDOTA CANAL CPM 042.53	0.5 Mile N of Marshall Rd	4. Historical Significance not determined	1944	
38C0214	DELTA-MENDOTA CANAL	0.5 Mile N of Sperry Ave	4. Historical Significance not determined	1949	
38C0215	DEL PUERTO CREEK	0.5 MI N ZACHARIAS RD	5. Bridge not eligible for NRHP	1911	1962
38C0216	SALADO CREEK	0.4 MI EAST STATE RTE 33	5. Bridge not eligible for NRHP	1921	1960
38C0217	DEL PUERTO CREEK	200 FT N/O LOQUAT AVE	5. Bridge not eligible for NRHP	1935	
38C0218	WESTLEY WASTEWAY	0.3 MI SW OF SR 33	5. Bridge not eligible for NRHP	1948	
38C0219	WESTLEY WASTEWAY	0.1 MI N FRANK COX RD	5. Bridge not eligible for NRHP	1950	
38C0220	DELTA-MENDOTA CANAL CPM 028.27	1.3 Mi S of Gaffery Road	4. Historical Significance not determined	1949	
38C0221	DELTA-MENDOTA CANAL CPM 026.21	1.5 Miles W of Welty Road	4. Historical Significance not determined	1948	
38C0222	T.I.D. CERES MAIN CANAL	80' W/O MOORE ROAD	5. Bridge not eligible for NRHP	1921	1961
38C0223	T.I.D. CERES MAIN CANAL	50' SOUTH HATCH RD	5. Bridge not eligible for NRHP	1967	
38C0224	T.I.D. CERES MAIN CANAL	80 FT SOUTH HATCH RD	5. Bridge not eligible for NRHP	1924	1960
38C0225	T.I.D. MAIN CANAL	0.8 MI W/O HICKMAN RD	5. Bridge not eligible for NRHP	1921	1960
38C0226	M.I.D. LATERAL #6	0.4 MI W/O TOOMES RD	5. Bridge not eligible for NRHP	1925	1960
38C0228	M.I.D. LATERAL #6	0.2 MI S CLARIBEL RD	5. Bridge not eligible for NRHP	1923	1959
38C0230	M.I.D. MAIN CANAL	0.2 MI E LANGWORTH RD	5. Bridge not eligible for NRHP	1922	1961
38C0231	ROCK CREEK TRIBUTARY	3.7 MI N/O SR 4	5. Bridge not eligible for NRHP	1918	1990
38C0232	HOODS CREEK	1.6 MI S/O SR 4	5. Bridge not eligible for NRHP	1931	
38C0233	SHIRLEY CREEK	1.6 MI E/O MILTON RD	5. Bridge not eligible for NRHP	1935	
38C0234	SOUTH SAN JOAQUIN MAIN CANAL	0.5 MI N DODDS RD	5. Bridge not eligible for NRHP	1929	
38C0235	SOUTH SAN JOAQUIN MAIN CANAL	1.0 MI W TWENTY SIX MI RD	5. Bridge not eligible for NRHP	1994	

Appendix C

Native American Outreach

Sacred Lands File & Native American Contacts List Request

NATIVE AMERICAN HERITAGE COMMISSION

1550 Harbor Blvd, Suite 100
Sacramento, CA 95814
(916) 373-3710
(916) 373-5471 – Fax
nahc@nahc.ca.gov

Information Below is Required for a Sacred Lands File Search

Project: Keyes Road at Turlock Irrigation District Ceres Main Canal Bridge Replacement Project
#18-07035

County: Stanislaus County

USGS Quadrangle Name: Ceres, California Quadrangle

Township: 04 South Range: 09 East Section(s): 25, 26, 35 and 36

Company/Firm/Agency: Rincon Consultants, Inc.

Contact Person: Mary Pfeiffer

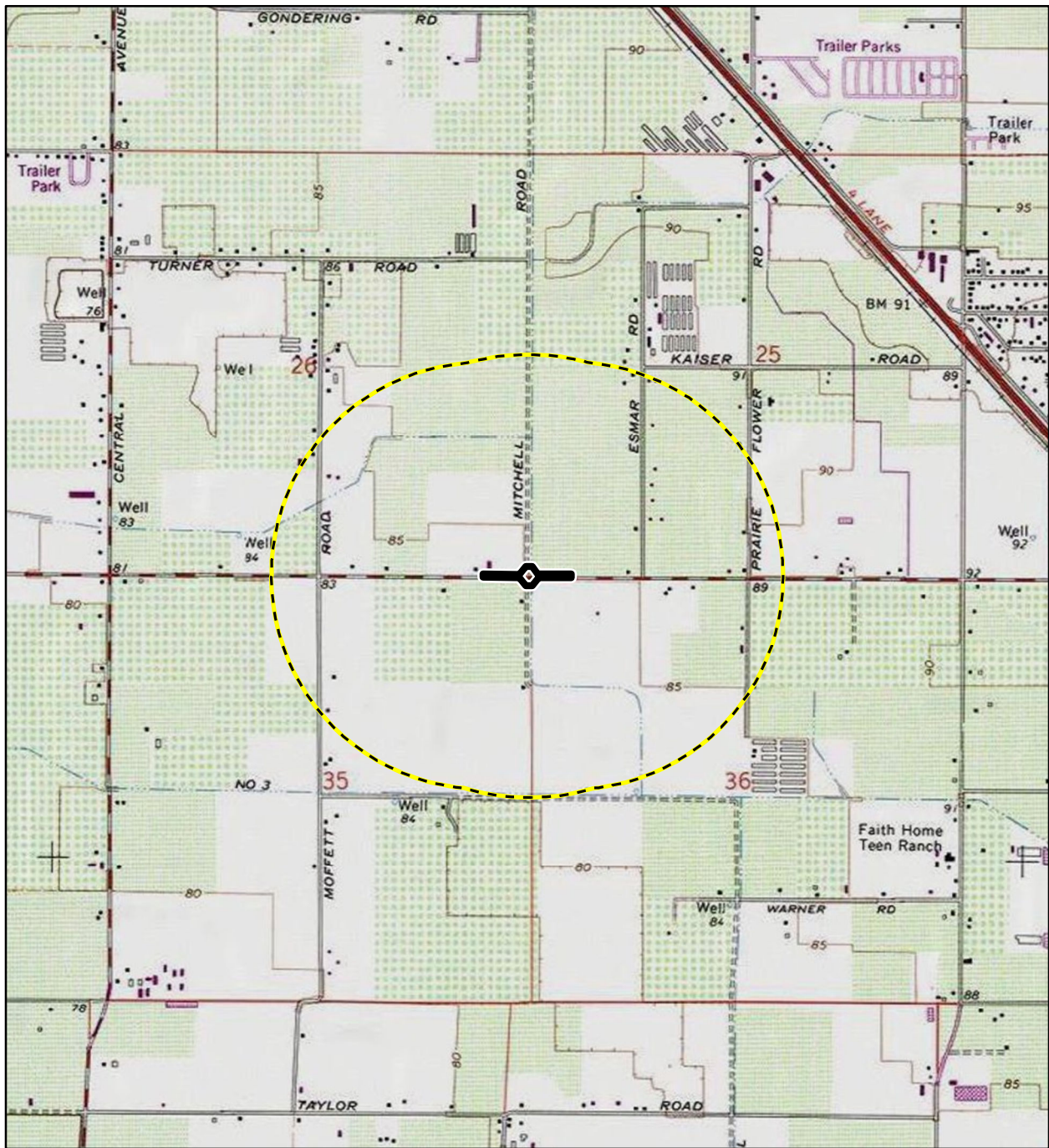
Street Address: 180 North Ashwood Avenue

City: Ventura Zip: 93003



Phone: (805) 644-4455 extension 2052

Email: mpfeiffer@rinconconsultants.com

Project Description: The proposed project would correct structural damage found during the bridge inspection. The new bridge would be built in accordance with the latest Caltrans Structure Design standards as well as in conformance to TID and County requirements. The proposed project would increase the load limit and permit rating of the bridge, improve safety for motorists and minimize vehicular accidents. Stanislaus County is the lead agency for this project.



Imagery provided by National Geographic Society, Esri and its licensors © 2019. Ceres Quadrangle. T04S R09E S25,26,35,36. The topographic representation depicted in this map may not portray all of the features currently found in the vicinity today and/or features depicted in this map may have changed since the original topographic map was assembled.

-  Half-Mile Buffer
-  Area of Potential Effects



0 1,000 2,000 Feet

0 250 500 Meters

1:24,000

Records Search Map



Rincon Consultants, Inc.

NATIVE AMERICAN HERITAGE COMMISSION
Cultural and Environmental Department
1550 Harbor Blvd., Suite 100
West Sacramento, CA 95691
Phone: (916) 373-3710
Email: nahc@nahc.ca.gov
Website: <http://www.nahc.ca.gov>
Twitter: @CA_NAHC



May 28, 2019

Mary Pfeiffer
Rincon Consultants

VIA Email to: mpfekiffer@rinconconsultants.com

RE: Keyes Road at Turlock Irrigation District Ceres Main Canal Bridge Replacement Project,
Stanislaus County.

Dear Ms. Pfeiffer:

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 the NAHC. 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: Katy.sanchez@nahc.ca.gov.

Sincerely,

A handwritten signature in blue ink that reads "Katy Sanchez".

KATY SANCHEZ
Associate Environmental Planner

Attachment

Appendix D

California Department of Parks and Recreation 523 forms

State of California -- The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
CONTINUATION SHEET

Primary # P-50-000073 (update)

HRI#

Trinomial

Page 1 of 3

*Resource Name or # Ceres Main Canal at Keyes Road

*Recorded by: James Williams, Rincon Consultants

*Date: May 7, 2019

☐ Continuation

☒ Update

The subject property is a 240' segment of the Turlock Irrigation District's (TID) Ceres Main Canal (CMC), which was built between 1894 and 1904 to irrigate farms in this area of Stanislaus County. The canal was among the first constructed under the Wright Act, an 1887 State Law that authorized the establishment of bond-funded, publicly owned irrigation districts (JRP 1993; Patrick 2016). Centered on the CMC's intersection with Keyes Road, the subject canal segment measures approximately 25' wide and 240' long, is lined with concrete, and flows south beneath the bridge that carries Keyes Road. Orchards surround the canal segment. The present record updates several previous evaluations of the CMC and its associated lateral canals.

In 1993, JRP Historical Consulting recorded the CMC at its intersection with U.S. 99 as part of the Mojave Natural Gas Pipeline, Northern Extension Project, finding the resource ineligible for listing in the NRHP. JRP found the canal was significant under Criterion A with as an early canal built under the Wright Act of 1887 and for its associations with agricultural development in Stanislaus County. However, due to the concrete lining of the originally earthen canal and extensive development in its vicinity (including the construction of modern bridges and culverts), JRP argued the CMC lacked sufficient integrity of design, materials, workmanship, setting, and feeling for listing in the National Register (JRP 1993).

Judith Marvin of Foothill Resources recorded and evaluated the TID system in 1999 for the Historic Resource Survey Report (positive) for the Keyes Road Bridge at Turlock Irrigation District Ceres Main Canal Project. As part of this effort, Marvin recorded a segment of the CMC at Keyes Road, though the record does not specify the segment's precise length or location. She found the TID system eligible for listing in the National Register under Criterion A as the first California irrigation district established under the Wright Act and for its role in the development of agriculture in Stanislaus County. Marvin also recommended the TID eligible under Criterion C because it "[conveys] a sense of the time and place when small farms replaced the large grazing ranches of the nineteenth century, forever altering the demographics of the area" (Marvin 1999).

In 2009, Judith Marvin of Foothill Resources completed a record update for the CMC segment between Mitchell and Boothe roads, reversing her 1999 recommendation and found that, although significant under Criterion A, the CMC appeared ineligible for the National Register. Marvin cited integrity considerations owing to the resurfacing of the canal in 1927, 1958, and 1958 as the reason for her revised finding (Marvin 2009).

Natalie Lawson and Jessica Feldman of CH2M Hill recorded a segment of TID Lateral No. 2 located between Crow's Landing and Ustick roads in 2009. This was completed as part of the TID Almond Power Plant No. 2. AFC Application. Lawson and Feldman found that, although the canal segment was associated with agricultural development in the region between 1900 and 1920, it appeared ineligible for listing in the National Register due to a loss of integrity (Lawson and Feldman 2009).

In 2009, as part of the Hughson Grayson 115v Transmission Line and Substation Project, Pamela Daly of Cultural Resource Associates recorded a segment of the CMC just south of Gondering Road; segments of Upper Lateral No. 2 between the Burlington Northern Santa Fe Railroad and Griffen Road and between East Service and Redwood roads; and a segment of Upper Lateral No. 2 ½ on either side of U.S. 99; and Lower Lateral No. 2 between Grayson and West Service roads. According to Daly, although the canal and laterals are significant as part of "the first publicly owned irrigation district in California," continual maintenance of the canal and laterals has so diminished the segments' integrity that they do not meet eligibility standards for the National or California Registers (Daly 2009).

In 2015, Judith Marvin of Foothill Resources recorded a segment of the recorded a segment of the MCM located between Whitmore Avenue and Roeding Road for the Historical Resources Evaluation Report for the Mitchell/TID Canal Bike Path Project. She found that, although the canal segment was significant under Criterion A for its association with the development of the TID, the periodic lining of the canal with concrete and gunite impaired the canal's integrity to its period of significance, 1890-1925. As a result, the canal was recommended canal ineligible for listing in the National Register (Marvin 2015).

Melinda Pacheco Patrick of Patrick GIS Group and Judith Marvin of Foothill Resources recorded Ceres Main Canal Segment C in 2016. This segment situated between Roeding and Service roads included the canal and two associated features, namely, a "broken concrete foundation" and intake valve and a "metal pipe stand" (Patrick and Marvin). In addition, Patrick located a "moderate-sized scatter of historic debris" that included shattered ceramic and glass. She found the canal and associated features appeared ineligible for listing in the National Register due to a lack of integrity, while the historic-era scatter appeared ineligible under Criterion D because it lacked information potential (Patrick and Marvin 2016).

On May 9, 2019, Rincon Consultants revisited the CMC at Keyes Road Bridge as part of the Keyes Road over Turlock Irrigation District Ceres Main Canal Bridge Replacement Project. The current survey update finds the subject segment of the CMC does not appear eligible for listing in the National or California Registers. As argued in most of the evaluations cited above, while the canal is significant under Criteria A/1 for its associations with the Wright Act and the development of intensive agriculture in Stanislaus County, it lacks integrity to its period of significance, which varies in previous evaluations, but consistently falls within the period spanning initial construction in the 1890s and its lining with concrete in the 1920s. As a result, the CMC does not appear eligible under Criteria A/1. Available evidence did not suggest the canal was strongly associated with individuals who have made important contributions to local, state, or national history. Consequently, it does not appear eligible under Criteria B/2. There is no evidence suggesting the canal is a distinguished engineering structure or that it otherwise embodies the distinctive characteristics of a type, period, or method of construction, represent the work of a master, or possess high artistic values. Therefore it does not appear eligible for listing under Criteria C/3. Finally, because a review of available evidence and records search results did not indicate it may yield important information about prehistory or history, the canal does not appear eligible under Criteria D/4

CONTINUATION SHEET

*Recorded by: James Williams, Rincon Consultants

*Date: May 7, 2019

☐ Continuation

☒ Update

References:

Daly, Pamela

2009 California Department of Parks and Recreation form 523: Turlock Irrigation District Water Conveyance System (P-05-000073). Record on file at the Central California Information Center, Turlock, CA.

JRP Historical Consulting, Inc.

1993 Evaluation of Ceres Main Canal, Turlock Irrigation District, Stanislaus County (P-05-000073). Record on file at the Central California Information Center, Turlock, CA.

Lawson, Jessica and Natalie Feldman

2009 California Department of Parks and Recreation form 523: TID Lateral No. 2 (P-05-000073). Record on file at the Central California Information Center, Turlock, CA.

Marvin, Judith

1999 California Department of Parks and Recreation form 523: TID System (P-05-000073). Record on file at the Central California Information Center, Turlock, CA.

2009 California Department of Parks and Recreation form 523: TID System/Ceres Main Canal (P-05-000073). Record on file at the Central California Information Center, Turlock, CA.

2015 California Department of Parks and Recreation form 523: Whitmore Avenue to Roeding Road Segment, TID System/Ceres Main Canal (P-05-000073). Record on file at the Central California Information Center, Turlock, CA.

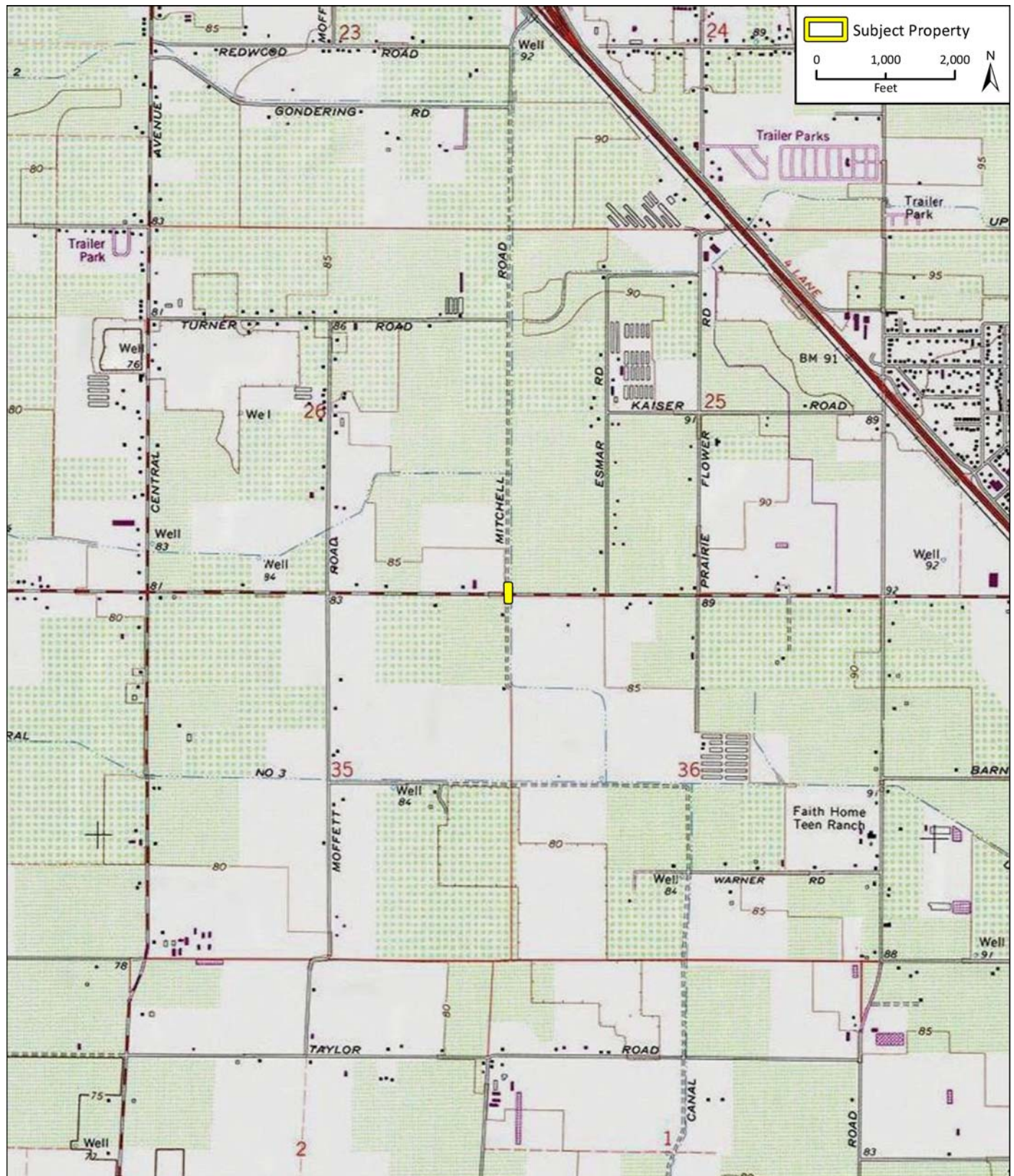
Patrick, Melinda Pacheco and Judith Marvin

2016 California Department of Parks and Recreation form 523: TID System/Ceres Main Canal Segment C (P-05-000073). Record on file at the Central California Information Center, Turlock, CA.



Ceres Main Canal at Keyes Road, camera facing northwest. Photo taken May 9, 2019.

LOCATION MAP



PRIMARY RECORD

* See also P. 50-000071 (2 1/2)

Other Listings
Review Code

Primary # P50-000073
HRI #

Trinomial CA-STA-426H
NRHP Status Code

(Should have
had separate
records & numbers)

Page 1 of 15

*Resource Name or #: Turlock Irrigation District Water Conveyance System

P1. Other Identifier:

*P2. Location: ☐ Not for Publication ☒ Unrestricted

and (P2b and P2c or P2d. Attach a Location Map as necessary.)

*b. USGS 7.5' Quad: Cressy, Turlock, Hatch, Stevenson, Gustine, Ceres, Denair, Montpelier, Paulsell, Brush Lake, Westly

Date:

c. Address:

d. UTM: Zone: 10 ; Point A: 0706880 mE/ 4167426 mN

Point B: 0708059 mE/ 4145952 mN

Point C: 0680424 mE/ 4135385 mN

*a. County: Stanislaus and Merced

T ; R ; 1/4 of 1/4 of Sec ; M.D. ; B.M.

City:

Point D: 0662092 mE/ 4164553 mN

Point E: 0677777 mE/ 4166381 mN

(NAD 84)

Zip:

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate) Elevation:

See map of Turlock Irrigation District Water Conveyance System on Continuation Sheets, pages 4 and 5.

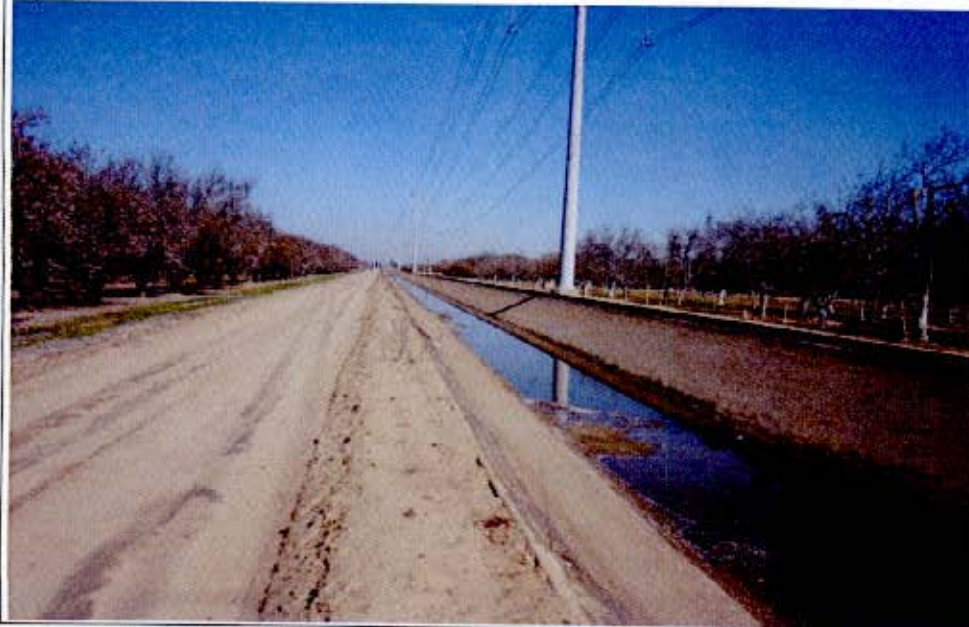
*P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)
The Turlock Irrigation District (TID) is bordered by the San Joaquin, the Tuolumne and the Merced Rivers. Water is collected as it comes down from the Sierra Nevada Mountains and directed to the low lying, level land in the Central Valley in and around Turlock.

Surveys for laying out the canals and ditches from the La Grange area on the Tuolumne River began in 1887 after the passing of the Wright Act in the California Legislature. After a sale of public bonds to pay for the new irrigation system, the excavation of the first canal and dam began in La Grange in February 1890. The La Grange Dam was completed in 1893. The canal from La Grange to Hickman was finished in late 1898. The work on the Turlock Main Canal, which ran due south from Hickman, was started in December 1898. The system of canals and laterals down to Lateral 2 was completed in 1899. All of the canals and laterals were completed in 1900, and water was diverted to individual parcels of land. (Go to Continuation Sheet - page 3)

*P3b. Resource Attributes: (List attributes and codes) AH 6 (Water Conveyance System)

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

P5a. Photo or Drawing (Photo required for buildings, structures, and objects.)



P5b. Description of Photo: (View, date, accession #)
Turlock Irrigation District Main Canal in Ceres, Mitchell Road, view looking north, March 8, 2009.

*P6. Date Constructed/Age and

Sources: ☒ Historic

☐ Prehistoric ☐ Both

Constructed in 1898.

Dates of construction found in:
Paterson, Alan. Land, Water and Power, A History of the Turlock Irrigation District 1887-1987. Arthur Clark Company, Washington, 2004.

*P7. Owner and Address:

Turlock Irrigation District
333 East Canal Drive
Turlock, CA 95381

*P8. Recorded by: (Name, affiliation, and address)

Pamela Daly, M.S.H.P.
Cultural Resources Assoc.
295 East 8th Street
Chico, CA

*P9. Date Recorded: March 18, 2009.

*P10. Survey Type: (Describe) Pedestrian

*P11. Report Citation: (Cite survey report and other sources, or enter "none.")

Cultural Resources Inventory for the Hughson-Grayson 115V Transmission Line and Substation Project in Stanislaus 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):

DPR 523A (1/95)

*Required information

BUILDING, STRUCTURE, AND OBJECT RECORD

CA-STA-426H

Page 2 of 15

*NRHP Status Code

*Resource Name or # (Assigned by recorder) Turlock Irrigation District Water Conveyance System

B1. Historic Name: Turlock Irrigation District (TID)

B2. Common Name:

B3. Original Use: irrigation canal system

B4. Present Use: irrigation canal system

*B5. Architectural Style:

*B6. Construction History: (Construction date, alterations, and date of alterations)

Original construction of dirt lined canals and laterals: 1898 to 1900.

Canals and laterals lined with concrete or gunite: 1917 to 1920.

Water diversion features, i.e. regulator gates (both operated by hand and automatic counter-balance system), waste gates, concrete culverts and bridges: 1917 to 1920.

*B7. Moved? ☒ No ☐ Yes ☐ Unknown Date:

Original Location:

*B8. Related Features: Pump systems moving water from local water table to supplement the flow of water in the irrigation canals.

B9a. Architect: George Manuel, Surveyor and designer of irrigation system

b. Builder: James A. Waymire, prime contractor; R.W. Morgan, subcontractor Turlock Main Canal; E.M. Roberts subcontractor, Ceres canals and laterals; H.S. Crane and George Bloss, subcontractor of Turlock laterals and main canal.

*B10. Significance: Theme: Irrigation System

Area: San Joaquin Valley

Period of Significance: 1887 to 1925

Property Type: Irrigation canal

Applicable Criteria: NR/CR

(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

The Turlock Irrigation District (TID) is the oldest example of a publicly owned irrigation district in California. Established in 1887, the district is bordered by the San Joaquin, the Tuolumne and the Merced Rivers. Water is collected as it comes down from the Sierra Nevada Mountains and directed to the low lying, level land in the Central Valley. The TID provides irrigation water to 307 acres.

With the introduction of the Central Pacific Railroad into the region in 1871, a stopping point was established on John Mitchell's land that was to grow into the town of Turlock in Stanislaus County. The town of Ceres was established about nine miles north by Daniel Whitmore. Wheat was the major crop with hundreds of thousands of acres planted between Stockton and Merced. In the 1860s, the first irrigation systems were constructed in Southern California, in San Bernardino County and the new town of Anaheim. Due to adequate rainfall, the need for man-made watering in the San Joaquin Valley area was not seriously investigated until the drought of 1871. (See Continuation Sheet — page 3)

B11. Additional Resource Attributes: (List attributes and codes) AH 6 (Water conveyance system)

*B12. References:

See Continuation Sheet.

B13. Remarks: Under the proposed project, there will be no physical impacts to the canals or associated features.

(Sketch Map with north arrow required.)

See Continuation Sheet

*B14. Evaluator:

Pamela Daly, M.S.H.P.,
Cultural Research Assoc.,
295 E. 8th St.,
Chico, CA 95928

*Date of Evaluation: March 18, 2009

(This space reserved for official comments.)

Continued from DPR 523A; P 3a. Description:

The Turlock Irrigation District was responsible for the maintenance and upkeep of the main canals and laterals. The irrigation system was made up of dirt-lined ditches which needed continual dredging and scraping to keep plant growth from developing and slowing down the passage of water. The expense of annually cleaning out all the water channels got to such a large sum that in 1917, TID began a program of lining all their canals and laterals with either a two-inch thick covering of concrete or gunite over chicken wire that was laid over the dirt walls. Automatic regulator gates, waste gates and bridges were also installed during this period and they all added a substantial measure of water conservation and efficiency to the system.

While the canals vary in depth and width they are similar in that the bottom of the canal bed is flat, and then the canal sides are angled away from the canal bed, with the top of the canal wider than the channel. The Main Canal runs in a north/south direction and is approximately twenty feet deep and thirty feet wide. The laterals (smaller canals) run generally in an east/west direction and are constructed with the same materials, but are not as deep, nor as wide, as the Main Canal. The average width of a lateral is 15 feet, with a depth of 6 to 8 feet.

Several water diversion features consisting of regulator gates (many made of wood in steel and concrete frames), valves, checks, drops and chutes are found throughout the system. Some of the drop gates have counterweights for automatic adjustment, while others have large iron wheels and screws for manual adjustment. Some of the larger iron fixtures bear the name of Stockton Iron Works.

Continued from DPR 523B, B 10. Statement of Significance:

The first proposal of creating a cooperative institution to build and operate a private irrigation system was developed by the Merced and San Joaquin Irrigation Canal Company in 1873. Many plans came and went due to problems with land-ownership issues, financing problems, nationwide recessions, and legal hurdles. Finally in 1887, the Wright Act, named after its sponsor the Modesto attorney and assemblyman, C.C. Wright, passed into legislation. The Wright Act set up the regulations and framework for the creation of public irrigation systems in California. The Turlock Irrigation District was the first to organize under the Wright Act with its first Board of Directors meeting held on June 15, 1887.

Surveys for laying out the canals and ditches from the La Grange area on the Tuolumne River began immediately. After the sale of bonds to pay for the new systems, the excavation of the first canal and dam began in La Grange in February 1890. When it was completed in 1893, the La Grange Dam was the highest overflow dam in the United States. The canal from La Grange to Hickman was finished in late 1898. The work on the Turlock Main Canal, which ran due south from Hickman, was begun in December 1898. The canals down to Lateral 2 were completed in 1899. The canals and laterals were completed in 1900, and water was diverted at last from the systems to individual parcels of land. Within just three years of the irrigation system being completed, the town of Ceres had grown in size with new streets and a public park.

The Turlock Irrigation District was responsible for the maintenance and upkeep of the main canals and laterals. The irrigation system was made up of dirt-lined ditches which needed continual dredging and scraping to keep plant growth from developing and slowing down the passage of water. The expense of annually cleaning out all the water channels got to such a large sum that in 1917, TID began a program of lining all their canals and laterals with either a two-inch thick covering of concrete or gunite over chicken wire that was laid over the dirt walls. Automatic regulator gates, waste gates and bridges were also installed during this period and they all added a substantial measure of water conservation and efficiency to the system.

The dams, reservoirs, power houses, and systems of irrigation canals and ditches of the TID were constructed without substantial federal or state assistance. In the 1920s with power produced off the dams that they had constructed, TID sold its electric power directly to its consumers within the district.

Although the Turlock Irrigation District appears eligible for listing in the National Register and California Register for its association with the development of the first publicly owned irrigation district in California, the individual canal segments that are being evaluated for this survey have lost their integrity in workmanship, setting, materials, and feeling. The canals are constantly being repaired for both large and small maintenance issues. Many of the water diversion features have had their historic parts replaced, or altered, to adapt to current conditions.

Continued from DPR 523B, B 12. References:

JRP Historical Consulting Services and California Department of Transportation. *Water Conveyance Systems in California*. 2000.

Paterson, Alan. *Land, Water and Power, A History of the Turlock Irrigation District 1887-1987*. Arthur Clark Company, Washington; 2004.

Turlock Irrigation District Water and Power, *Our History*. www.tid.org

Turlock Irrigation District, *Turlock Irrigation District: The First Century*. Brochure published by Turlock Irrigation District. No date.

TID Water & Power, *Leadership and Innovation*. Brochure published by Turlock Irrigation District. (Printed after 2005.)

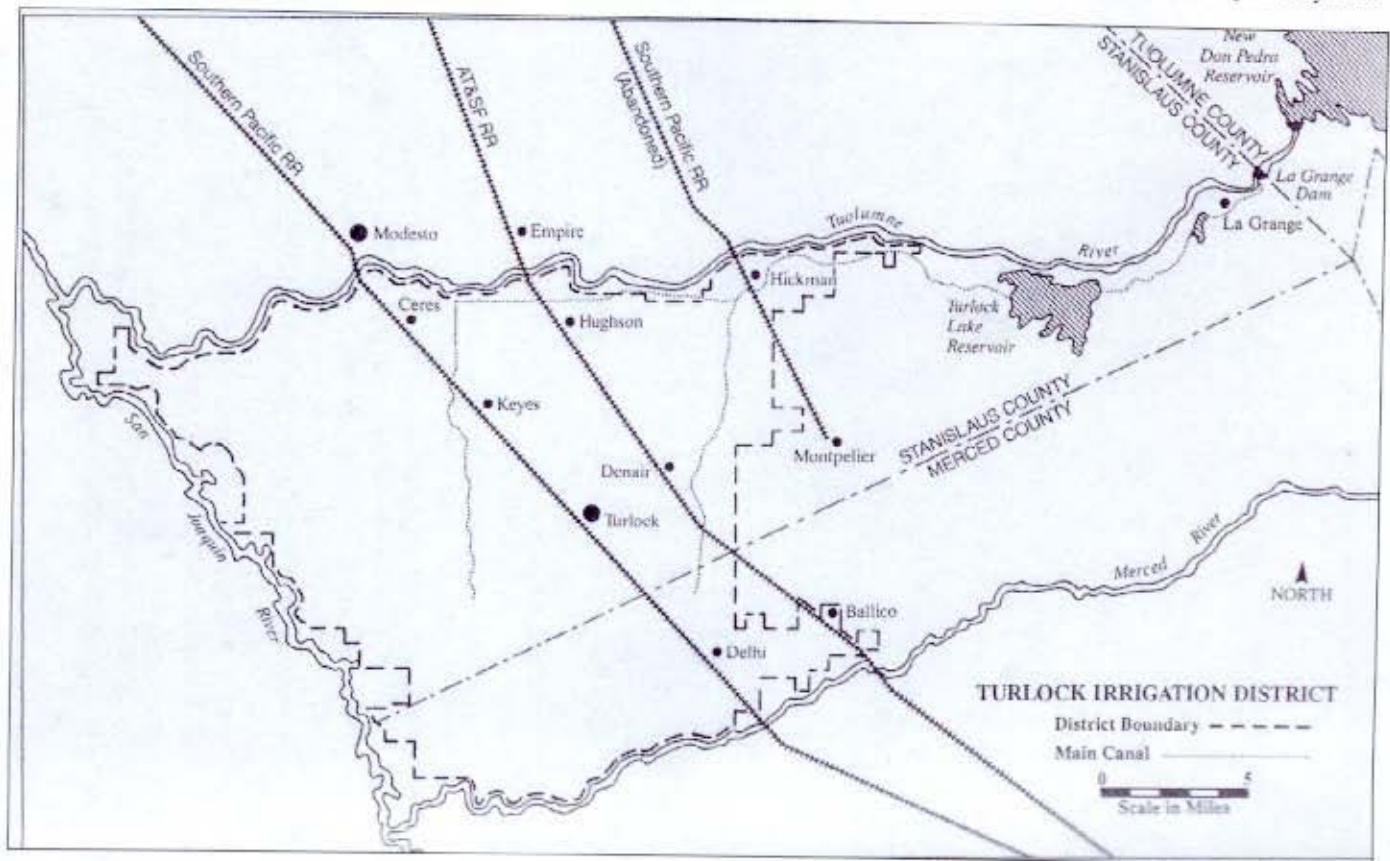
CONTINUATION SHEET

Primary # *P-50-000073*
HRI#

Trinomial *CA-STA-426H*

Page 4 of 15

*Resource Name or # (Assigned by recorder) Turlock Irrigation District Water Conveyance System



Map of the Boundary Line of Turlock Irrigation District from: Paterson, Alan. *Land, Water and Power, A History of the Turlock Irrigation District 1887-1987*. Arthur Clark Company, Washington; 2004. Page 65. (Note: the Tidewater Southern Railway line, now owned by Union Pacific Railroad, is not pictured on this map. The rail line is located to the west of the Southern Pacific RR line and still operates today.)

*Recorded by: Pamela Daly, M.S.H.P. *Date: March 18, 2009 ■ Continuation
DPR 523L (1/95)

☐ Update

*Required information

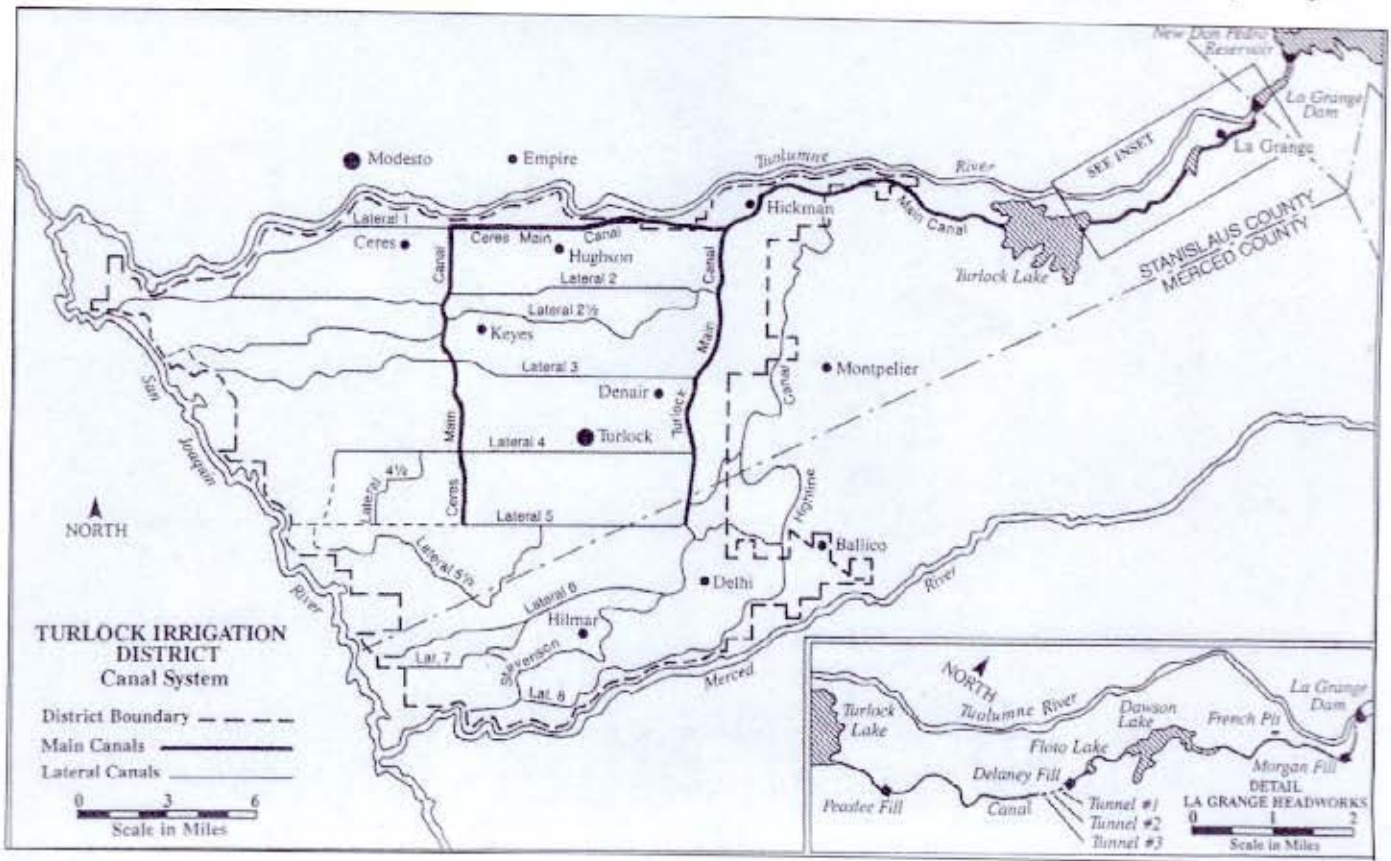
CONTINUATION SHEET

Primary # *P-50-000073*
HRI#

Trinomial *CA-STA-426H*

Page 5 of 15

*Resource Name or # (Assigned by recorder) Turlock Irrigation District Water Conveyance System



Map of the Canal System of Turlock Irrigation District from: Paterson, Alan. *Land, Water and Power, A History of the Turlock Irrigation District 1887-1987*. Arthur Clark Company, Washington; 2004. Page 84.

*Recorded by: Pamela Daly, M.S.H.P. *Date: March 18, 2009
DPR 523L (1/95)

■ Continuation

□ Update

*Required information

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

Primary # P-50-000073
HRI #

Trinomial CA-STA-426H

Page 6 of 15

Resource Name or #: Turlock Irrigation District — Ceres Main Canal

L1. Historic and/or Common Name: Ceres Main Canal

L2a. Portion Described: ☐ Entire Resource ☒ Segment ☐ Point Observation Designation:

b. Location of point or segment: (Provide UTM coordinates, legal description, and any other useful locational data. Show the area that has been field inspected on a Location Map)

Point A: Zone 10, 0682011 mE/ 4159941 mN

Point B: Zone 10, 0682018 mE/ 4159628 mN

L3. Description:

The Ceres Main Canal is one of the two main north/south distribution canals that delivers water from the Turlock Main Canal that runs from the main reservoir at La Grange. The channel was originally just an open dirt ditch when constructed in 1890, and was clad in concrete to aid with maintenance in 1917.

This section of the Ceres Main Canal delivers water to orchards on both sides of the canal. There is also a water control feature with a large wood drop gate set in concrete pillars, an automatic shut-off counterbalance, and a valve gate for allowing water to irrigate the nearby privately owned orchard.

L4. Dimensions: (In feet for historic features and meters for prehistoric features)

a. Top Width: 30'

b. Bottom Width: 15'

c. Height or Depth: 15'

d. Length of Segment: 1,100 feet

L5. Associated Resources: None.

L6. Setting: (Describe natural features, landscape characteristics, slope, etc., as appropriate.) In this section, there are orchards on both sides of the canal.

L4e. Sketch of Cross-Section (include scale) Facing:

L7. Integrity Considerations: The main canal is still used as part of an active irrigation system that covers 307 square miles. Due to continual upkeep and maintenance, the canal has lost integrity in materials, design, setting and workmanship. This segment is not eligible for listing in the National or California Register.

L8b. Description of Photo: Ceres Main Canal. View looking south along the unpaved section of Mitchell Road.

L8a. Photograph, Map or Drawing



L9. Remarks:

The proposed project will not physically impact the canal.

L10. Form Prepared by:
Pamela Daly, M.S.H.P.
Cultural Research Assoc.
295 E. 8th Street
Chico, CA 95928

L11. Date: 3/19/2009

DPR 523E (1/95)

LINEAR FEATURE RECORD

Primary # P-50-000073
HRI #

Trinomial CA-STA-42CH

Page 7 of 15

Resource Name or #: Turlock Irrigation District — Upper Lateral 2

L1. Historic and/or Common Name:

L2a. Portion Described: ☐ Entire Resource ☒ Segment ☐ Point Observation Designation:

b. Location of point or segment: (Provide UTM coordinates, legal description, and any other useful locational data. Show the area that has been field inspected on a Location Map)

Point A: Zone 10, 0689645 mE/ 4161401 mN

Point B: Zone 10, 0687384 mE/ 4161346 mN

L3. Description:

Upper Lateral No. 2 is one of the distribution canals that run on a general east/west axis and deliver water from the Ceres Main Canal. The channel was originally just an open dirt ditch when constructed in 1890, and was clad in concrete to aid with maintenance in 1917.

This section of Upper Lateral No. 2 runs under the Burlington Northern Santa Fe Railroad line which runs in a north/south direction. There is also a water control feature with a large wood drop gate set in concrete pillars, an automatic shut-off counterbalance, and a valve gate for allowing water to irrigate the nearby privately owned orchard located in the canal approximately 50 feet to the west of the railroad tracks.

L4. Dimensions: (In feet for historic features and meters for prehistoric features)

a. Top Width: 15'

b. Bottom Width: 5'

c. Height or Depth: 5'

d. Length of Segment: 1.42 miles

L5. Associated Resources: Burlington Northern Santa Fe Railroad line (Atchison, Topeka & Santa Fe Railroad), P-39-000112.

L4e. Sketch of Cross-Section (include scale) Facing:

L6. Setting: (Describe natural features, landscape characteristics, slope, etc., as appropriate) This section of Upper Lateral No. 2 is located just to the south of East Service Road, a two-lane road, in a mostly agricultural, lightly settled area. The canal runs under the railroad tracks and under Santa Fe Avenue before continuing east. Heading west from the railroad tracks, the canal runs under a bridge on Griffen Road.

L7. Integrity Considerations: The lateral canal is still used as part of an active irrigation system that covers 307 square miles. Due to continual upkeep and maintenance, the canal has lost integrity in materials, design, setting and workmanship. This segment is not eligible for listing in the National or California Register.

L8a. Photograph, Map or Drawing



L8b. Description of Photo, Map, or Drawing

Upper Lateral No. 2 where it intersects with the Burlington Northern Santa Fe Railroad line. View looking east. March 8, 2009.

L9. Remarks:
None

L10. Form Prepared by:
Pamela Daly, M.S.H.P.
Cultural Research Assoc.
295 E. 8th Street
Chico, CA 95928

L11. Date: 3/19/2009

DPR 523E (1/95)

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

Primary # P-50-000073
HRI #
Trinomial CA-STA-426H

Page 8 of 15

Resource Name or #: Turlock Irrigation District — Upper Lateral 2

L1. Historic and/or Common Name:

L2a. Portion Described:

☐ Entire Resource

☒ Segment

☐ Point Observation

Designation:

b. Location of point or segment: (Provide UTM coordinates, legal description, and any other useful locational data. Show the area that has been field inspected on a Location Map)

Zone 10: Point A: 0683650 mE/ 4160878 mN

Point B: 0687331 mE/ 4161325 mN

L3. Description:

Upper Lateral No. 2 is one of the distribution canals that run on a general east/west axis and deliver water from the Ceres Main Canal. The channel was originally just an open dirt ditch when constructed in 1890, and was clad in concrete to aid with maintenance in 1917.

This section of Upper Lateral No. 2 runs parallel with East Service Road to the north, and Redwood Road to the South.

L4. Dimensions: (In feet for historic features and meters for prehistoric features)

a. Top Width: 15'

b. Bottom Width: 5'

c. Height or Depth: 5'

d. Length of Segment: 2.38 miles

L5. Associated Resources:

L6. Setting: (Describe natural features, landscape

characteristics, slope, etc., as appropriate.) There are several water diversion features located in this section of the canal. The canal in this section is bordered by orchards and vineyards, and light agricultural buildings.

L4e. Sketch of Cross-Section (include scale) Facing:

L7. Integrity Considerations: The lateral canal is still used as part of an active irrigation system that covers 307 square miles. Due to continual upkeep and maintenance, the canal has lost integrity in materials, design, setting and workmanship. This segment is not eligible for listing in the National or California Register.

L8a. Photograph, Map or Drawing



L8b. Description of Photo, Map, or Drawing

Upper Lateral No. 2 where it intersects with Washington Road. View looking west. March 8, 2009.

L9. Remarks:

None

L10. Form Prepared by:

Pamela Daly, M.S.H.P.
Cultural Research Assoc.
295 E. 8th Street
Chico, CA 95928

L11. Date: 3/19/2009

DPR 523E (1/95)

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

Primary # *P-50-000077* *P-50-*
HRI # *000071*
Trinomial *CA-STA-426H*

Page 9 of 15

Resource Name or #: Turlock Irrigation District — Upper Lateral No. 2 ½

L1. Historic and/or Common Name:

L2a. Portion Described: ☐ Entire Resource ☒ Segment ☐ Point Observation Designation:

b. Location of point or segment: (Provide UTM coordinates, legal description, and any other useful locational data. Show the area that has been field inspected on a Location Map)

UTM Zone 10: Point A: 0683676 mE/ 4159798 mN; Point B: 0682942 mE/ 4159248 mN

L3. Description:

Upper Lateral No. 2 ½ is one of the distribution canals that run on a general east/west axis and deliver water from the Ceres Main Canal. The channel was originally just an open dirt ditch when constructed in 1890, and was clad in concrete to aid with maintenance in 1917.

This section of Upper Lateral No. 2 ½ crosses under the Southern Pacific/Union Pacific Railroad line.

L4. Dimensions: (In feet for historic features and meters for prehistoric features)

a. Top Width: 15'

b. Bottom Width: 5'

c. Height or Depth: 5'

d. Length of Segment: Approximately 1.25 miles.

L4e. Sketch of Cross-Section (include scale) Facing:

L5. Associated Resources:

Southern Pacific Railroad/Union Pacific Railroad line.

L6. Setting: (Describe natural features, landscape characteristics, slope, etc., as appropriate.)

This section of Upper Lateral No. 2 ½ extends to the east and west from its intersection with Route 99 and the Southern Pacific/Union Pacific Railroad lines. The canal in this section is bordered by orchards and vineyards, and light agricultural buildings.

L7. Integrity Considerations: The lateral canal is still used as part of an active irrigation system that covers 307 square miles. Due to continual upkeep and maintenance, the canal has lost integrity in materials, design, setting and workmanship. This segment is not eligible for listing in the National or California Register.

L8a. Photograph, Map or Drawing



L8b. Description of Photo, Map, or Drawing

Upper Lateral No. 2 ½ where it intersects with Prairie Flower Road. View looking west. March 8, 2009.

L9. Remarks:
None

L10. Form Prepared by:
Pamela Daly, M.S.H.P.,
Cultural Research Assoc.
295 E. 8th Street
Chico, CA 95928

L11. Date: 3/19/2009

DPR 523E (1/95)

LINEAR FEATURE RECORD

Primary # *P-50-000073*

HRI #

Trinomial *CA-STA-426H*

Page 10 of 15

Resource Name or #: Turlock Irrigation District — Lower Lateral No. 2

L1. Historic and/or Common Name:

L2a. Portion Described: ☐ Entire Resource ☒ Segment ☐ Point Observation **Designation:**

b. Location of point or segment: (Provide UTM coordinates, legal description, and any other useful locational data. Show the area that has been field inspected on a Location Map)

UTM: Zone 10 Point A: 677608 mE/ 4160340 mN (NAD 84)

Point B: 678000 mE/ 4160356 mN

L3. Description:

Lower Lateral No. 2 is one of the distribution canals that run on a general east/west axis and deliver water from the Ceres Main Canal. The channel was originally just an open dirt ditch when constructed in 1890, and was clad in concrete to aid with maintenance in 1917.

This short section of Lower Lateral No. 2 runs under the historic Tidewater Southern Railway lines (now Union Pacific Railroad lines).

L4. Dimensions: (In feet for historic features and meters for prehistoric features)

a. Top Width: 15'

b. Bottom Width: 5'

c. Height or Depth: 5'

d. Length of Segment: 1/4 mile

L4e. Sketch of Cross-Section (include scale) Facing:

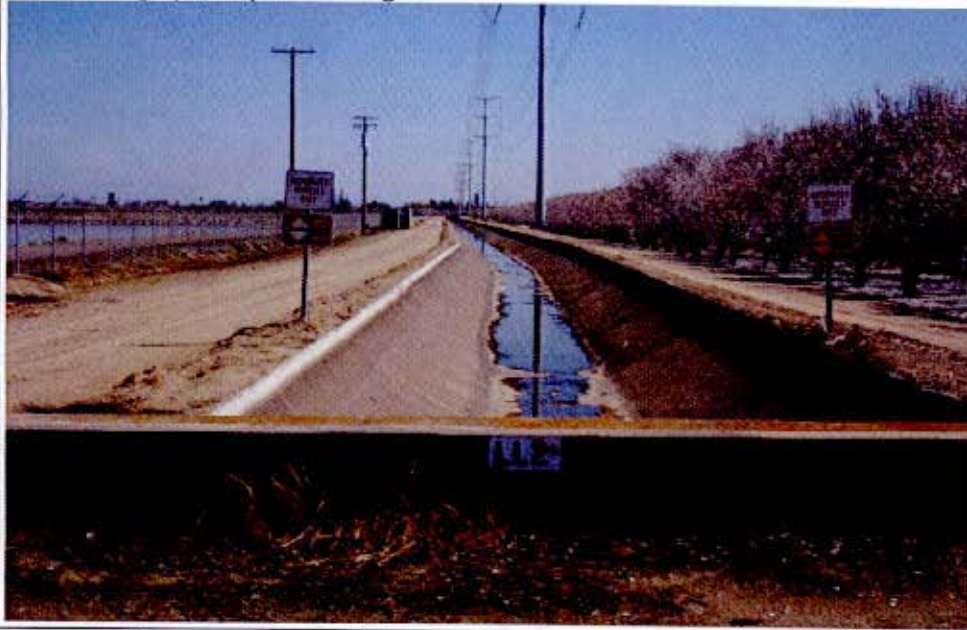
L5. Associated Resources:

L6. Setting: (Describe natural features, landscape

characteristics, slope, etc., as appropriate.) This section of Lower Lateral No. 2 is located just to the south of West Service Road and north of Grayson Road. There is a water diversion feature located in the canal to the west of the intersection with the railroad line near Point A. The canal in this section is bordered by orchards and vineyards, and light agricultural buildings.

L7. Integrity Considerations: The lateral canal is still used as part of an active irrigation system that covers 307 square miles. Due to continual upkeep and maintenance, the canal has lost integrity in materials, design, setting and workmanship. This segment is not eligible for listing in the National or California Register.

L8a. Photograph, Map or Drawing



L8b. Description of Photo, Map, or Drawing

Lower Lateral No. 2. View looking west from Morgan Road towards intersection of canal with railroad line. March 8, 2009.

L9. Remarks:

None

L10. Form Prepared by:

Pamela Daly, M.S.H.P.
Cultural Research Assoc.
295 E. 8th Street
Chico, CA 95928

L11. Date: 3/19/2009

DPR 523E (1/95)

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

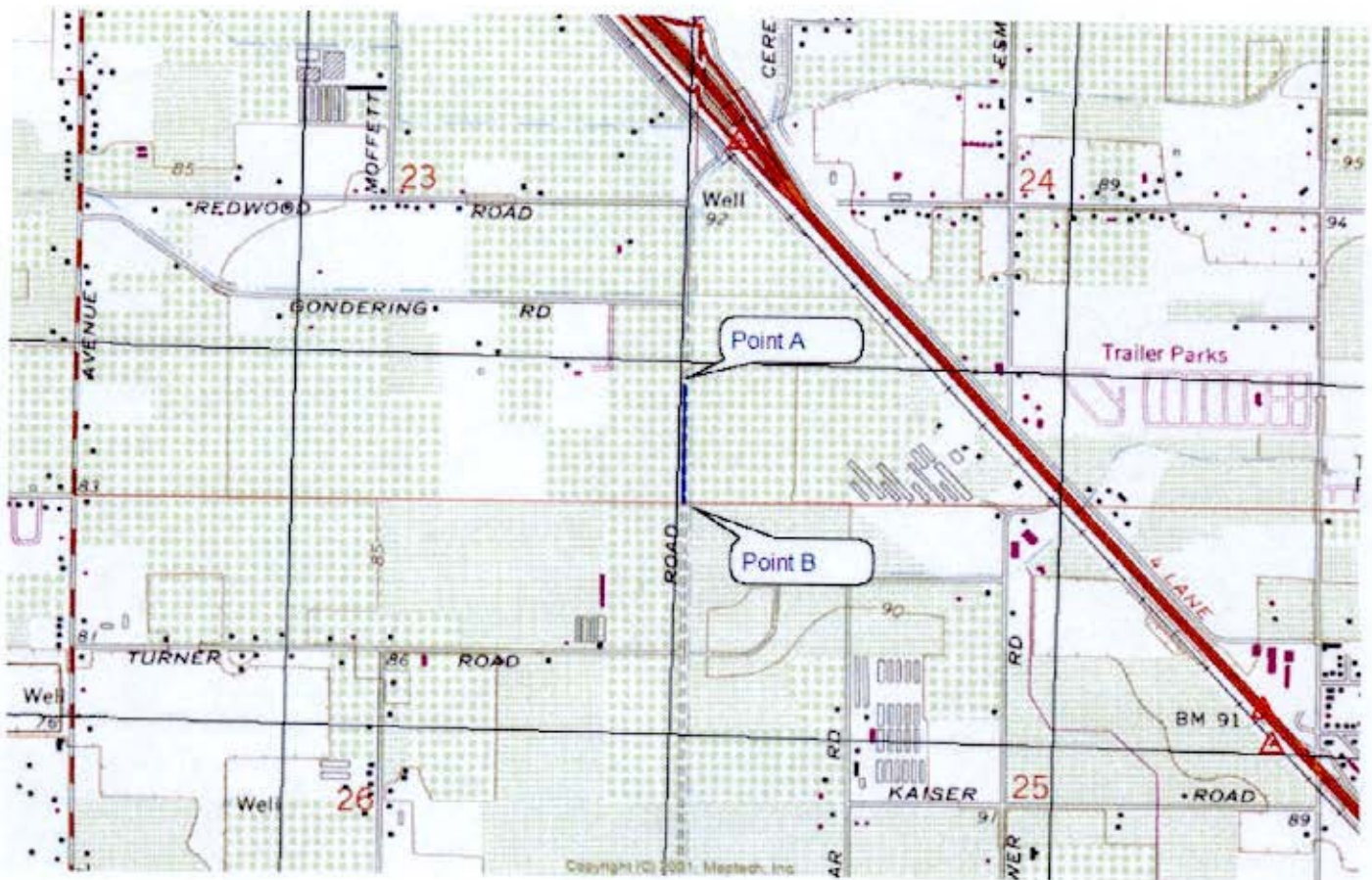
Primary # *P-50-000073*
HRI#
Trinomial *CA-STA-4264*

Page 11 of 15

*Resource Name or #: Turlock Irrigation District, Ceres Main Canal

*Map Name: Ceres
DPR 523J (1/95)

*Scale: 1:24,000 *Date of Map: 1963 rev 1987
*Required information



Zone 10 Point A: 0682011 mE/ 4159941 mN
Point B: 0682018 mE/ 4159628 mN

LOCATION MAP

Primary # *P-50-000073*
HRI#

Trinomial *CA-STA-426H*

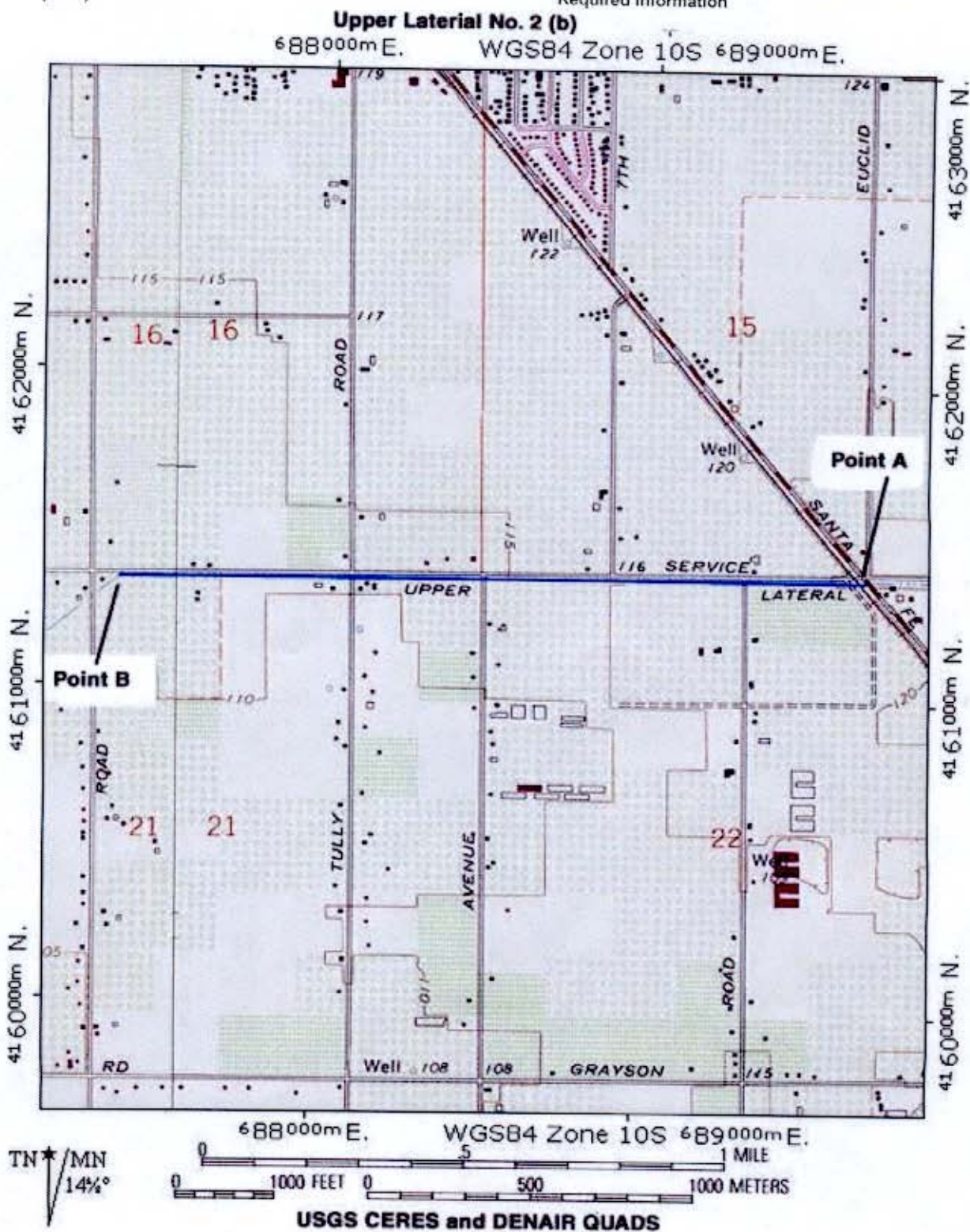
Page 12 of 15

*Resource Name or #: Turlock Irrigation District, Upper Lateral No. 2

*Map Name: Ceres
DPR 523J (1/95)

*Scale: 1:24,000 *Date of Map: 1963 rev 1987

*Required information



LOCATION MAP

Primary # *P-50-000073*
HRI#

Trinomial *CA-STA-426H*

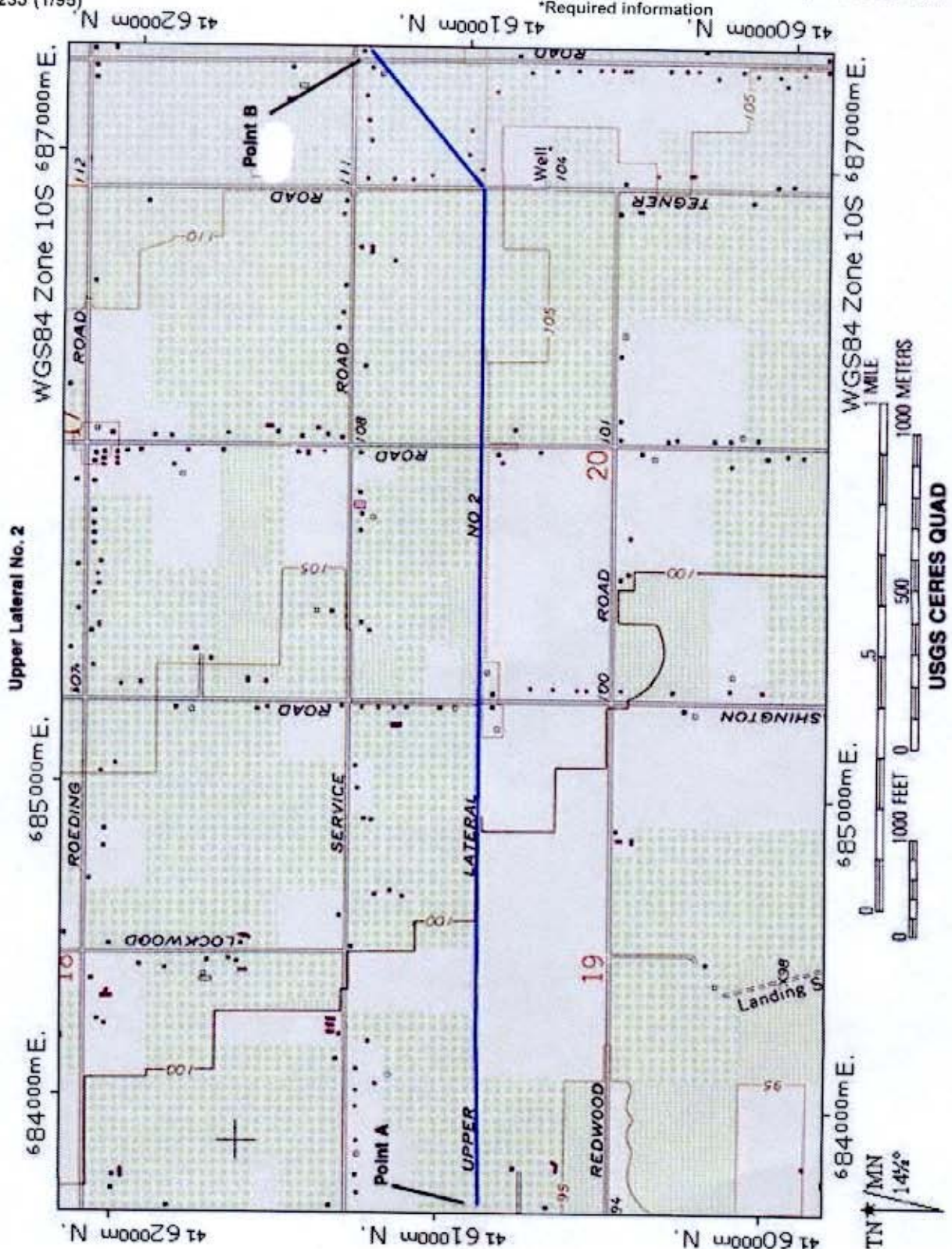
Page 13 of 15
Washington Street, Ceres)

*Resource Name or #: Turlock Irrigation District, Upper Lateral No. 2 (crossing with

*Map Name: Ceres
DPR 523J (1/95)

*Scale: 1:24,000 *Date of Map: 1963 rev 1987

*Required information



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

LOCATION MAP

Primary #
HRI#

Trinomial

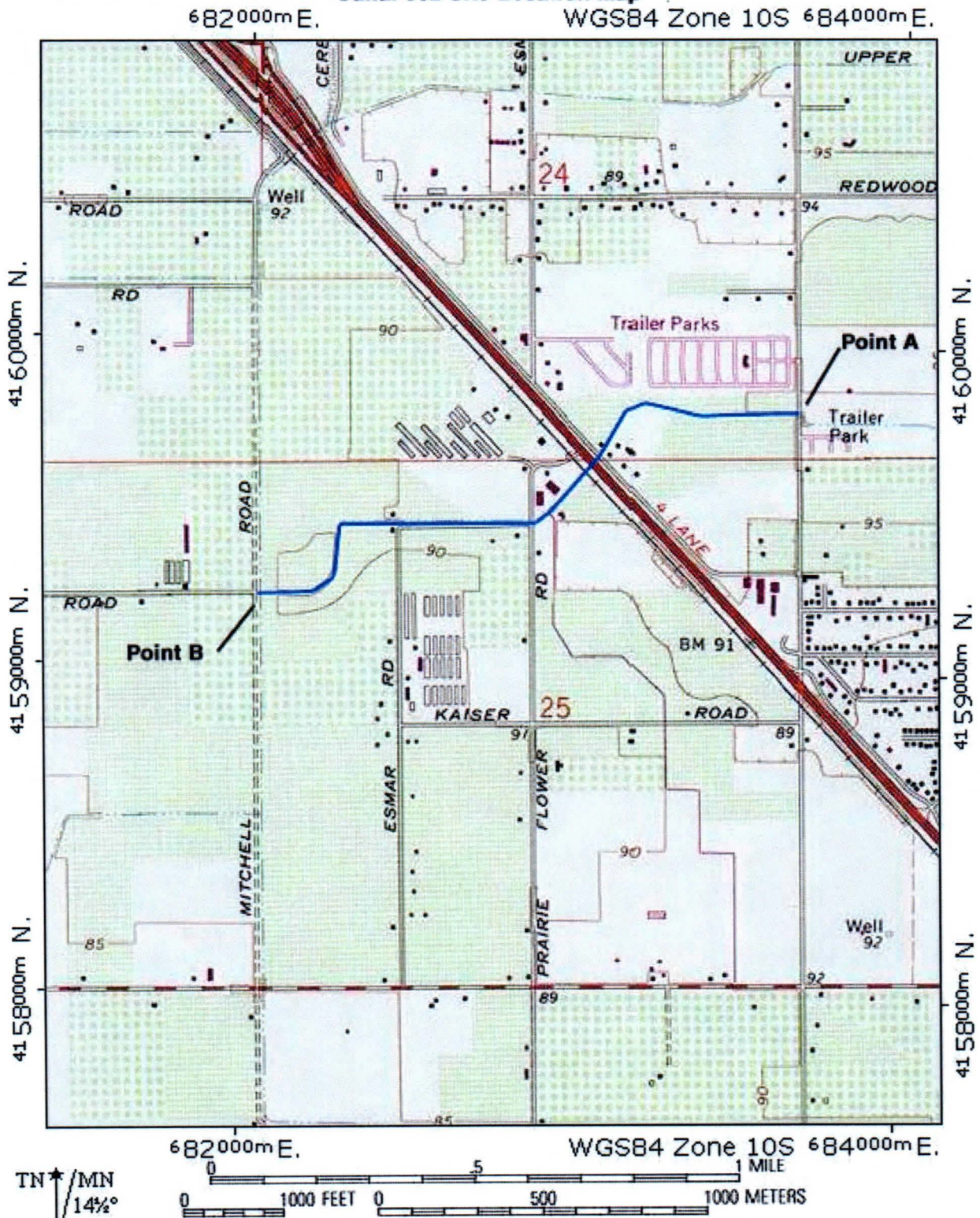
P-50-000071 71

XXXXXXXXXXXXXXXXXXXX

Page 14 of 15

*Resource Name or #: Turlock Irrigation District, Upper Lateral No. 2 1/2 (crossing with historic Southern Pacific Railroad, now the Union Pacific Railroad)

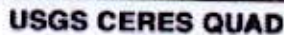
Canal-002 Site Location Map



line.)
*Map Name: Ceres
DPR 523J (1/95)

*Scale: 1:24,000 *Date of Map: 1963 rev 1987
*Required information

677000mE, WGS84 Zone 10S 678000mE.



*Scale: 1:24,000 *Date of Map: 1963 rev 1987

*Required information

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

Primary # P-50-000073 (update)

HRI #

Trinomial CA-STA-426H

Page 1 of 4

Resource Name or #: TID System/Ceres Main Canal Segment C (Roeding Road to Service Road)
Ceres 7.5'**L1. Historic and/or Common Name:** Ceres Main Canal**L2a. Portion Described:** ☐ Entire Resource ☒ Segment ☐ Point Observation **Designation:** Segment C

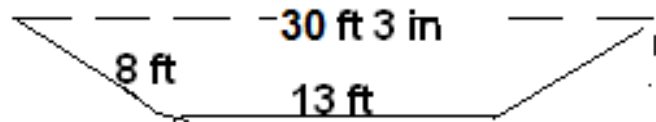
b. Location of point or segment: (Provide UTM coordinates, legal description, and any other useful locational data. Show the area that has been field inspected on a Location Map) Portions of the canal intersect the project area, which primarily consisted of the eastern berm. This segment parallels Moore Road to the west, trending south from Roeding Road and terminating at Service Road, in the city of Ceres.

No UTM's

6/2017

L3. Description: (Describe construction details, materials, and artifacts found at this segment/point. Provide plans/sections as appropriate.)

The canal is constructed as described in the 2015 record by Marvin for Segment B, Whitmore Avenue to Roeding Road. The previous segment was determined ineligible for the NRHP. The current segment as documented herein has been evaluated as ineligible as well. In addition to the canal, an artifact assemblage was identified along the entire length of the eastern berm. The assemblage is a moderate-sized scatter of historic debris including several hundred fragments of: white improved earthenware (WIE); amethyst, aqua, green, clear, cobalt, and brown glass; heavy aggregate concrete rubble; and various metal fragments. The constituents represent structural and domestic debris of varying ages. There is no direct provenience for the assemblage, which appears to have been deposited within fill for the berm. The artifacts represent a wide date range and reflect diverse activities, therefore providing limited potential to address historical questions about past populations. Likely imported within fill material, the source of the artifacts is unlikely to be identified, further reducing their information potential (Criterion D). The deposit is evaluated as not eligible to the NRHP and no further research is recommended.

L4. Dimensions: (In feet for historic features and meters for prehistoric features)**a. Top Width:** 30 ft. 3 in.**b. Bottom Width:** 13 ft.**c. Height or Depth:** 8 ft.**d. Length of Segment:** 2,640 feet**L4e. Sketch of Cross-Section** (include scale) **Facing:** East**L5. Associated Resources:** Along the eastern berm:

Feature A includes a broken concrete foundation in line with an intake valve. A metal pipe stand extending from the ground and pumping into the canal is adjacent to the intake valve. Feature B is a concrete box with a heavily corroded metal lid with two hinges. Feature B is adjacent to a dam.

L6. Setting: (Describe natural features, landscape characteristics, slope, etc., as appropriate.) The canals of the TID system course through agricultural lands planted with orchards, vineyards, and row crops, consistent with the original setting of 1900. They pass by small farms, past rural residences, and through communities, conveying water from the same sources and for the same uses as they did when first constructed. This segment of canal is surrounded by industrial and residential property as well as vacant fields.

L7. Integrity Considerations: Originally an earthen-bermed canal, constructed with horses, graders, scrapers, and manual labor, the canal has been improved and maintained over the ensuing years by lining it with concrete, replacing original metal culverts and gates, checks, valves, etc. During the 1920s-1930s the canals were lined with concrete and have undergone periodic modifications to features since their construction. Although the Turlock Main Canal follows the same course as when completed in the early 1900s, it was lined with concrete in 1927, resurfaced with Gunitite in 1958 and 1985, and upgraded to modern standards. Consequently, it lacks integrity and is not eligible for the National Register.

L8a. Photograph, Map or Drawing**L8b. Description of Photo, Map, or Drawing**

Canal facing south with Caltrans Bridge 38C0245 in foreground.

L9. Remarks:

L10. Form Prepared by: Melinda Pacheco Patrick (Patrick GIS Group, Inc.) 1256 W. Lathrop Road, #216, Manteca, CA 95336 and Judith Marvin (Foothill Resources, Ltd.), P.O. Box 2040, Murphys, CA 95247

L11. Date: June 2016



Photo 753. Feature A - cement foundation and pipe (right background) on the east side of the canal in the berm, adjacent to an intake valve (left background). Facing west.



Photo 753. Feature B - metal box (left) on the eastern berm of the canal, associated with the dam. Facing southwest.

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

Primary # P-50-000073 (update)

HRI#

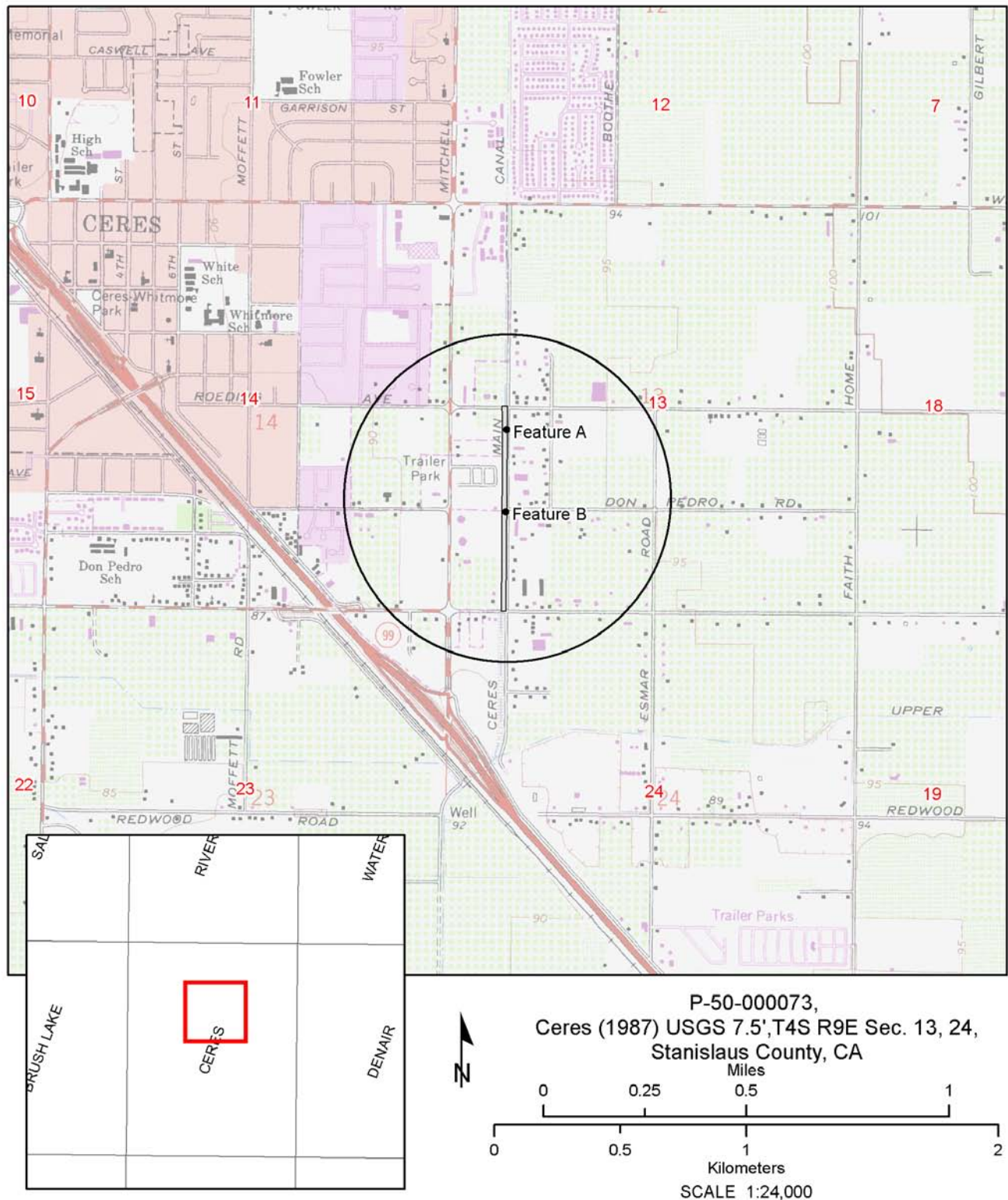
Trinomial CA-STA-426H

Page 3 of 4

*Resource Name or #: TID System/Ceres Main Canal Segment C (Roeding Road to Service Road Segment)

*Map Name:

*Scale: *Date of Map:



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

Primary # P-50-000073 (update)

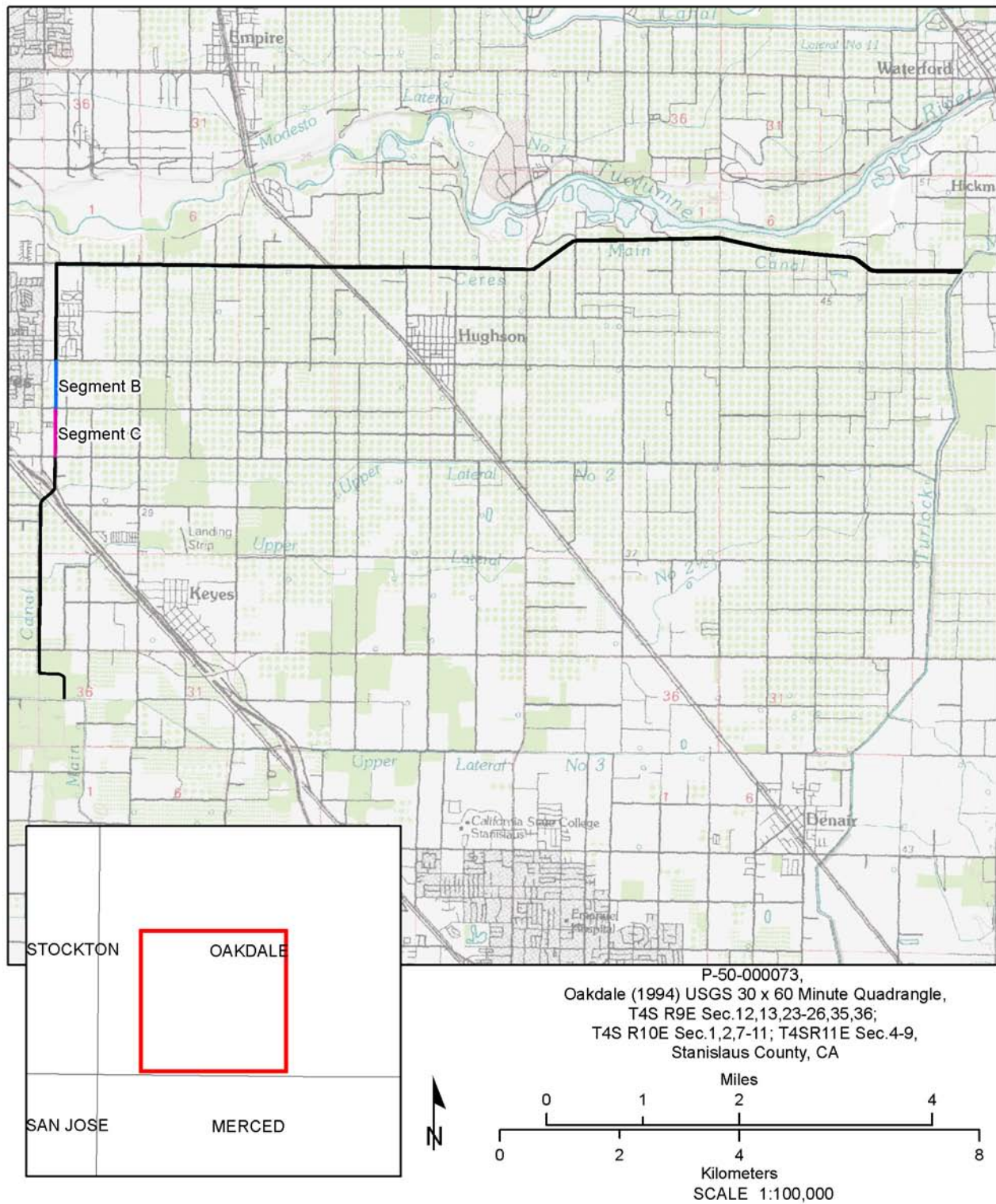
HRI#

CA-STA-426H

Trinomial

Page 4 of 4

*Resource Name or #: TID System/Ceres Main Canal Segment C (Roeding Road to Service Road Segment)



p Name:

DPR 523J (1/95)

*Scale: *Date of Map:

*Required information

*Ma

segment in this record is Ceres 7.5' only

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

Primary # P- 50-000073

HRI # _____

Trinomial CA-STA-426HPage 1 of 6

*Resource Name or # (Assigned by recorder) Whitmore Avenue to Roeding Road Segment
TID System/Ceres Main Canal

*Recorded by: Judith Marvin, Foothill Resources, Ltd. *Date 8 May 2015 ☐ Continuation ☒ Update

P1. Other Identifier: _____

6/2017

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

and (P2b and P2c or P2d. Attach a Location Map as necessary.)

*b. USGS 7.5' Quad Ceres, Calif. Date 1969 PR 1987 T 4 S R 9 E, W 1/2 of NW 1/4 of Sec. 13; MDBMc. Address _____ City Ceres Zip _____ No UTMsd. UTM: (Give more than one for large and/or linear resources) Zone 10 _____ mE/ _____ mN

e. Other Locational Data: e.g., parcel #, directions to resource, elevation, etc., as appropriate)

*P3a. Description: Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries).

This resource includes the water conveyance systems and related features of the Turlock Irrigation District (TID) Ceres Main Canal system, completed in this location by March of 1900 (Paterson 1987:100-102). The Ceres Main Canal branch runs along the TID's northern edge, not far from the Tuolumne River, to a point northeast of Ceres, where it turns south to replenish the laterals it crossed.

This update addresses a 2,587-foot segment of the Ceres Main Canal (P-05-000073) from Whitmore Avenue south to Roeding Road. Features in the APE include the concrete-lined open channel of the canal and control structures consisting of seven gates with weir boards, gate valves, and a water-measuring weir. At this location, the canal measures 30 feet 3 inches wide and 8 feet deep. It was lined with poured concrete ca. 1923 and resurfaced with Gunitite in 1958; a roughly 12-inch rise was added at the same time (Troglin 1999). It was resurfaced again in 1985 (Vanderpol 2009). Cultural constituents included amethyst, aqua, green, clear, cobalt, and brown glass; heavy aggregate concrete rubble; and various metal fragments. The constituents are intermixed with modern debris of varying ages. The area is bordered by a trucking yard, fields, and housing. The ground surface is sand intermixed with gravels and there is no vegetation on site, with the exception of extremely sparse weeds. The resources are in good condition, albeit the area has been heavily disturbed by infrastructure, i.e. roads, telephone lines, and utilities. The berm has presumably been modified as the original canal has been retrofitted.

*P3b. Resource Attributes: (List attributes and codes) HP20; Canal*P4. Resources Present: ☐ Building ☒ Structure ☐ Object ☒ Site ☐ District ☐ Element of District ☐ Other (Isolates, etc.)

P5a. Photo or Drawing (Photo required for buildings, structures, and objects.)



P5b. Description of Photo: (View, date, accession #) View NW, 28 March 2015
 IMG-3718

*P6. Date Constructed/Age and

Sources: ☒ Historic
☐ Prehistoric ☐ Both
1900

*P7. Owner and Address:

Turlock Irrigation District
 333 E. Canal Drive
 Turlock, CA 95380

*P8. Recorded by: (Name, affiliation, address)

Judith Marvin
 Foothill Resources, Ltd.
 P.O. Box 2040
 Murphys, CA 95247

*P9. Date Recorded: 25 March 2015

*P10. Survey Type (Describe):

Intensive survey

*P11. Report Citation: (Cite survey report and other sources, or enter "none.") Historical Resources Evaluation Report for the Mitchell/TID Canal Bike Path Project #CML-5241 (047), Ceres, Stanislaus County, California. Prepared by Judith Marvin for the City of Ceres.

*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) _____

BUILDING, STRUCTURE, AND OBJECT RECORD

CA-STA-426H

Page 2 of 6

*NRHP Status Code 6Z

*Resource Name or # (Assigned by recorder) Whitmore Ave.-to Roeding Rd Segment
TID System/Ceres Main Canal

B1. Historic Name: Ceres Main Canal

B2. Common Name:

B3. Original Use: Water Conveyance

B4. Present Use: Water Conveyance

*B5. Architectural Style: Concrete-lined open canal

*B6. Construction History: (Construction date, alterations, and date of alterations)

The Ceres Main Canal was completed and entered use on March 13, 1900; this segment was lined with poured concrete in 1927, and resurfaced with Gunitite in 1958 and 1985; a roughly 12-inch rise was added at the same time (T. Troglin, TID Engineering FAX 7/28/1999).

*B7. Moved? ☒ No ☐ Yes ☐ Unknown Date: Original Location:

*B8. Related Features: Seven gates with weir boards and gate valves, and a water measuring weir.

B9a. Architect: George Manuel b. Builder: Unknown (Doe, Hunt and Company; Horace Crane, George Bloss, N.O. Hultburg, Hubert Dunn, and others)

*B10. Significance: Theme Water systems Area

Period of Significance 1890-1925 Property Type Canal Applicable Criteria n/a

(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.) The first irrigation system to be completed under the Wright Act, the Turlock District was also the first public irrigation district to be established in California, as well as the first to deliver retail electric power. In 1886 members of the Turlock and Ceres granges began actively proposing the formation of irrigation districts for the farmers of their regions. A young Modesto attorney, C. C. Wright, was elected to the State Assembly and chosen "for the express purpose of advocating some measure providing for the municipal control of water for irrigation" (Paterson 1987:53). In the spring of 1887 Wright drafted the Irrigation Districts Act. The Wright Act, approved in March of 1887, provided "for the organization and government of irrigation districts and... for the acquisition of water and other property and for the distribution of water thereby for irrigation purposes." Within three months of passage of the Wright Act, on 6 June 1887, the Turlock Irrigation District was formed. Initially all the irrigable land between the Tuolumne and Merced rivers, from the foothills on the east to the San Joaquin River on the west, 176,210 acres were included in the district. A water right for 225,000 inches was located, near Wheaton's Dam on the Tuolumne River near La Grange. George Manuel of Fresno was hired as district engineer; he surveyed the dam site and canal routes, and reported that estimated costs for the system totaled \$467,544.62. The board called for an election to authorize issuance of \$600,000 in bonds; the first sale of \$50,000 in bonds occurred in November 1887. Not until 1890, however, were any contracts let for construction. The La Grange Dam was completed by the Pacific Bridge Company in 1893; (continued)

B11. Additional Resource Attributes: (List attributes and codes)

*B12. References: T. Troglin, Turlock Irrigation District Engineer, personal communication 28 July 1999. Alan M. Paterson, 1987, *Land, Water and Power, A History of the Turlock Irrigation District 1887-1987*. The Arthur H. Clark Company, Glendale, California.

B13. Remarks:

*B14. Evaluator: Judith Marvin, Foothill Resources, Ltd.
P.O. Box 2040, Murphys, CA 95247

*Date of Evaluation: 8 May 2015

(Sketch Map with north arrow required.)

See page 3.

(This space reserved for official comments)

Page 3 of 6

*Resource Name or # (Assigned by recorder) Whitmore Avenue to Roeding Road Segment
TID System/Ceres Main Canal

*Recorded by: Judith Marvin, Foothill Resources, Ltd. *Date 8 May 2015 ☒ Continuation ☐ Update

***B10. Significance:** the District issued the contract for the first part of the canal in January 1890 to Hamilton W. Gray. After another sale of bonds, the District awarded a contract to Doe, Hunt and Company for construction of the remainder of the canal system, and they began laying out the laterals. When the first contractor was unable to complete the work, Horace Crane and George Bloss, large Turlock landholders, assisted the District in taking over the construction program. Several other private individuals aided in the construction, including N. O. Hultburg and Hubert Dunn, a TID director, with his horses and men. Located within the project APE, the Ceres Main Canal branch runs along the TID's northern edge, not far from the Tuolumne River, to a point northeast of Ceres, where it turns south to replenish the laterals it crossed. Water was turned into the Ceres Main Canal on March 13, 1900, with Henry Stirring, a Ceres corn grower, the first customer (Paterson 1987:102).

Originally an earthen-bermed canal, constructed with horses, graders, scrapers, and manual labor, the canal has been improved and maintained over the ensuing years by lining it with concrete, replacing original metal culverts and gates, checks, valves, etc. During the 1920s-1930s the canals were lined with concrete and have undergone periodic modifications to features since their construction. Although the Turlock Main Canal follows the same course as when completed in the early 1900s, it was lined with concrete in 1927, resurfaced with Gunitite in 1958 and 1985, and upgraded to modern standards. Consequently, this segment lacks integrity and is not eligible for the National Register. Under Criterion A, although the canal is associated with the Turlock Irrigation District, an important entity in Stanislaus County, it has been upgraded to modern standards and lacks integrity to its 1890-1925 period of significance. Under Criterion C, the canal and its ancillary gates, pipeline, valves, weirs, and other features are standard examples of common resource types, designs used throughout the system, and not associated with any important advancements in engineering or design. It is not associated with any persons significant in the past (Criterion B), nor does it appear able to answer questions important to history (Criterion D).

Other sites related to the TID system—such as reservoirs, dams, siphons, tunnels, channels, canals, laterals, spillways, water conveyance features, power plants, construction camps, maintenance roads and facilities, pump sites and windmills—could potentially be grouped with the Turlock canals as a thematic NRHP District nomination.

(Sketch Map with north arrow required.)



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

Primary # 50-000073
HRI#
Trinomial CA-STA-426H

Page 4 of 6

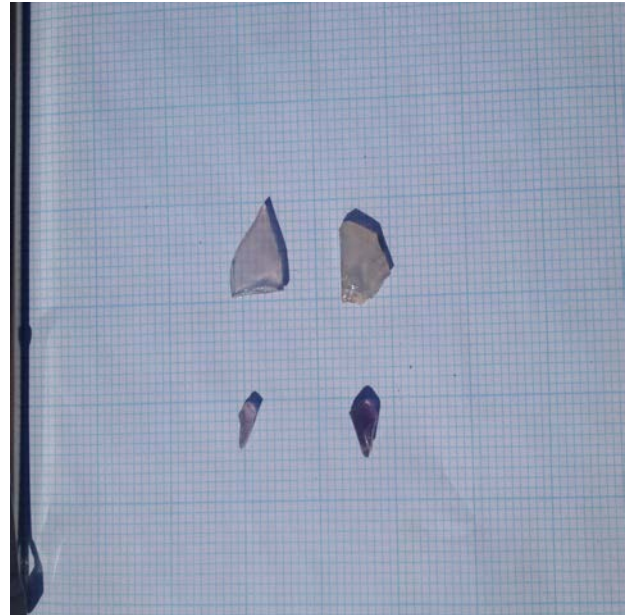
*Resource Name or # T.I.D Ceres Main Canal

*Recorded by: Patrick GIS Group, Inc.

*Date: ☒ Continuation ☐ Update



Caltrans Bridge #38C0245 facing south/southwest with T.I.D. berm in foreground.



Thick, heavily corroded, green glass with patina and amethyst glass.

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

Primary # 50-000073
HRI #
Trinomial CA-STA-426H

Page 5 of 6 Resource Name or #: TID System/Ceres Main Canal

L1. Historic and/or Common Name: Ceres Main Canal

L2a. Portion Described: ☐ Entire Resource ☒ Segment ☐ Point Observation Designation: Hatch Rd at Lateral 1

b. Location of point or segment: The segment surveyed for this project is located in central Stanislaus County on Moore Road between Whitmore Avenue and Roeding Road.

L3. Description (Describe construction details, materials, and artifacts found with each feature. Provide plans/sections as appropriate.): This site includes the water conveyance systems and related features of the Turlock Irrigation District (TID) Ceres Main Canal system. Features associated with this segment included the concrete-lined open channel of the canal. It was lined with poured concrete in 1927, and resurfaced with Gunite in 1958 and 1985; a roughly 12-inch rise was added at the same time (T. Troglin, TID Engineering FAX 7/28/1999).

L4. Dimensions:

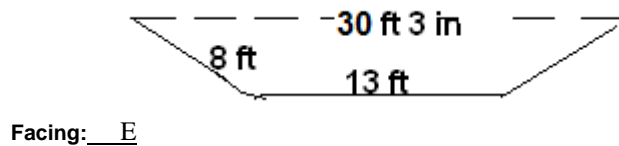
a. Top Width: 30 ft 3 in

b. Bottom Width: ~13 ft

c. Height or Depth: 8 ft

d. Length of Segment: 2587 ft

L4e. Sketch of Cross-Section (include scale):

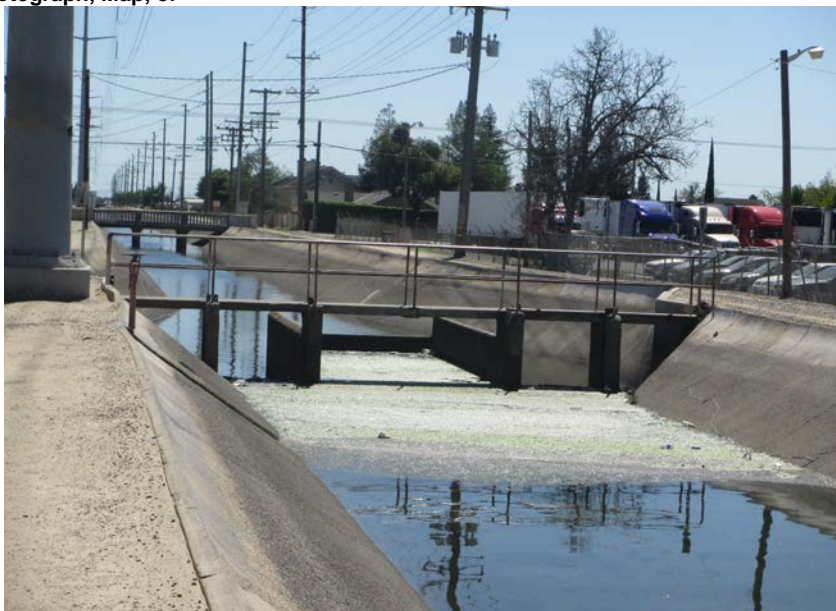


L5. Associated Resources: Seven gates with weir boards and gate valves (Snow Mfg. Co., Los Angeles), concrete water measuring weir, and pedestrian bridge with pipe rail.

L6. Setting: (Describe natural features, landscape characteristics, slope, etc., as appropriate): The canals of the TID system course through agricultural lands planted with orchards, vineyards, and row crops, consistent with the original setting of 1900. They pass by small farms, past rural residences, and through communities, conveying water from the same sources and for the same uses as they did when first constructed. Within the project area, a subdivision is located along its northwest boundary and Moore Road along its east side.

L7. Integrity Considerations: Originally an earthen-bermed canal, constructed with horses, graders, scrapers, and manual labor, the canal has been improved and maintained over the ensuing years by lining it with concrete, replacing original metal culverts and gates, checks, valves, etc. During the 1920s-1930s the canals were lined with concrete and have undergone periodic modifications to features since their construction. Although the Turlock Main Canal follows the same course as when completed in the early 1900s, it was lined with concrete in 1927, resurfaced with Gunite in 1958 and 1985, and upgraded to modern standards. Consequently, it lacks integrity and is not eligible for the National Register.

L8a. Photograph, Map, or



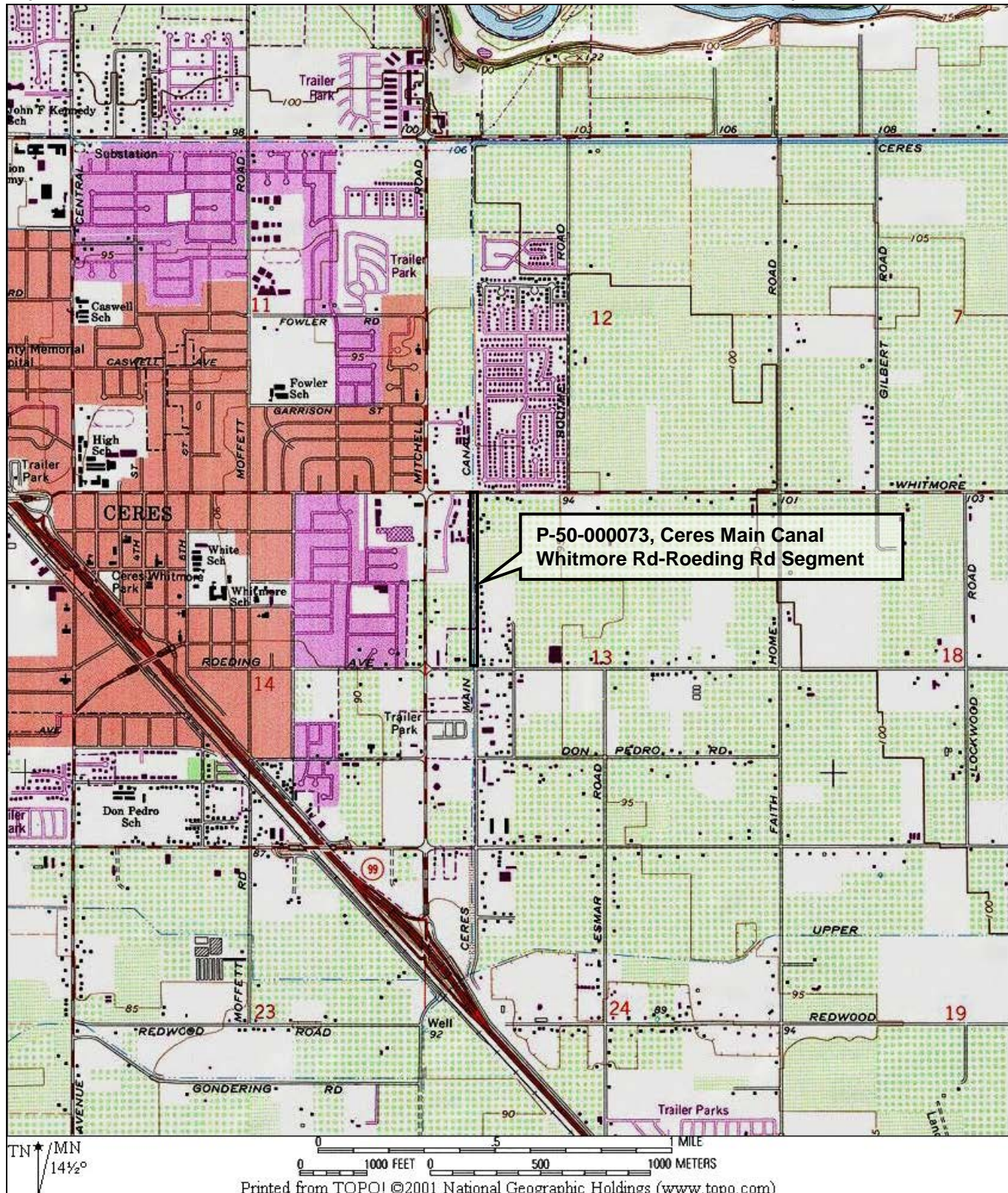
L8b. Description of Photo, Map, or Drawing (View, scale, etc.)
View south (3/25/2015)

L9. Remarks:

L10. Form Prepared by (Name, affiliation, and address)

Judith Marvin,
Foothill Resources, Ltd.
P.O. Box 2040
Murphys, CA 95247

L11. Date: May 8, 2015



Ceres Main
Canal only

Primary # 50-00073
HRI #
Trinomial CA-STA-426H

Page 1 of 5 *Resource Name or # (Assigned by recorder) Ceres Main Canal, Hatch Road at Lateral One
*Recorded by: Judith Marvin *Date 12 March 2009 ☐ Continuation ☒ Update

Ceres 7.5'

This update records the segment of the Ceres Main Canal along Hatch Road between Mitchell Road and Boothe Road, a length of 1,050 feet. At this point, the Ceres Main Canal branch runs along the Turlock Irrigation District's (TID) northern edge, not far from the Tuolumne River to a point northeast of Ceres, where it turns south to replenish the laterals it crossed.

The portion of the site surveyed as part of this project extends for 1,050 feet along the Ceres Main Canal from Boothe Road west to where the main canal turns south, with Lateral One continuing west about 3,675 feet in an underground concrete pipe. Features in the APE include the concrete-lined open channel of the canal and control structures consisting of gates, drop, weir, and an underground pipeline. At this location, the canal measures 30 feet 3 inches wide and 8 feet deep. It was lined with poured concrete in 1927, and resurfaced with Gunitite in 1958. A roughly 12-inch rise was added at the same time (Troglin 1999). It was resurfaced again in 1985 (Vanderpol 2009). A roughly 2-foot concrete rise was added at the head of Lateral One in recent years.

Four gates are located at the Head of Lateral One, constructed of board-formed concrete, with wood gates with metal bottoms, raised with Waterman valves and supported by square metal posts and rails, which divert water from the canal into Lateral One and the Main Canal. Lateral One, which continues west, conveys water through a concrete pipeline, accessed from the head drop through a trash gate (grizzly). Five concrete gates, with a central rectangular board-formed concrete water measuring weir, divert water due south into the Main Canal. A pedestrian bridge, constructed of concrete with board decking, crosses the canal at this point. Another pedestrian bridge, of more recent construction, has a concrete deck and a pipe rail. It provides access across the south branch of the Main Canal. Upstream from the diversion gates, a lateral (13-2) diverts water north through a gate with a Waterman valve, to the agricultural area north of the Main Canal. The age of the Waterman valves and improvements to the canal are unknown, as the TID does not keep historical records of replacements (Vanderpol 2009).



No. 1. Headgates, Head of Lateral One and Ceres Main Canal.



No. 2. Lateral 1 at Ceres Main Canal, view west.

Page 2 of 5

Resource Name or #: TID System/Ceres Main Canal

L1. Historic and/or Common Name: Ceres Main Canal

L2a. Portion Described: ☐ Entire Resource ☒ Segment ☐ Point Observation Designation: Hatch Rd at Lateral 1

b. Location of point or segment: The segment surveyed for this project is located in central Stanislaus County on Hatch Road between Mitchell Road and Boothe Road.

L3. Description (Describe construction details, materials, and artifacts found with each feature. Provide plans/sections as appropriate.): This site includes the water conveyance systems and related features of the Turlock Irrigation District (TID) Ceres Main Canal system. Features associated with this segment included the concrete-lined open channel of the canal. It was lined with poured concrete in 1927, and resurfaced with Gunite in 1958 and 1985; a roughly 12-inch rise was added at the same time (T. Troglin, TID Engineering FAX 7/28/1999).

L4. Dimensions:

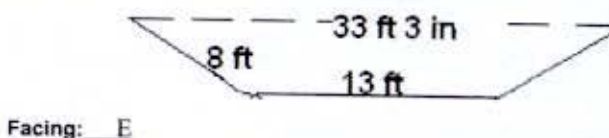
a. Top Width: 33 ft 3 in

b. Bottom Width: ~13 ft

c. Height or Depth: 8 ft

d. Length of Segment: 1050 ft

L4e. Sketch of Cross-Section (include scale):



L5. Associated Resources: Head of Lateral One with drop with four gates with weir boards, trash rack, and concrete pipeline; five gates into south branch of Ceres Main Canal, including a water measuring weir.

L6. Setting: (Describe natural features, landscape characteristics, slope, etc., as appropriate): The canals of the TID system course through agricultural lands planted with orchards, vineyards, and row crops, consistent with the original setting of 1900. The pass by small farms, past rural residences, and through communities, conveying water from the same sources and for the same uses as they did when first constructed. Within the project area, a subdivision is located along its south boundary and Hatch Road along its north side.

L7. Integrity Considerations: Originally an earthen-bermed canal, constructed with horses, graders, scrapers, and manual labor, the canal has been improved and maintained over the ensuing years by lining it with concrete, replacing original metal culverts and gates, checks, valves, etc. During the 1920s-1930s the canals were lined with concrete and have undergone periodic modifications to features since their construction. Although the Turlock Main Canal follows the same course as when completed in the early 1900s, it was lined with concrete in 1927, resurfaced with Gunite in 1958 and 1985, and upgraded to modern standards. Consequently, it lacks integrity and is not eligible for the National Register.

L8a. Photograph, Map, or



L8b. Description of Photo, Map, or Drawing (View, scale, etc.)
View east (3/12/09)

L9. Remarks:

L10. Form Prepared by (Name, affiliation, and address)

Judith Marvin,
Foothill Resources, Ltd.
P.O. Box 2040
Murphys, CA 95247

L11. Date: 20 March 2009

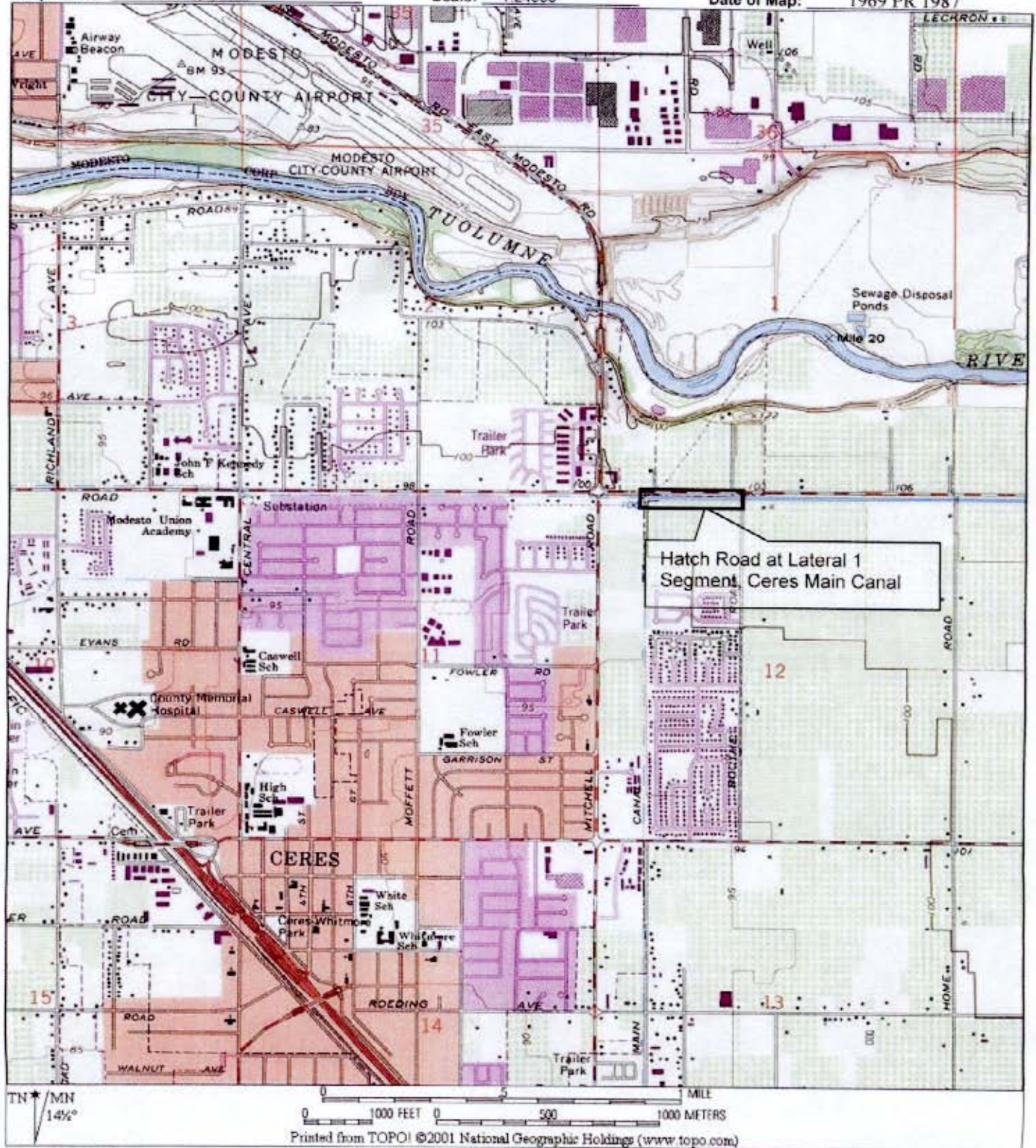
Page 3 of 5

*Resource Name or # (Assigned by recorder) Hatch Rd @ Lateral 1 Segment, Ceres Main Canal

*Map Name: Ceres, Calif.

Scale: 1:24000

Date of Map: 1969 PR 1987



DPR 523J (1/95)

*Required information

PRIMARY RECORD

Primary # 50-000073

HRI #

Trinomial CA-STA-426H

NRHP Status Code

Other Listings

Review Code

Reviewer

Date

Page 4 of 5

*Resource Name or #: (Assigned by recorder) TID System

P1. Other Identifier: TID Main Canal

*P2. Location: ☐ Not for Publication ☒ Unrestricted

*a. County Stanislaus

and (P2b and P2c or P2d. Attach a Location Map as necessary.)

*b. USGS 7.5' Quad Ceres Date 1969 PR 1987 T 4S R 9E

Corners of of Sec. 25,26,35,36; MDBM

c. Address Keyes Rd at TID Main Canal

City

Zip

d. UTM: (Give more than one for large and/or linear resources) Zone 10

mE/

e. Other Locational Data: e.g., parcel #, directions to resource, elevation, etc., as appropriate) About 1 1/2 miles west of Keyes in an unincorporated area of Stanislaus County.

*P3a. Description: Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries.

This site includes the water conveyance systems and related features of the Turlock Irrigation District (TID) system. The district was formed in 1887, with construction of the La Grange Dam on the Stanislaus River completed in 1893. After great difficulties—economic, engineering, legal, and political—the system was finally completed in 1902. The first phase of construction brought the waters of the Stanislaus River along the south bank of the Tuolumne River to Turlock Lake, through a main supply canal to the northeast edge of the district, near Hickman. At this point the Ceres Main Canal takes off, flows west on the highland above the Tuolumne Channel, and then south through the center of the district. The Turlock Main Canal diverts at the same gate, flows south for about ten miles, and then through the main laterals, running west to the San Joaquin River. In 1923 TID completed construction of the Don Pedro dam, reservoir, and power house and began delivering electric power to its customers soon thereafter. The system consists of dams, reservoirs, canals, tunnels, channels, siphons, laterals, spillways, water conveyance features, power plants, gates, gauges, valves, and other features.

The canal courses through agricultural lands planted with orchards, vineyards, and row crops, and is consistent with its original setting. The portion of the site recorded in detail in this form includes the section of the Ceres Main Canal at Keyes Road. When originally constructed, the canal was an earthen-bermed open channel, 25'9" feet wide and 7 2 in feet deep. The segment in the project area was concreted in 1927, and resurfaced with Gunite in 1958, but has been unchanged except for regular maintenance.

*P3b. Resource Attributes: (List attributes and codes) HP 20 Canal, HP 21 Dam, HP 22 Reservoir

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

P5a. Photo or Drawing (Photo required for buildings, structures, and objects.)

P5b. Description of Photo: (View, date, accession #) TID Ceres Main Canal, view southwest, 6/21/99

*P6. Date Constructed/Age and

Sources: ☒ Historic

☐ Prehistoric ☐ Both

1900

*P7. Owner and Address:

Turlock Irrigation District

333 East Canal Drive

Turlock, CA 95381

*P8. Recorded by: (Name, affiliation, address)

Judith Marvin

Foothill Resources, Ltd.

P.O. Box 2040

Murphys, CA 95247

*P9. Date Recorded: 6/21/99

*P10. Survey Type (Describe):

Intensive survey

*P11. Report Citation: (Cite survey report and other sources, or enter "none.")

Historical Property Survey

Report (Positive) for the Keyes Road

Bridge at Turlock Irrigation District

Ceres Main Canal Project, Stanislaus

County, California, submitted to Stanislaus County Dept. of Public Works, August 1999.

*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) _____

DPR 523A (1/95)

*Required Information

*Resource Name or #: (Assigned by recorder) TID System Ceres Main Canal

D1. Historic Name: Turlock Irrigation District

D2. Common Name: TID System

*D3. Detailed Description (discuss overall coherence of the district, its setting, visual characteristics, and minor features. List all elements of district.): The district includes the Don Pedro, La Grange, and Turlock (Owens) Lake dams and reservoirs, the Main Canal, Ceres Main Canal, Turlock Main Canal, and Laterals of the TID system. It also includes all power plants, tunnels, siphons, spillways, water conveyance features, gates, valves, gauges, and other associated features. Other sites related to the history and operations of the TID system—such as construction camps, maintenance roads and facilities, pump sites, and windmills—could potentially be grouped with the canal system as a thematic District NRHP nomination. The system courses from Don Pedro Reservoir in southwestern Tuolumne County, along the south bank of the Tuolumne River to near Hickman, where it divides into the Ceres Main and Turlock Main Canals. A gravity flow system, the canals course from the foothills in Tuolumne County west to the vast plains of the San Joaquin Valley. The system was built to convey the waters of the Tuolumne River to the agricultural lands in southern Stanislaus County, providing irrigation water to orchards, vineyards, and row crops, passing by small farms, rural residences, and through communities.

*D4. Boundary Description (Describe limits of district and attach map showing boundary and district elements.): The district extends from Don Pedro Reservoir in southwestern Tuolumne County, along the south bank of the Tuolumne River to near Hickman, then is diverted into the Turlock Main and Ceres Main Canals. Laterals flow westerly from the Turlock to Ceres canals. It includes virtually all the land south from the Tuolumne River to the Merced Rivers, and from Hickman and Delhi in the east to the San Joaquin River in the west (TID Canal System Map, pg. 4).

*D5. Boundary Justification: The district boundaries include all of the area encompassed by the Turlock Irrigation District, as depicted on the TID Canal System Map (pg. 4).

*D6. Significance: Theme Irrigation and Power Systems

Area Stanislaus County

Period of Significance 1890-1925

Applicable Criteria

A & C

(Discuss district's importance in terms of its historical context as defined by theme, period of significance, and geographic scope. Also address the integrity of the district as a whole.) The Turlock Irrigation District was the first in California to be established under the 1887 Wright Act, which provided for the formation of irrigation districts under public control. The act was tested in local, state, and federal courts and has survived virtually intact, allowing for the formation of irrigation districts in the Great Central Valley and other parts of the state. The TID system brought irrigation water to the dry lands south of the Tuolumne River, as well as building a publicly-owned hydroelectric plant for its users.

The TID Ceres Main Canal (TID 1) and Turlock Main Canal (TID 2) are only two of the most visible parts of a complex water system extending from the Sierra Nevada foothills to the Central San Joaquin Valley. The entire system includes dams, reservoirs, diversion structures, tunnels, canals, laterals, pipelines, spillways, gates, gauges, valves, siphons, pumps, and other features. The historical significance of the TID canal system lies in its whole, rather than in individual segments or features.

The system appears to retain its integrity to its period of significance and reflects the criteria as to original location, setting, feeling and association to a remarkable degree. It also retains good integrity of design, workmanship, and materials to the period of significance. Although designed as an earthen-bermed system of canals and laterals, all were concreted by the 1920s, during the period of significance, and improvements since that time have been for maintenance purposes, rather than a major change in the system.

The District, the first of its kind to be established in California and the prototype for all others that followed, delivered the water that facilitated the agricultural, community, and residential development of Stanislaus County. Flowing westerly and then southerly through the heartland of Stanislaus County, the segment of the Ceres Main Canal and Turlock Main Canal convey a sense of the time and place when small farms replaced the large grazing ranches of the nineteenth century, forever altering the demographics of the area.

*D7. References (Give full citations including the names and addresses of any informants, where possible.): *Historic Property Survey Report (Positive) for the Baldwin Road Bridge at Turlock Irrigation District Ceres Main Canal Project, Stanislaus County, California*, and *Historic Resource Evaluation Report for the Baldwin Road Bridge at Turlock Irrigation District Ceres Main Canal Project, Stanislaus County, California*, both submitted to James Gregg, Supervising Civil Engineer, Stanislaus County Department of Public Works, Modesto California, July 1999.

*D8. Evaluator: Judith Marvin

Date: 29 July 1999

Affiliation and Address: Foothill Resources, Ltd., P.O. Box 2040, Murphys, California 95247

→ only
SITE NAME: Ceres Main Canal, Turlock Irrigation District, Stanislaus County
SITE NUMBER: KT-8
QUAD SHEET: "Ceres Quadrangle," USGS: 1969, photorevised 1987
PIPELINE LOCATION: Milepost 197.9, Mainline

Description of Feature

Site KT-8 is located at the point where Turlock Irrigation District's Ceres Main Canal crosses the proposed Mojave Pipeline project APE, immediately northeast of the junction of Mitchell and Redwood roads and east of Highway 99, on the edge of the town of Ceres. This site, with its comparison points KT-8(n) and KT-8(s), is located in a mixed agricultural and industrial area of Stanislaus County. JRP recorded the two comparison sites to better place KT-28 in context and consider the lateral's integrity.

The Ceres Main Canal receives water from the Turlock Main Canal just west of Hickman, then flows west to the town of Ceres. It then turns south and supplies the district's lower laterals. The canal also connects with the district's upper lateral system and transfers available water from the upper into the lower laterals. KT-8 is located just to the west of the freeway, railroad, and the canal's confluence with Upper Lateral 2 1/2, and approximately a mile north of the junction of the Ceres Main Upper Lateral 2 (**Photograph 1**). KT-8 and its comparison sites are located in an area of mixed agricultural, residential, and commercial use. KT-8 is located at the southern end of the point where the canal passes under the freeway and railroad. To the southwest of this site are orchards and an almond processing facility, while to the northwest is a vehicle yard and silo complex. To the southeast across the freeway are subdivisions, while to northeast across the freeway is a sales yard. Site KT-8(s) is completely surrounded by orchards, and is located at the junction of Upper Lateral 2 with the Ceres Main Canal (**Photograph 3 of Site LG-28**). Comparison site KT-8(n) is located where Service Road crosses the Ceres Main Canal, in an area of small agricultural parcels with homes (**Photograph 2**).

History of Feature

The Ceres Main Canal is a central feature of the Turlock Irrigation District's original distribution system. TID is one of the first Wright Act districts (along with Modesto Irrigation District). For a brief history of the TID, see above Section 2.2. The district began building its system in 1893, when it joined with the Modesto Irrigation District to build a diversion facility at La Grange on the Tuolumne River. Over the next years the district constructed its main canal system and began work on its laterals. Internal dissension in the district caused main canal construction progress to move forward slowly. By April 1894, TID had underway planning and preliminary work on the district canal and irrigation system. Besides the main headwork at the dam and canals, flumes and tunnels to reach Hickman, where the main canal then terminated, laterals would have to be dug in what the district engineer described as "ground easily scraped." The main canal would run almost due south from Hickman for 18 miles, nearly to the Merced River, with laterals serving separate areas. The main canal terminated with its division into the Turlock and Ceres main canals. (Modesto Daily Evening News, April 7, 1894.) Later that summer

TID's directors accepted a bid from Doe, Hunt & Co. of San Francisco to complete the TID canal system, who began work in June 1894. However, by August, 1894 work stopped because the district had no money to pay their contractors. (Stanislaus County Weekly News May 11, 1894; June 8, 1894; June 29, 1894; July 23, 1894)

For the next few years the district struggled to build its system, and by the end of 1898 TID had finished its main canal sufficiently far to send of water 23 miles from La Grange to Hickman. (Modesto Daily Evening News November 12, 1898; Stanislaus County Weekly News November 18, 1898). TID began irrigation in the spring of 1900. (Stanislaus County Weekly News, March 16, 1900). According to the district, the Ceres Main Canal, and all related laterals, was in place by 1904 (Glauser, July 12, 1993). Shortly thereafter the system was described as a main canal reaching about 25 miles from the diversion dam, connecting with the Turlock Main and Ceres Main canals, each "about 35 miles long and each system having seven laterals aggregating over 100 miles in length." The main canals and portions of the laterals were contracted out in units. (Elias, 1924: 63)

During the 1920s and 1930s the district undertook a program of canal and lateral lining. Asphalt proved impractical, and eventually the district turned to concrete lining. In later years the canals and laterals have also been gunited. In July 1993 the district described changes to their laterals:

Since the date of first construction of the canals the District has conducted routine maintenance and significant upgrades of its water delivery systems. Although the canals were originally constructed near the turn of the century they have been improved over the years with the addition of modern structures and surface lining to improve flow capacity, improve hydraulic control, and improve customer service. Alignments have been changed, cross sections have been increased, drop structures have been installed and improved, and the location of the original turnouts has been changed. The only remnant of the original canal is probably the name of the canal ... (Glauser, July 12, 1993)

Comparison of historic and modern maps indicates that the Ceres Main Canal is, at KT-8 and the comparison points, in its original location. Field inspection of the three sites show that in all cases the Ceres Main Canal has been lined with concrete, in two of the three locations as recently as the 1980s. When the canals were lined, older control structures were redesigned as can be seen within the APE where standardized lateral headgates were integrated into the canal's concrete embankment (**Photograph 3**).

Evaluation of Feature

The Turlock Irrigation District's Ceres Main Canal at site KT-8 is part of the original irrigation system of one of California's first Wright Act irrigation districts. It has played a significant role in the agricultural development of the area it serves, and is sufficiently old to be considered for the National Register on the basis of its age and local importance under Criterion A. Its period of significance, therefore, dates to the time of its original construction, ca. 1898-1904. At that time the lateral was dirt lined and ran through an

P-50-000073

area of farms and orchards. Since that time, however, the lateral has lost integrity of design, workmanship, materials, setting, and feeling owing to the district's lining projects and the installation of the freeway, electric transmission lines on both banks of the canal, modern bridges and culverts after the period of significance. It no longer runs through an area typified by widely scattered farmsteads, because with the passage time, and with construction of Highway 99 came denser non-agricultural development. Furthermore, because lined irrigation canals are common features in the San Joaquin Valley, the Ceres Main Canal cannot be considered a unique example of a segment of an early irrigation system and thus does not meet Criterion C. It is not eligible for the National Register.

CANAL FEATURE INVENTORY FORM

Developed by JRP Historical Consulting Services

7-50-0000/3
P-50-000073

PROJECT: Mojave Natural Gas Pipeline, Northern Extension Project
MILEPOST: 197.9, Mainline

LOCATION NO: KT-8
PHOTO DATE: MAY 28, 1993

1. **Name of Feature:** Ceres Main Canal

2. **Location of recordation:** KT-8 is located at the point where the new Redwood Road bridge crosses the Turlock Irrigation District's Ceres Main Canal. The canal at this point runs roughly due north under Highway 99. The Southern Pacific railroad crosses Ceres Main Canal just to east of Redwood Road.

3. **Other locations for recording this feature:** K-8(n) and K-8(s)

4. **Structures at or near this location:** There are several structures at this site, including the new county Redwood Road bridge (Ceres Main Canal Bridge, No. 38C-321) across the canal, a concrete culvert of apparently recent origin carrying the canal under the railroad, and a low bridge carrying the freeway over the canal. A large power line on steel poles parallels north side of canal.

5. **Setting at this location:** KT-8 is located just to the west of Highway 99 and the SPRR. Across the tracks and freeway to the east are scattered residences. The west side of the railroad is typified by large scale agricultural activities. A livestock ranch is situated to the northwest and on the other side of Redwood Road, and to the southwest are orchards.

6. **Integrity considerations for this feature:** Concrete lining has replaced the original dirt canal.

7. **Attributes at this location (measurements in feet):**

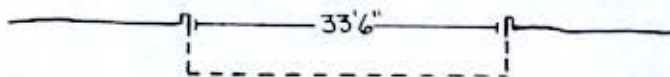
Top width: 33' 6"

Bottom width: Unable to observe due to high flows

Height or Depth: Unable to observe due to high flows

Material: 4" concrete lined

8. **Sketch, in cross section:** Looking west



CANAL FEATURE INVENTORY FORM

Developed by JRP Historical Consulting Services

P-50-000073

PROJECT: Mojave Natural Gas Pipeline, Northern Extension Project

MILEPOST: N/A

LOCATION NO: KT-8(n)

PHOTO DATE: May 28, 1993

1. **Name of Feature:** Ceres Main Canal
2. **Location of recordation:** Where the canal crosses Service Road.
3. **Other locations for recording this feature:** KT-8 and KT-8(s)
4. **Structures at or near this location:** Bridge No. 144 carries Service Road traffic over the canal. Outlet gates are located in the west bank of the canal (one on each side of the bridge) to serve local irrigators, and the Turlock Irrigation District's electrical transmission line parallels the canal to the east.
5. **Setting at this location:** This site is located in an area of "ranchettes" and suburban development on the southern edge of Ceres. Residential development has occurred to the southwest, and there is a farm house and old orchard to the northwest. A small homestead and agricultural parcel is located to the northeast, with a similar vineyard and house with outbuildings to the southeast. The area is typified by small parcels rather than large commercial farms.
6. **Integrity considerations for this feature:** Concrete lining has replaced the original earthen canal.
7. **Attributes at this location (measurements in feet):**

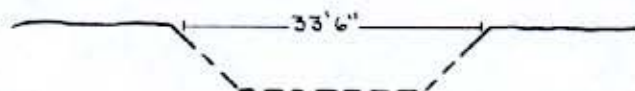
Top width: 33' 6"

Bottom width: Unable to observe due to high flows

Height or Depth: Unable to observe due to high flows

Material: 3" thick concrete done in 1975

8. **Sketch, in cross section:** Looking north



CANAL FEATURE INVENTORY FORM

Developed by JRP Historical Consulting Services

P-50-000073

PROJECT: Mojave Natural Gas Pipeline, Northern Extension Project
MILEPOST: N/A

LOCATION NO: KT-8(s)
PHOTO DATE: May 28, 1993

1. **Name of Feature:** Ceres Main Canal
2. **Location of recordation:** Where Upper Lateral 2 1/2 joins the Ceres Main Canal at the junction of Turner and Mitchell roads.
3. **Other locations for recording this feature:** KT-8 and KT-8(n)
4. **Structures at or near this location:** Mitchell Road extends parallel to the canal.
5. **Setting at this location:** Orchards completely surround this recordation point.
6. **Integrity considerations for this feature:** Concrete lining has replaced the original dirt canal.
7. **Attributes at this location (measurements in feet):**

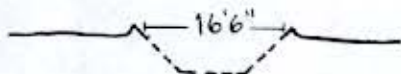
Top width: 16' 6"

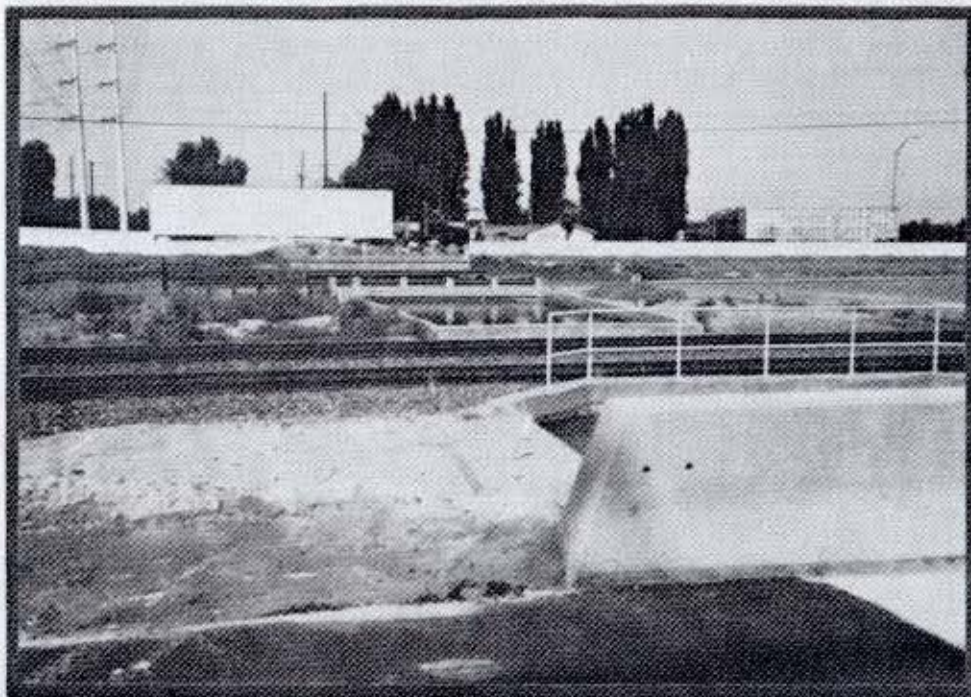
Bottom width: Unable to observe due to high flows

Height or Depth: Unable to observe due to high flows

Material: Concrete, relined in 1987.

8. **Sketch, in cross section:** Looking south



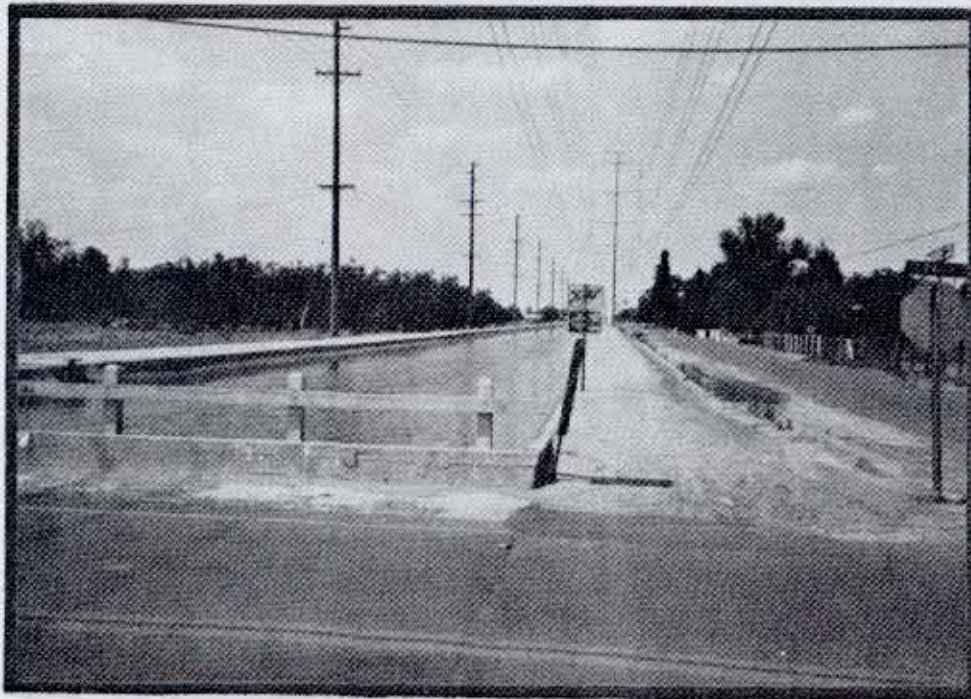


1

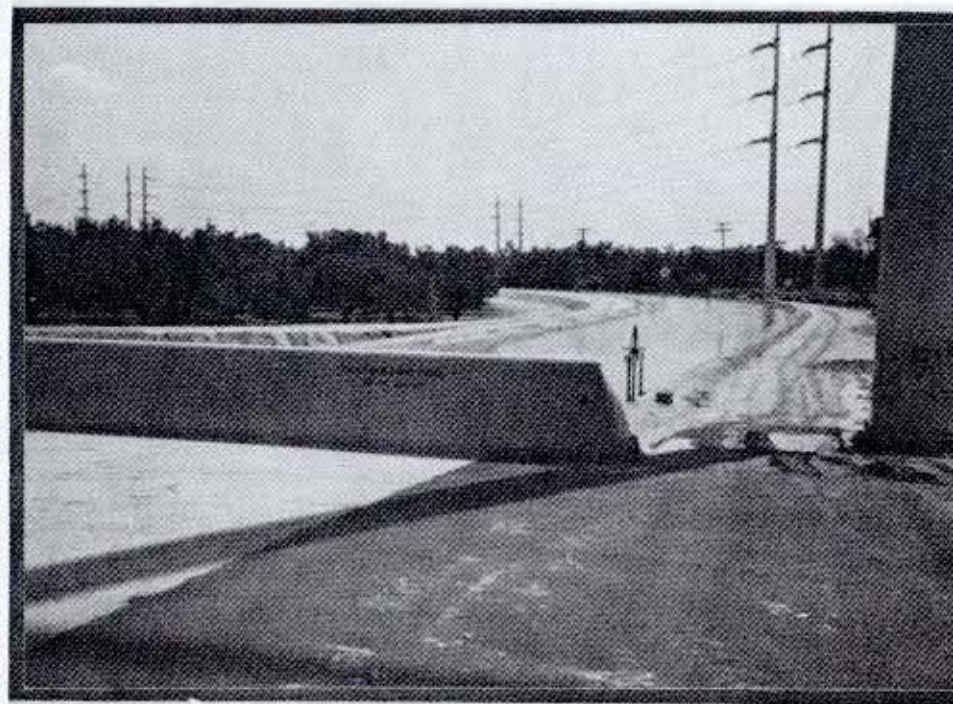
Photograph Number: 1
 Site Number: KT-8
 Common Name: Ceres Main Canal
 Camera Facing: East

Photograph Number: 2
 Site Number: KT-8(n)
 Common Name: Ceres Main Canal
 Camera Facing: North

Photograph Number: 3
 Site Number: KT-8
 Common Name: Ceres Main Canal
 Camera Facing: West

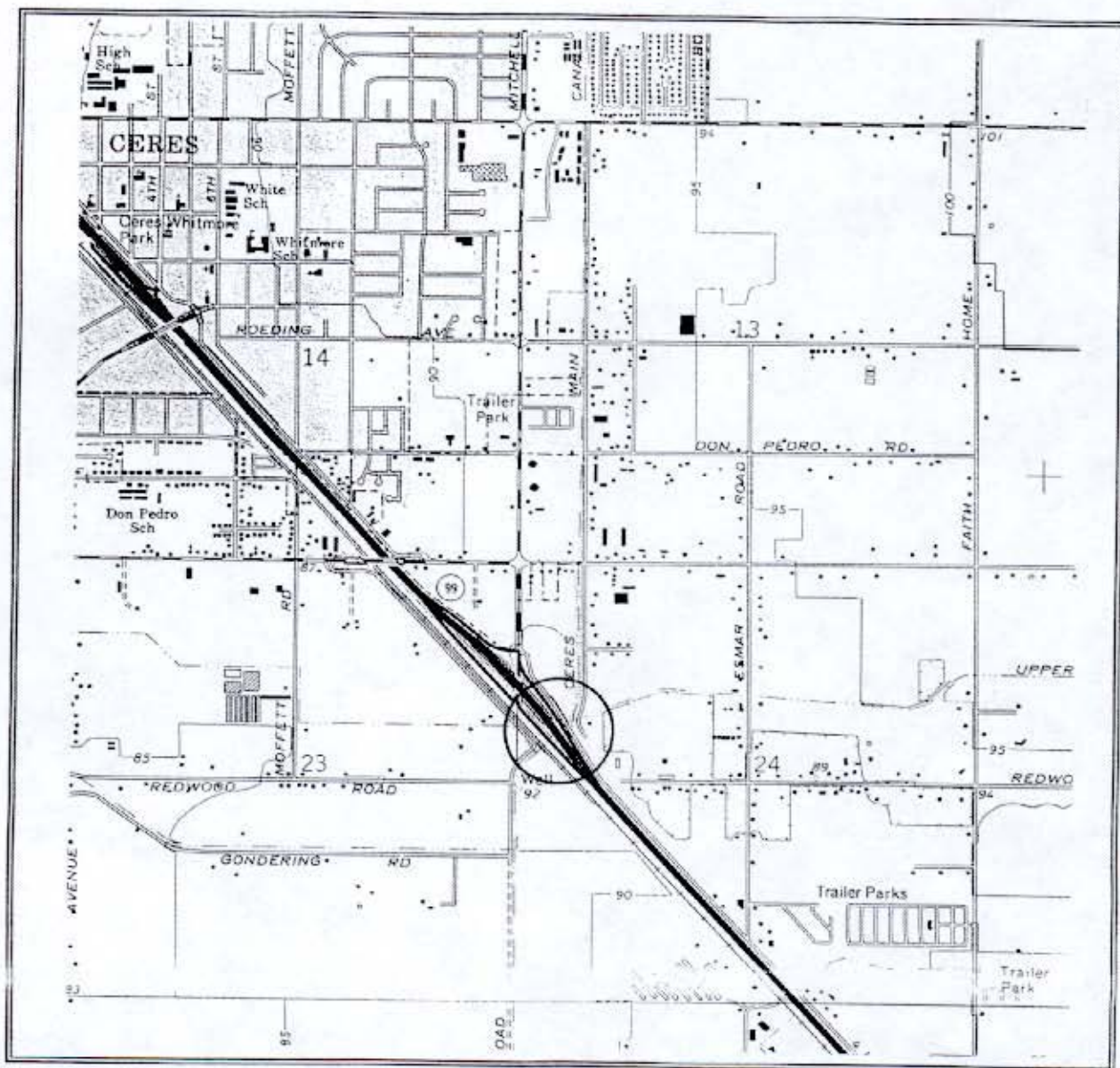


2



3

50000



SITE NAME: Ceres Main Canal, Turlock Irrigation District, Stanislaus County

SITE NUMBER: KT-8

QUAD SHEET: "Ceres Quadrangle," USGS: 1969, photorevised 1987

PIPELINE LOCATION: Milepost 197.9, Mainline

PRIMARY RECORD

Primary # *P-50-000073*
HRI #

Trinomial
NRHP Status Code

Other Listings
Review Code

Reviewer

Date

Page 1 of 6

*Resource Name or #: T.I.D. Lateral No. 2

(Lower)

8/13

P1. Other Identifier:

*P2. Location: ☐ Not for Publication ☒ Unrestricted

*a. County: Stanislaus

and (P2b and P2c or P2d. Attach a Location Map as necessary.)

*b. USGS 7.5' Quad: *Ceres and Brush Lake* Date: 1987 and 1986 T 4S; R 9E; Sections 19, 20, 21; M.D.B.M.

c. Address: Lateral No. 2/Lower Lateral No. 2

City: Ceres

Zip:

d. UTM: Zone: 10 ; mE/ mN (G.P.S.)

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate) Elevation: Irrigation canal paralleling Redwood Road.

*P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries) Turlock Irrigation District's (TID) Lateral No. 2 connects at the eastern end to the Turlock Main Canal. The segment of the canal recorded begins where the Union Pacific railroad intersects Lateral No. 2 and continues west until Carpenter Road. This portion of Lateral No. 2 connects on the eastern end at the Ceres Main Canal and Laird Slough on the western end. At Crow's Landing, Lateral No. 2 is called Lower Lateral No. 2. Lateral No. 2 was completed in 1899 (Paterson 1989). Originally, Lateral No. 2 was an open dirt canal which was constructed by Fresno scrapers. Parts of the TID canals were lined with cobbles after initial construction to improve water flow. Beginning in the 1920's the TID began a long-term program of canal improvement that focused on the installation of concrete lining which would improve water flow, reduce loss from seepage, and reduce maintenance. The easternmost section of Lateral No. 2 that is recorded here is located between the Union Pacific Railroad line and Crow's Landing Road and was lined with concrete in 1953. Approximately one mile west of Crow's Landing Road at Ustick Road, the concrete lining was installed by 1961. Concrete lining was installed in Lateral No. 2 at Carpenter Road by 1964. Even with this concrete lining, irrigation canals require maintenance and repair on a periodic basis. Several patched cracks were observed along this lateral. In addition to the actual canal, the recorded segment of Lateral No. 2 includes several check dams: D7, D8, D9, D10, and D11.

*P3b. Resource Attributes: (List attributes and codes) HP 20

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

P5a. Photo or Drawing (Photo required for buildings, structures, and objects.)



P5b. Description of Photo: (View, date, accession #) March 16, 2009, View to the west.

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

*P7. Owner and Address:

Turlock Irrigation District
333 East Canal Drive
P.O. Box 949
Turlock, CA 95381-0949

*P8. Recorded by: (Name, affiliation, and address)

Natalie Lawson/Jessica Feldman
CH2M HILL
6 Hutton Centre, Suite 700
Santa Ana, CA 92707

*P9. Date Recorded: March 16, 2009

*P10. Survey Type: (Describe):
Pedestrian survey

*P11. Report Citation: (Cite survey report and other sources, or enter "none.") TID Almond Power Plant No. 2, AFC Application

*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):

BUILDING, STRUCTURE, AND OBJECT RECORD

Page 2 of 6

*NRHP Status Code

*Resource Name or # (Assigned by recorder)

B1. Historic Name: T.I.D Lateral No. 2

B2. Common Name: Lateral No. 2/Lower Lateral No. 2

B3. Original Use: Irrigation canal

B4. Present Use: Irrigation canal

*B5. Architectural Style:

*B6. Construction History: (Construction date, alterations, and date of alterations) Constructed 1899

*B7. Moved? ☒ No ☐ Yes ☐ Unknown Date:

Original Location:

*B8. Related Features: Check dams and drains.

B9a. Architect:

b. Builder: Turlock Irrigation District

*B10. Significance: Theme: Irrigation/Agriculture

Area: Ceres and Turlock

Period of Significance: 1905-1920

Property Type: Irrigation canal

Applicable Criteria:

(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

The recorded segment of the TID canal Lateral No. 2/Lower Lateral No. 2 between the Union Pacific Railroad line and Carpenter Road does not appear to meet the criteria for listing in the National Register of Historic Places. It is located west of Turlock in the Central Valley, and it is in the context of the TID that the canal is evaluated. See continuation sheet.

B11. Additional Resource Attributes: (List attributes and codes)

*B12. References: Paterson, A.M. 1989. Land, Water, and Power: A History of the Turlock Irrigation District 1887-1987. The Arthur H. Clark Company, Spokane, Washington.

B13. Remarks:

*B14. Evaluator:

*Date of Evaluation:

(This space reserved for official comments.)

(Sketch Map with north arrow required.)

*Recorded by: N. Lawson

*Date: 3/16/09

☒ Continuation

☐ Update

Historic Context

The Central Valley is defined historically by agriculture and transportation. The area around Modesto and Ceres is no exception. In addition to the railroads, such as the Central Pacific and the Western Pacific, ferries serviced the area via several ferry landings and the Tuolumne and the San Joaquin Rivers. The road that would eventually become State Route 99 was planned and permitted in the late 1800's, although the paved highway was not completed until 1968. Ceres was first settled in 1870 and by 1872, the CPRR stopped at Ceres. Wheat was planted on thousands of acres in the region. The settlement of Crow's Landing was founded by J.B. Crow, one of the first wheat growers in the area. Crow established a landing on the San Joaquin River to ship his wheat to market and Crow and his two partners operated a ferry at that landing from 1870 until 1885 (Napton 1991). Crow's Landing Road represents the original road which connected two ferries, the Davis and Maze's Ferry on the Tuolumne and the Fairbank's Ferry on the San Joaquin. This main road was established in 1870. Several small taverns were constructed along this main road and served as way stations for (Brotherton 1982).

Hot dry summers and over cultivated lands made wheat growing less and less prosperous as the 19th century drew to a close. In 1887, the Wright bill, a bill that proposed the creation of irrigation districts in California, passed the California Senate and Assembly and was signed into law by then Governor Washington Bartlett. Local irrigation districts, including the TID and the Modesto Irrigation District (MID), created water conveyance systems in the early 1900s and started the flow of water into the area. Farmers began to diversify their crops and experimented with fruit and nut trees that did not require as much water as wheat. The combined efforts of the TID and the MID resulted in the construction of the La Grange Dam in 1893. The promise of water and cheap land brought an influx of settlers into the area. Expanding rail lines and ferry service made travel into the region easier.

In 1900, the area was still a big grain farming region. Irrigation, however, allowed the planting of orchards, vineyards, and row crops which were better suited to farmers able to devote a few acres and put considerable effort into them rather than to the large grain fields planted and harvested by transient hired hands. Small farms meant more people, more towns, and more trade. This vision of irrigation propelled the local crusade for the Wright Act and became a part of the national reclamation movement for a federal irrigation program. In 1901, only 3700 acres were irrigated by the TID in the northern part of the district. A scant two years later 10,000 acres were irrigated and by 1908, the TID provided water to almost 58,000 acres (Hohenthal 1971:207).

Settlers to the area, unless they bought property adjacent to the TID canals, faced the prospect of creating ditches which connected to the lateral canals of the TID. Farmers depended on the so-called community ditch system to connect their farms to the water supply. The community ditches, hundreds of miles of them were built and maintained by the irrigators using them, generally without any formal organization. Once water reached a farm, it could be sent into crop fields in a number of ways. One was called "wild flooding". In this method, supply ditches running along the high ground were temporarily dammed to divert small streams into field ditches dug down the slopes. These smaller ditches were plugged at intervals to force water out onto the field, letting the water flood down the hill without restraint. Another method, furrow irrigation, sent a small head of water through the rows of crops or orchards. The check method of flooding and its variants divided the land into a series of level basins or checks that were surrounded by levees. A large flow of water was turned into each check until the area was just covered by water. By the time irrigation reached the TID area, the standard practice was to create checks of up to one acre (Paterson 1989: 123).

The TID system began a revolution in the region's agriculture. The system formed the basis for new industries and caused the reduction in the size of landholdings as the large ranches of the late 1800s were broken into small parcels with dairies, orchards, and row crops. New towns were founded and wheat was replaced by melons, grapes, and peaches.

CONTINUATION SHEET

Primary #
HRI#

P-50-000073

Trinomial

Page 4 of 6

*Resource Name or # (Assigned by recorder) T.I.D. Lateral No. 2/Lower Lateral No. 2

*Recorded by: N. Lawson

*Date: 3/16/09

☒ Continuation

☐ Update

New settlers in the area first planted alfalfa, raised a few dairy cows, and sold cream to the nearest creamery. Others raised poultry. Both practices readily raised needed cash. In the first few years of irrigation in the TID, alfalfa was the main crop. It grew readily, could usually be cut twice in its first year and would yield about four cuttings annually thereafter, thus producing approximately five to six tons of good quality hay per acre. Alfalfa acreage peaked in 1914 at approximately 72 percent of the acreage, or 68,000 acres, in the TID. It rapidly decreased in acreage, accounting for less than 31,000 acres in 1920. Between 1911 and 1925, the Turlock was called the Watermelon Capitol of the World. After the lowering of the water table, however, the melon boom in the TID quickly faded. For a time, grapes were a major fruit crop of the region following the decline of melons. Orchard land reached just over 5000 acres in 1920 and grew to 11,500 acres in 1927. Although the acreage devoted to grapes declined for a time in the 1930's, ultimately acreage devoted to vineyards grew again until the 1970s (Hohenthal 1971: 214).

By 1912, the Tidewater Southern Railroad connected Modesto with Stockton. This line operated as a freight feeder system and connected with the Western Pacific Railroad at Manteca Junction. Modesto was connected with Turlock via rail by 1916 (Paterson 1989) providing easy access to rail lines for local growers. A rise in canneries throughout the region provided convenient buyers for local fruit and vegetable sellers who, prior to the opening of the canneries had to haul their figs, apricots, and peaches to San Jose or Santa Clara for processing.

The main Turlock diversion canal leads from the La Grange Dam along the south bank of the Tuolumne River for approximately 7 miles to Turlock Lake, historically known as Owen Reservoir. The Main Supply Canal diverts near the western end of Turlock Lake, and carries water to the northeastern edge of the TID. At this point, the Ceres Main Canal carries the water west to the highland above the Tuolumne channel and south through the center of the TID. The Turlock Main Canal diverst at the same gate as the Ceres Main, flows south for approximately 10 miles, and then the main laterals divert the water at intervals of two and three miels, running west to the San Joaquin River (Hohenthal 1972).

Until the late 1930's, concrete lining predominated canal improvement work. By 1940, only 20 miles of the 132 miles of improved community ditches had pipelines. During the 1944-1945 growing season, a short stretch of concrete lining was removed from a community ditch to make way for underground pipe and from this project, the trend continued. By 1951, the local improvement districts had more miles of pipeline than concrete lined open canals. The TID canals, however, remained open canals. By 2002, only 3 miles of the 250 miles of TID canals have been replaced with pipeline (TID documents). Local community ditches, however, have been largely replaced with underground pipe line, and only the relief standpipes and gate structures of these underground lines are visible (Paterson 1989:263).

Period of Significance

From the standpoint of agriculture, which was the primary occupation of the people that settled the TID region, the years from 1900 to 1920 were the ones of growth and development. These were the pioneering times when many families livened in one end of a barn while their cattle resided in the other end until the family could afford a barn and a house. World War I brought a sharp increase in the price of agricultural products and the local gross farm income soared from 14,300,000 dollars in 1910 to 34,204,000 dollars in 1919. Prices crashed in 1920 and did not recover until World War II (Hohenthal 1972: 217).

Lateral No. 2 was completed in 1899, thus making irrigation agriculture and farm settlement possible. Although the lateral was completed in 1899, the first irrigation waters did not flow until 1900. Using 1900 to 1920 as the period of significance effectively captures the important historical context of the historic built environment in the immediate project area. Buildings, farms, and associated outbuildings were constructed in direct response to the presence of Lateral No. 2 and the sale of smaller parcels, such as 40, 60, and 80 acres.

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

Primary #
HRI#
Trinomial

P-50-000073

Page 5 of 6

*Resource Name or # (Assigned by recorder) T.I.D. Lateral No. 2/Lower Lateral No. 2

*Recorded by: N. Lawson

*Date: 3/16/09

☒ Continuation

☐ Update

Lateral No. 2 was originally an open earth canal that was later improved with concrete lining beginning in the 1950s and continuing through 1970. Over the decades, the concrete lining was repaired and maintained. Repairs and upgrades to the check dams and flow controls along the canal have occurred over the decades, as well. The canal segment recorded here possesses integrity of location, as it is in the same location as when it was originally constructed in 1899. However, the canal only retains some integrity of setting. Although a part of the area of the recorded canal segment remains predominately rural farmland, several post 1920 structures are located in the vicinity of the canal, including industrial and agri-business development. Additional roads cross the canal and The canal has sustained a loss of integrity of materials and workmanship as it is no longer an open earth canal, but rather lined with concrete which has been continually repaired and maintained. Also, although the check dams retain much of their original construction, all have been upgraded and modern metal bridges have been added at each dam. The canal segment does retain some integrity of association, as the canal segment is still used for irrigation. Since the materials and workmanship of this canal segment have been replaced with more modern materials, the canal no longer retains integrity of feeling of the TID area before 1920. This recorded segment does not retain the essential physical features that made up its character or appearance during the period of its association.

The canal segment being a very small part of a much larger canal system, does not itself convey clear association with significant trends in agriculture on a national level (Criterion A), nor is it associated with individuals that made a significant contribution to history at the local, state or national level (Criterion B). The canal segment is not an important example of a type or method of construction (Criterion C) and because of repeated repairs and extensive upgrades, it can not serve as a source of important information about historic canal construction or technology (Criterion D). Thus, this segment does not appear to meet the criteria for listing in the National Register of Historic Places.

This canal segment was evaluated in accordance with Section 15064.5 (a)(2)-(3) of the CEQA Guidelines, using the criteria outlined in Section 5024.1 of the California Public Resources Code. This canal segment does not appear to meet any of the significance criteria as outlined in these guidelines.

References Cited or Consulted

Brotherton, J. 1982. *Annals of Stanislaus County, Volume I: River Towns and Ferries*. Western Tanager Press, Santa Cruz.

Hohenthal, H.A., J.E. Caswell, and V. Sonntag. 1972. *Streams in a Thirsty Land*. City of Turlock, California.

National Register Bulletin, No. 15. How to Apply the National Register Criteria for Evaluation. 1990. National Park Service.

Paterson, A.M. 1989. *Land, Water, and Power: A History of the Turlock Irrigation District 1887-1987*. The Arthur H. Clark Company, Spokane, Washington.

LOCATION MAP

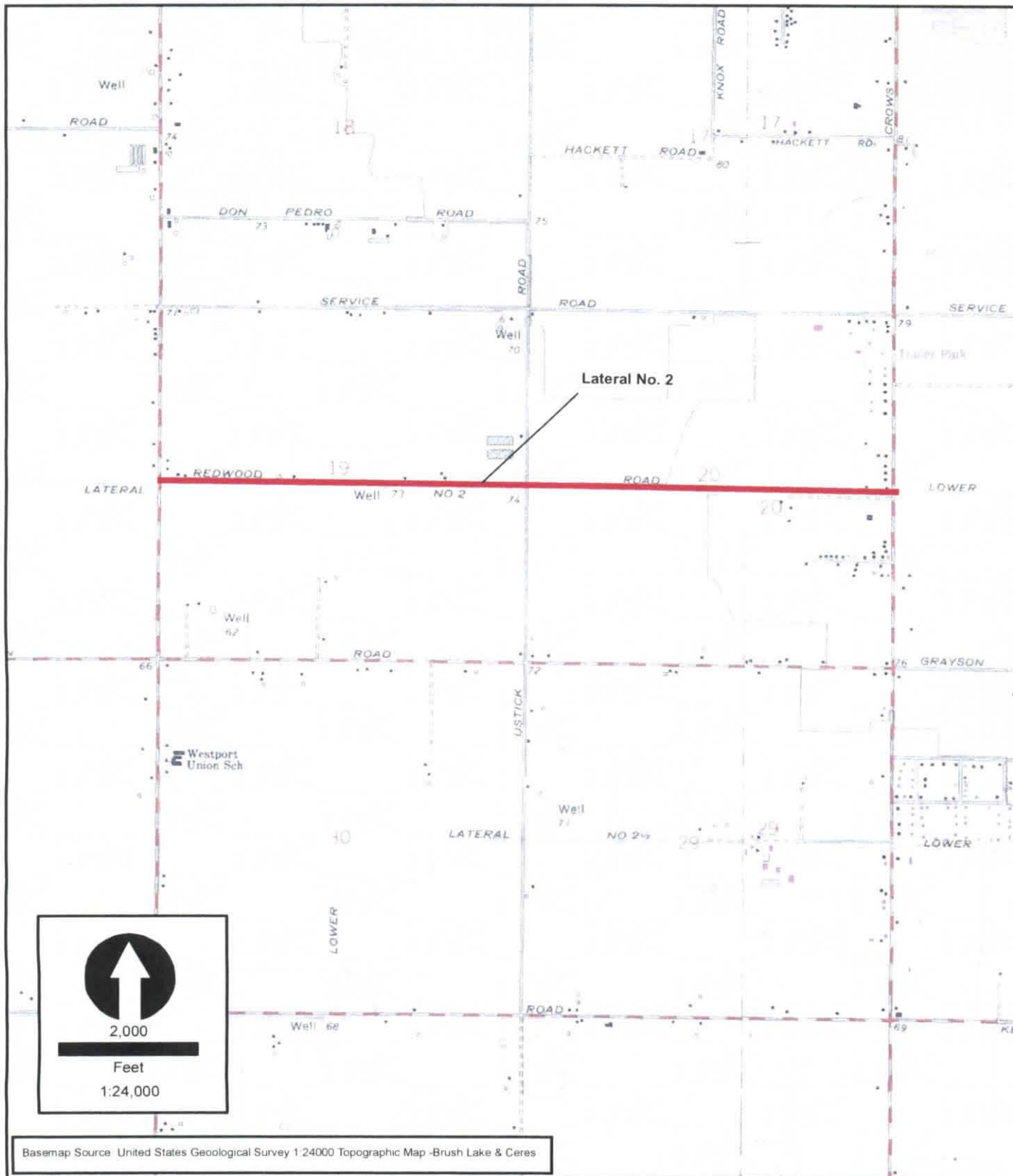
Page 6 of 6

Resource Name or #: T.I.D Lateral No. 2

Map Name: Brush Lake & Ceres 7.5 min USGS Topographic Quadrangle

Scale: 1:24000

Date of Map: 1976 & 1987



Basemap Source: United States Geological Survey 1:24000 Topographic Map -Brush Lake & Ceres

State of California – The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary #
HRI #
Trinomial
NRHP Status Code 6Z

Other Listings
Review Code

Reviewer

Date

Page 1 of 3

*Resource Name or #: Keyes Road Bridge (Bridge No. 38C-193)

P1. Other Identifier:

*P2. Location: ☐ Not for Publication ☒ Unrestricted *a. County: Los Angeles

*b. USGS 7.5' Quad: Ceres Date: 1969 Township 4S, Range 9E, SW ¼ of SE ¼ Section 25 M.D.B.M.

c. Address: N/A

City: Ceres

Zip: 95307

d. UTM: Zone: mE/ mN (G.P.S.)

e. Other Locational Data: Located on either side of Keyes Road, approximately 0.5 miles west of Prairie Flower Road.

***P3a. Description:**

The subject resource is a two-lane concrete slab bridge carrying Keyes Road over the Ceres Main Canal. Following an east-to-west alignment, it measures approximately 27' long and 32' wide, including narrow shoulders on either side of the asphalt-paved roadway. Its head and tail walls are constructed of concrete and form walls of about 2' in height flanking the roadway. The head and tail walls are contiguous with the concrete-lined banks of the canal. The driving surface is level and runs flush with the approaching road on either end. Further details regarding the design of the bridge could not be ascertained due to the relatively high water level at the time of the field survey.

*P3b. Resource Attributes: HP39. Bridge

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

P5a. Photo or Drawing



P5b. Description of Photo:

State Bridge No. 38C-193; camera facing southwest.

*P6. Date Constructed/Age and Sources:

☒ Historic ☐ Prehistoric ☐ Both

1920 (Caltrans n.d.)

*P7. Owner and Address:

N/A

*P8. Recorded by:

James Williams
Rincon Consultants
250 E. First Street, Ste. 1400
Los Angeles, CA 90012

*P9. Date Recorded:

May 9, 2019

*P10. Survey Type:

Intensive

***P11. Report Citation:**

Haas, Hannah et al. *Cultural Resources Technical Memorandum for the Keyes Road over Turlock Irrigation District Ceres Main Canal Bridge Replacement Project, near the Community of Keyes, Stanislaus County, California*. 2019. Prepared for Stanislaus County Public Works by Rincon Consultants, Inc.

*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 X Natural Resources Agency
DEPARTMENT OF PARKS AND RECREATION
LOCATION MAP

Primary #
HRI#
Trinomial

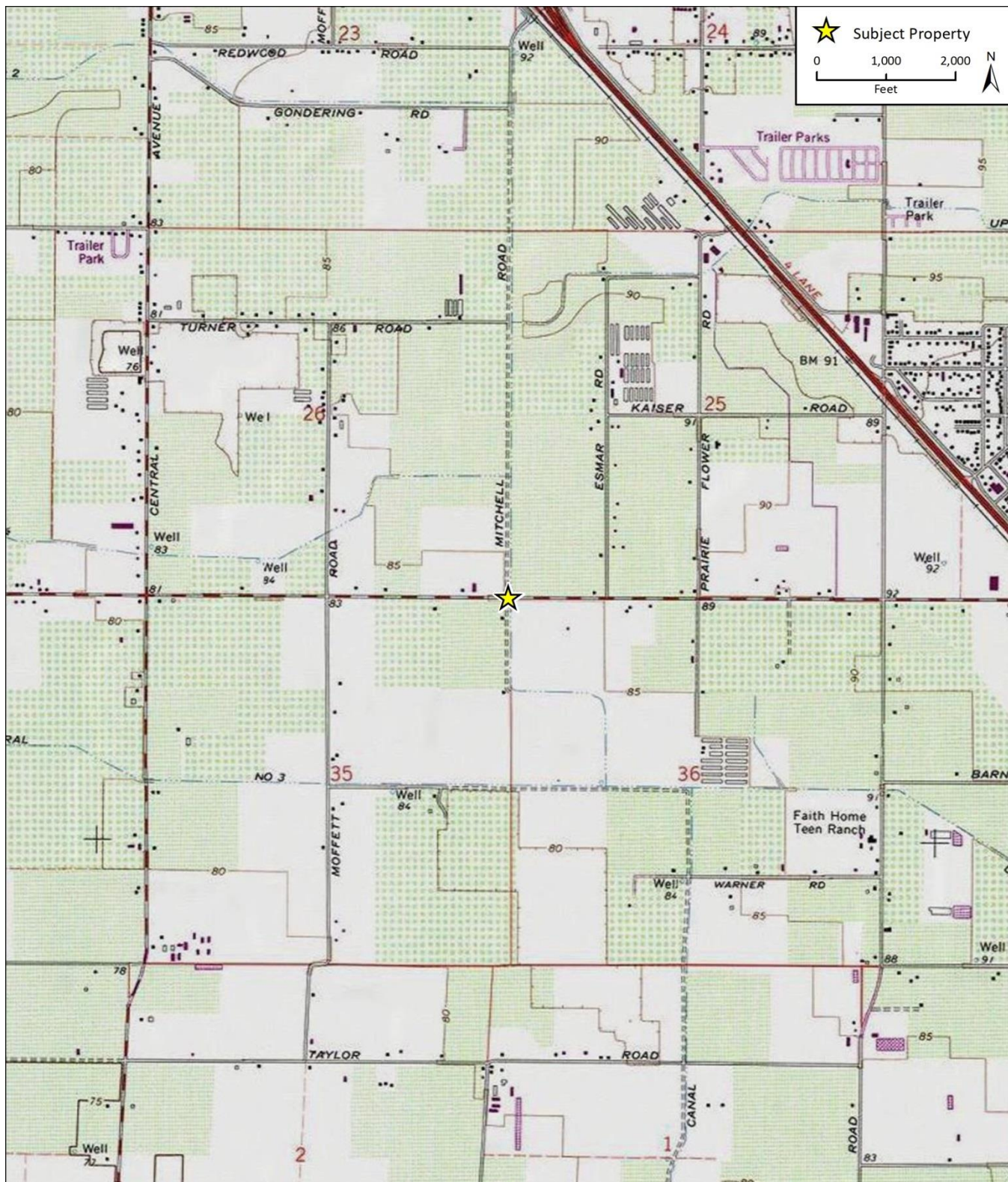
Page 2 of 3

* Map Name: *Ceres*

* Scale: 1:24,000

* Resource Name or # Keyes Road Bridge (Bridge No. 38C-193)

* Date of map: 1969



BUILDING, STRUCTURE, AND OBJECT RECORD

* **Resource Name or #** Keyes Road Bridge (Bridge No. 38C-193)

* **NRHP Status Code** 6Z

Page 3 of 3

B1. Historic Name: N/A
B2. Common Name: Keyes Road Bridge
B3. Original Use: Vehicular bridge
B4. Present Use: Vehicular bridge
* **B5. Architectural Style:** N/A
* **B6. Construction History:**

The bridge was completed in 1920 (Caltrans n.d.). Aside from the repaving of the roadway, there are no visible alterations.

* **B7. Moved?** ☐ No ☐ Yes ☐ Unknown **Date:** N/A **Original Location:** N/A

* **B8. Related Features:** None

B9a. Architect: Unknown b. Builder: Unknown

* **B10. Significance:** Theme N/A Area N/A

Period of Significance N/A Property Type N/A Applicable Criteria N/A

Constructed in 1920, the subject resource is a two-lane concrete slab bridge that carries Keyes Road over the Ceres Main Canal (CMC) (Caltrans n.d.). The Turlock Irrigation District built the CMC and its main laterals in 1894, stimulating agricultural development in the surrounding area during the late nineteenth and early twentieth centuries. Historic topographical maps indicate a crossing was built at this location by 1916 (USGS 1916). That structure was replaced with the extant bridge, an event that coincided roughly with the lining of the CMC and its lateral canals with concrete during the 1920s (JRP 1993). Inexpensive and easy to construct, concrete slab bridges were built in California "throughout the twentieth century" and were particularly common in the Central Valley (Caltrans 1986; Caltrans 2003).

State Bridge No. 38C-193 is identified in the Caltrans *Historic Bridge Inventory*, which finds it ineligible for listing in the National Register (Caltrans n.d.). The present study concurs with this finding and also finds the bridge ineligible for listing in the California Register under any significance criteria. Although the bridge is associated with the Ceres Main Canal and, by extension, the development of agriculture in the section of Stanislaus County, research conducted for this study did not indicate it was important in this context. As a result, it does not appear eligible for listing under Criterion 1. Because available evidence did not suggest the bridge was associated with any individuals who made important contributions to local, regional, state, or national history, it does not appear eligible for under Criteria 2. The subject bridge is an undistinguished example of a concrete slab bridge, a bridge type that is ubiquitous in the region. As such, it does not embody the distinctive characteristics of a type, period, or method of construction, represent the work of a master, or possess high artistic values. Consequently, it does not appear eligible for listing under Criterion 3. Finally, a review of available evidence and records search results did not indicate that it may yield important information about prehistory or history. It therefore does not appear eligible under Criterion 4.

B11. Additional Resource Attributes: N/A

* **B12. References:**

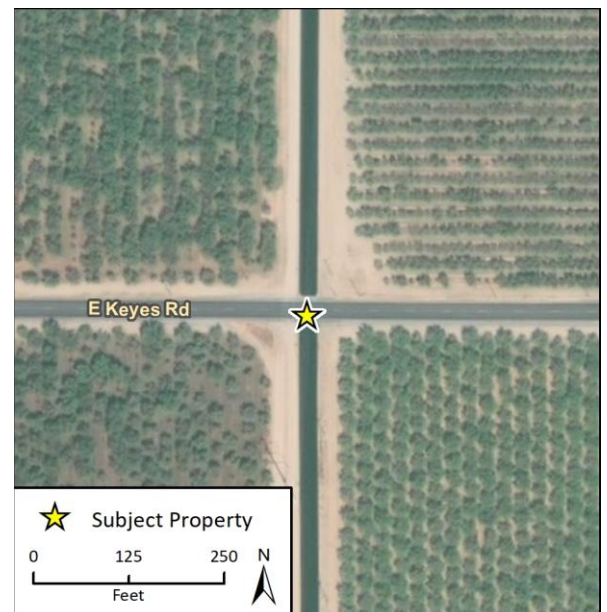
Caltrans. 1986. *Historic Bridges in California: Concrete Arch, Concrete Girder, Concrete Slab, Canticrete, Stone, Masonry, Suspension, Steel Girder and Steel Arch Thematic Determination of Eligibility*.
Caltrans. 2003. *Caltrans Statewide Historic Bridge Inventory Update: Metal Truss, Movable, and Steel Arch Bridges*. Prepared by JRP Historical Consulting, Inc. January.
Caltrans. n.d. *Historic Bridge Inventory: Structure Maintenance & Investigations, Historical Significance - Local Agency Bridges*.
JRP Historical Consulting, Inc. 1993. Evaluation of Ceres Main Canal, Turlock Irrigation District, Stanislaus County (P-05-000073). Record on file at the Central California Information Center, Turlock, CA.

B13. Remarks:

* **B14. Evaluator:** James Williams, Rincon Consultants

* **Date of Evaluation:** May 24, 2019

(This space reserved for official comments.)



Appendix D

Phase I Environmental Site Assessment



Phase I Environmental Site Assessment

Keyes Road at Turlock Irrigation District
Ceres Main Canal Bridge Replacement
Ceres, California

prepared for
Stanislaus County Public Works
1716 Morgan Road
Modesto, California 95358

prepared by
Rincon Consultants, Inc.

June 13, 2019



RINCON CONSULTANTS, INC.
Environmental Scientists | Planners | Engineers
rinconconsultants.com



Rincon Consultants, Inc.

4825 J Street, Suite 200
Sacramento,, California 95819

916 706 1374 OFFICE AND FAX

info@rinconconsultants.com
www.rinconconsultants.com

June 13, 2019
Project 18-07035

Paul Saini, PE, QSD/QSP, MBA
Stanislaus County Public Works
1716 Morgan Road
Modesto, California 95358

**Subject: Phase I Environmental Site Assessment
Keyes Road at Turlock Irrigation District Ceres Main Canal Bridge Replacement
Ceres, California**

Dear Mr. Saini:

This report presents the findings of a Phase I Environmental Site Assessment (ESA) completed by Rincon Consultants, Inc. for the Keyes Road at Turlock Irrigation District Ceres Main Canal Bridge Replacement Project in Ceres, California. The Phase I ESA was performed in accordance with our proposal and contract dated February 21, 2019.

The accompanying report presents our findings and provides an opinion regarding the presence of recognized environmental conditions. Our work program for this project, as referenced in our contract, is intended to meet the guidelines outlined in the American Society for Testing and Materials (ASTM), Standard Practice for Environmental Site Assessments: *Phase I Environmental Site Assessment Process* (ASTM Standard E-1527-13). Our scope of services, pursuant to ASTM practice, did not include any inquiries with respect to asbestos, lead-based paint, lead in drinking water, wetlands, regulatory compliance, cultural and historic resources, industrial hygiene, health and safety, ecological resources, endangered species, vapor intrusion or other indoor air quality, mold, or high-voltage power lines.

Thank you for selecting Rincon for this project. If you have any questions, or if we can be of any future assistance, please contact us.

Sincerely,
Rincon Consultants, Inc.

Lauren Kodama Roenicke
Environmental Scientist

Gib Fates, PG
Principal

Table of Contents

Executive Summary	1
Recognized Environmental Condition	1
Introduction	2
Purpose	2
Scope of Services	3
Significant Assumptions, Limitations, Deviations, Exceptions, Special Terms, and Conditions	4
User Reliance	4
Site Description	4
User-Provided Information	6
Records Review	7
Physical Setting Sources	7
Standard Environmental Record Sources	8
Additional Environmental Record Sources	9
Review of State of California Division of Oil, Gas, and Geothermal Resources Records	10
Review of National Pipeline Mapping System Records	10
Known or Suspect Contaminated Release Sites with Potential Vapor Migration	10
Historical Use Information on the Property and the Adjoining Properties	11
Interviews	14
Interview with Owner	14
Interview with Site Manager	Error! Bookmark not defined.
Interviews with Occupants	15
Interviews with Local Government Officials	15
Interviews with Others	15
Site Reconnaissance	16
Methodology and Limiting Conditions	16
Current Use of the Property and Adjacent Properties	16
Past Use of the Property and Adjacent Properties	16
Current or Past Uses in the Surrounding Areas	16
Geologic, Hydrogeologic, Hydrologic, and Topographic Conditions	16
General Description of Structures	16
Roads	17
Potable Water Supply	17
Sewage Disposal System	17
Interior and/or Exterior Observations	17
Evaluation	19
Findings	19
Opinions	19
Conclusions	19
Recommendations	19
Deviations	19



References 20

Signatures of Environmental Professionals 22

Qualifications of Environmental Consultants 23

Tables

Table 1 Current Uses of Adjacent Properties5

Table 2 EDR Listing Summary of Select Sites Within One-Eighth Mile of the Subject
Property9

Figures

Figure 1 Vicinity Map

Figure 2 Site Map

Figure 3 Adjacent Land Use Map

Figure 4 Site Photographs

Figure 5 Site Photographs

Appendices

Appendix A Interview Documentation

Appendix B Regulatory Records Search

Appendix C Historical Research Documentation



Executive Summary

This report presents the findings of a Phase I Environmental Site Assessment (ESA) for the Keyes Road bridge over the Turlock Irrigation District (TID) Ceres Main Canal property in Ceres, California (Figure 1, Vicinity Map). The Phase I ESA was performed for Stanislaus County by Rincon Consultants, Inc. (Rincon). Stanislaus County has requested this assessment and will use the information for the purposes of evaluating the bridge and surrounding land uses prior to reconstruction.

The subject property is located in an area that is primarily composed of orchards and rural residential land uses. Properties in the vicinity are primarily agricultural land. The current adjacent land uses are described in **Error! Reference source not found.** and depicted on Figure 3, Adjacent Land Use Map.

Rincon performed a reconnaissance of the subject property on May 1, 2019. The purpose of the reconnaissance was to observe existing conditions and to obtain information indicating the presence of recognized environmental conditions in connection with the subject property. The project site consisted of a short segment of Keyes Road bridged over the north-south trending TID water canal. The canal, the canal bridge, and several utility poles are the only structures within the project site boundaries. A water pump was present adjacent to the project site along the canal's western edge, approximately 100 feet north of the bridge. Lubricant containers were observed in the vicinity of the water pump; no evidence of spills or releases were observed.

A regulatory database search was conducted for sites that generate, store, treat or dispose of hazardous materials or sites for which a release or incident has occurred. The search was conducted for the subject property and included data from surrounding sites within a specified radius of the property. The subject property was not listed in any of the databases searched by EDR. One adjacent property, Home Ranch/Weststeyn Farm, was listed on the SWEEPS UST, Hist UST, CUPA Listings, and CERS databases. The property is not listed on any database indicating an unauthorized release has occurred, therefore the facility is not expected to impact the subject property.

Historical sources reviewed as part of the Phase I ESA include city directories, aerial photographs and topographic maps. The photos and maps reviewed indicate that the subject property has been occupied by a roadway, bridge, and canal since at least 1916. Land within the boundaries of the subject property adjacent to the bridge and canal has been used for agricultural purposes since at least 1937.

Based on the findings of this Phase I ESA, it is our opinion that there is one Recognized Environmental Condition in connection with the subject property as follows.

Recognized Environmental Condition

1. Current and historical agricultural use of the subject property

To evaluate the potential subject property impact associated with the historical agricultural use of the subject property we recommend collecting shallow soil samples to be analyzed for organochlorine pesticides and arsenic.



Introduction

This report presents the findings of a Phase I ESA conducted for the Keyes Road over Turlock Irrigation District (TID) Ceres Main Canal Bridge Replacement project in Ceres, California (Figure 1, Vicinity Map). The Phase I ESA was performed by Rincon Consultants, Inc. (Rincon) for Stanislaus County (Client) in general conformance with ASTM E 1527-13 and our proposal and contract dated February 21, 2019. The following sections present our findings and provide our opinion as to the presence of recognized environmental conditions on the subject property.

Purpose

Client has requested this assessment prior to replacement of a bridge spanning the Ceres Canal. The purpose of this Phase I ESA was to determine if there are recognized environmental conditions on the subject property, taking into account commonly and reasonably ascertainable information and to qualify for Landowner Liability Protections under the Brownfields Amendments to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

A recognized environmental condition (REC) is defined pursuant to ASTM E 1527-13 as,

“the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: 1) due to any release to the environment; 2) under conditions indicative of a release to the environment; 3) under conditions that pose a material threat of a future release to the environment”.

A Controlled REC is defined pursuant to ASTM E 1527-13 as,

“a recognized environmental condition resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority (for example, as evidenced by the issuance of a no further action letter or equivalent, or meeting risk-based criteria established by regulatory authority), with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls). A condition considered by the environmental professional to be a controlled recognized environmental condition shall be listed in the findings section of the Phase I Environmental Site Assessment report, and as a recognized environmental condition in the conclusions section of the Phase I Environmental Site Assessment report”.

A Historical REC is defined pursuant to ASTM E 1527-13 as,

“a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by regulatory authority, without subjecting the property to any required controls (for example, use restrictions, activity and use limitations, institutional controls, or engineering controls). Before calling the past release a historical recognized environmental condition, the environmental professional must determine whether the past release is a recognized environmental condition at the time the Phase I Environmental Site Assessment is conducted (for example, if there has been a change in the regulatory criteria). If the EP [Environmental Professional] considers the past release to be a



recognized environmental condition at the time the Phase I ESA is conducted, the condition shall be included in the conclusions section of the report as a recognized environmental condition”.

A *de minimis* condition is defined pursuant to ASTM E 1527-13 as,

“a condition that generally does not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. Conditions determined to be *de minimis* conditions are not recognized environmental conditions nor controlled recognized environmental conditions”.

Scope of Services

The scope of services conducted during this study is outlined below:

- Performed a reconnaissance of the subject property to identify obvious indicators of the existence of hazardous materials.
- Observed adjacent or nearby properties from public thoroughfares in an attempt to see if such properties are likely to use, store, generate, or dispose of hazardous materials.
- Obtained and reviewed an environmental records database search to obtain information about the potential for hazardous materials to exist at the subject property or at properties located in the vicinity of the subject property.
- Reviewed files for the subject property and immediately adjacent properties as identified in the database report, as applicable.
- Reviewed the current United States Geological Survey (USGS) topographic map to obtain information about the subject property and regional topography and uses of the subject property and surrounding sites.
- Reviewed additional pertinent record sources (e.g., California Division of Oil, Gas, and Geothermal Resources records, online databases of hazardous substance release sites), as necessary, to identify the presence of RECs at the subject property.
- Reviewed reasonably ascertainable historical resources (e.g., aerial photographs, topographic maps, fire insurance maps, city directories) to assess the historical land use of the subject property and adjacent properties.
- Provided a user interview questionnaire to a representative of the client, the user of the Phase I ESA.
- Provided a property owner interview questionnaire to the property owner or a designated subject property representative identified to Rincon by the client.
- Conducted interviews with other property representatives (e.g., key site manager, occupants), as applicable.
- Reviewed available client-provided information (e.g., previous environmental reports, title documentation).



Significant Assumptions, Limitations, Deviations, Exceptions, Special Terms, and Conditions

This work is intended to adhere to good commercial, customary, and generally accepted environmental investigation practices for similar investigations conducted at this time and in this geographic area. No guarantee or warranties, expressed or implied, are provided. The findings and opinions conveyed in this report are based on findings derived from a site reconnaissance, review of an environmental database report, specified regulatory records and historical sources, and comments made by interviewees. This report is not intended as a comprehensive site characterization and should not be construed as such. Standard data sources relied upon during the completion of Phase I ESAs may vary with regard to accuracy and completeness. Although Rincon believes the data sources are reasonably reliable, Rincon cannot and does not guarantee the authenticity or reliability of the data sources it has used. Additionally, pursuant to our contract, the data sources reviewed included only those that are practically reviewable without the need for extraordinary research.

Rincon has not found evidence that hazardous materials or petroleum products exist at the subject property at levels likely to warrant mitigation. Rincon does not under any circumstances warrant or guarantee that not finding evidence of hazardous materials or petroleum products means that hazardous materials or petroleum products do not exist on the subject property. Additional research, including surface or subsurface sampling and analysis, can reduce Client's risks, but no techniques commonly employed can eliminate these risks altogether.

In addition, pursuant to ASTM E 1527-13 practice, our scope of services did not include any inquiries with respect to asbestos-containing building materials, biological agents, cultural and historic resources, ecological resources, endangered species, health and safety, indoor air quality unrelated to release of hazardous substances or petroleum products into the environment, industrial hygiene, lead-based paint, lead in drinking water, mold, radon, regulatory compliance, wetlands, or high-voltage power lines.

User Reliance

Client has requested this assessment and will use the information for the purposes of purchasing or acquiring the subject property. This Phase I ESA was prepared for use solely and exclusively by Client. No other use or disclosure is intended or authorized by Rincon. Also, this report is issued with the understanding that it is to be used only in its entirety. It is intended for use only by the client, and no other person or entity may rely upon the report without the express written consent of Rincon.

Site Description

Location

The subject property includes the Keyes Road bridge over the TID Ceres Main Canal in Ceres, California and the area affected by reconstruction spanning approximately 0.10 mile to the east and west, and approximately 120 feet to the north and south of Keyes Road along the canal. The subject property encompasses approximately 1.75 acres and is illustrated on Figure 2, Site Map.



Subject Property and Vicinity General Characteristics

The subject property is currently developed with Keyes Road and a bridge over the TID Ceres Main Canal.

The subject property is located in an area that is primarily composed of orchards and rural residential land uses. Properties in the vicinity are primarily agricultural land. The current adjacent land uses are described in **Error! Reference source not found.** and depicted on Figure 3, Adjacent Land Use Map.

Table 1 Current Uses of Adjacent Properties

Area	Use
Northern Properties	Orchards and rural residential
Eastern Properties	Orchards and rural residential
Southern Properties	Orchards and rural residential
Western Properties	Orchards and rural residential

Descriptions of Structures, Roads, Other Improvements on the Subject Property

The project site consisted of a segment of Keyes Road bridged over the north-south trending TID water canal. Keyes Road was the only roadway running through or adjacent to the project site and the canal and canal bridge are the only structures within the project site boundaries. A water pump was present along the canal's western edge, approximately 100 feet north of the bridge, and several utility poles were present throughout the project site.

The following utility providers service the subject property area:

- Electrical Service – Turlock Irrigation District
- Natural Gas Service – Pacific Gas & Electric
- Water Service – City of Ceres
- Sewer Service – City of Ceres
- Solid Waste Service – Bertolotti Disposal

User-Provided Information

As described in ASTM E 1527-13 Section 6, Client was interviewed for actual knowledge pertaining to the subject property to help identify recognized environmental conditions. Paul Saini, Associate Civil Engineer for Stanislaus County Public Works, completed the User Questionnaire as provided by ASTM Appendix X3 on June 10, 2019. A copy of the completed questionnaire is included as Appendix A.

Based on our review of the completed questionnaire, the user did not review the following sources of information and is unaware of information regarding the following:

- Recorded land title records (or judicial records, where appropriate) that identify any environmental liens filed or recorded against the subject property
- Recorded land title records (or judicial records, where appropriate) that identify any activity and land use limitations (AULs), such as engineering controls, land use restrictions or institutional controls that are in place at the property and/or have been filed or recorded against the subject property under federal, tribal, state or local law
- Title Report that identifies information pertaining to environmental cleanup liens or AULs for the subject property

Based on our review of the completed questionnaire, the user is unaware of information regarding the following:

- Specialized knowledge or experience related to the subject property or nearby properties
- Reduction in value for the subject property relative to any known environmental issues
- Commonly known or reasonably ascertainable information about the subject property that would help the environmental professional to identify conditions indicative of releases or threatened releases
- Obvious indicators that point to the presence or likely presence of releases at the subject property
- Pending, threatened, or past litigation relevant to hazardous substances or petroleum products, in, on, or from the subject property
- Pending, threatened, or past administrative proceedings relevant to hazardous substances or petroleum products in, on, or from the subject property
- Notice from any government entity regarding any possible violation of environmental laws or possible liability relating to hazardous substances or petroleum products



Records Review

Physical Setting Sources

Topography

The current USGS topographic map (Ceres Quadrangle, 2012) indicates that the subject property is situated at an elevation of approximately 87 feet above mean sea level with relatively flat topography. The adjacent topography is relatively flat. Regional topography slopes gently towards the south.

Geology and Hydrogeology

According to the California Geologic Survey Note 36, California Geomorphic Provinces, the project site is located in the Central Valley Geomorphic Province. This province is characterized by an alluvial plain up to 400 miles long and 50 miles wide and is drained by the Sacramento and San Joaquin Rivers. Nearly constant sediment deposit since the Jurassic period has filled this trough with fertile alluvial sediment and created sedimentary rock deposits along the valley margins (CGS, 2002).¹

Site Geology

Rincon is not aware of any site-specific geotechnical or geologic reports available for the subject property.

According to *the Geologic Map of California, San Jose Sheet* (California Division of Mines and Geology, 1966), the subject property is underlain by Quaternary-age alluvial fan deposits of the Great Valley. These include sediments deposited during flood stages of major streams in areas between natural stream levees and fans.

Regional Groundwater Occurrence and Quality

The subject property is located within the Turlock subbasin of the San Joaquin Valley Groundwater basin.

The San Joaquin Valley is a structural trough up to 200 miles long and 70 miles wide and filled with up to 32,000 feet of marine and continental sediments deposited during periodic inundation by the Pacific Ocean and by erosion of the surrounding mountains. Continental deposits form an alluvial wedge that thickens from the valley margins toward the axis of the structural trough. The Turlock subbasin is bounded on the west by the San Joaquin River and on the east by crystalline basement rock of the Sierra Nevada foothills. The primary hydrogeologic units in the Turlock Subbasin include both consolidated and unconsolidated sedimentary deposits. The Corcoran aquitard underlies the western half of the subbasin at depths ranging from 50 to 200 feet bgs. Regional groundwater flow is typically to the southwest, following the dip of basement rocks and sedimentary units.

¹ https://www.conservation.ca.gov/cgs/Documents/Publications/Note_36.pdf



During the preparation of this Phase I ESA, we reviewed the California State Water Resources Control Board's (SWRCB's) online GeoTracker database to determine groundwater flow direction in the vicinity of the subject property:

According to the *Quarterly Groundwater Monitoring Report, Fourth Quarter, 2009, Former 7-Eleven Store 23108, 3240 Mitchell Road, Ceres, California*, prepared by Stantec and dated January 25, 2010, groundwater was reported to be between 34.5 and 36.65 feet below ground surface (bgs). Groundwater flow direction was not provided; however, as noted above, regional groundwater flow is expected to be towards the southwest. This property is located approximately 2.5 miles to the north-northwest of the subject property.

According to the SWRCB's Groundwater Ambient Monitoring and Assessment database, one well is located approximately 1,128 feet to the south-southeast from the subject property. Depth to water in the well was approximately 34.65 feet bgs.

Standard Environmental Record Sources

Environmental Data Resources, Inc. (EDR) was contracted to provide a database search of public lists of sites that generate, store, treat or dispose of hazardous materials or sites for which a release or incident has occurred. The EDR search was conducted for the subject property and included data from surrounding sites within specified radii of the property. A copy of the EDR report, which specifies the ASTM search distance for each public list, is included as Appendix B. As shown on the attached EDR report, federal, state and county lists were reviewed as part of the research effort. Please refer to Appendix B for a complete listing of sites reported by EDR and a description of the databases reviewed.

The Map Findings Summary, included in the EDR report, provides a summary of the databases searched, the number of reported facilities within the search radii, and whether the facility is located onsite or adjacent to the subject property. The following information is based on our review of the Map Findings Summary and the information contained in the EDR report.

Subject Property

The subject property was not listed on any of the regulatory databases reviewed.

Offsite Properties

Offsite properties listed by EDR fall under two general categories of databases: those reporting unauthorized releases of hazardous substances (e.g., Leaking Underground Storage Tank [LUST], National Priority List [a.k.a. Superfund sites], and corrective action facilities), and databases of businesses permitted to use hazardous materials or generate hazardous wastes, for which an unauthorized release has not been reported to a regulatory agency.

Rincon reviewed the EDR Radius Map and select detailed listings to evaluate their potential to impact the subject property, based on the following factors:

- Reported distance of the facility from the subject property
- The nature of the database on which the facility is listed, and/or whether the facility was listed on a database reporting unauthorized releases of hazardous materials, petroleum products, or hazardous wastes
- Reported case type (e.g., soil only, failed underground storage tank [UST] test only)



- Reported substance released (e.g., chlorinated solvents, gasoline, metals)
- Reported regulatory agency status (e.g., case closed, “no further action”)
- Location of the facility with respect to the reported groundwater flow direction (discussed in the Geology and Hydrogeology section of this report)

Facilities/properties that were interpreted by Rincon to be of potential environmental concern to the subject property, based on one or more of the factors listed above, are summarized in Table 2. In accordance with ASTM, contamination migration pathways in soil, groundwater, and soil vapor were considered in our analysis of offsite properties of potential environmental concern.

Table 2 EDR Listing Summary of Select Sites Within One-Eighth Mile of the Subject Property

Site Name	EDR Site ID	Site Address	Distance from Subject Property	Database Reference
Adjacent Property				
Home Ranch/Weststeyn Farm	A1, A2	3218 East Keyes Road	Adjacent Property – South and southwest	SWEEPS UST, Hist UST, CUPA Listings, CERS

Regulatory agency information reviewed for the listings in the table above are summarized in the Additional Environmental Record Sources section of this report.

Orphan Listings

EDR reported six orphan or unmapped site listings, which EDR is unable to plot due to insufficient address information. Based on Rincon’s review of the limited address information or site descriptions for the orphan listings, none of the listings are expected to impact the subject property.

Additional Environmental Record Sources

Review of Agency Files

As a follow-up to the database search, Rincon reviewed regulatory information for facilities within the specified search radii that were interpreted to have the potential to impact the subject property, based on one or more factors previously discussed (e.g., distance, open case status, upgradient location, soil vapor migration).

The following is a summary of our review of regulatory information obtained from review of online sources (e.g., California State Water Resources Control Board [SWRCB] GeoTracker database, Department of Toxic Substances Control [DTSC] EnviroStor database) and/or files requested from the applicable regulatory agency, as described below.

Subject Property

The subject property was not listed in any of the databases searched by EDR.



Adjacent Property

One adjacent property was listed in databases searched by EDR: Home Ranch/Weststeyn Farm was listed as a SWEEPS UST, Hist UST, CUPA Listing, and CERS site. These listings are not indicative of a release; however, they indicate that underground storage tanks have been present and hazardous materials and/or petroleum products may have been stored at the property.

According to the SWEEPS UST database, two 515-gallon USTs are present at the facility, one of which contains diesel and the other contains regular unleaded gasoline. According to the Hist UST database, the USTs are constructed of carbon steel and were installed in 1980. According to the CERS Tanks database, the property is listed as a chemical storage facility. Although one violation was noted, it was not indicative of an unauthorized release or threat of an unauthorized release. In addition, the property does not appear on any other database indicating an unauthorized release has occurred. Therefore, the facility is not expected to impact the subject property.

Upgradient Release Sites

None of the nearby listed sites are release sites.

Review of State of California Division of Oil, Gas, and Geothermal Resources Records

A review of the Department of Conservation, Division of Oil, Gas, and Geothermal Resources (DOGGR) Online Mapping System² indicates that the subject property is not located within an oil field and no oil wells are located on the subject property. One plugged well described as a dry hole is located on the adjacent property to the north and northwest. The plugged well is located approximately 620 feet north of the subject property. Based on distance and status the well is not expected to impact the subject property.

Review of National Pipeline Mapping System Records

A review of the National Pipeline Mapping System (NPMS) online Public Map Viewer³ indicates that no gas transmission pipelines or hazardous liquid pipelines are located on the subject property or adjacent property.

Known or Suspect Contaminated Release Sites with Potential Vapor Migration

The EDR report was reviewed to identify nearby known or suspect contaminated sites that have the potential for contaminated vapor originating from the nearby site to be migrating beneath the subject property. Based on the ASTM E 2600-15, *Standard Guide for Vapor Encroachment Screening on Property Involved in Real Estate Transactions*, the following minimum search distances were initially used to determine if contaminated soil vapors from a nearby known or suspect contaminated site have the potential to be migrating beneath the subject property:

² <https://maps.conservation.ca.gov/doggr/wellfinder/>

³ <https://www.npms.phmsa.dot.gov/PublicViewer/>



- 1/10 mile (528 feet) for petroleum hydrocarbons
- 1/3 mile (1,760 feet) for other contaminants of concern (COCs)

If upgradient known or suspect contaminated sites are located within the above referenced distances from the subject property, online resources are reviewed to determine the extent of the contaminated plume at those sites. The following describes search distances for contaminated plumes of petroleum hydrocarbons (30 feet from the subject property) and other COCs (100 feet from the subject property). Per ASTM E 2600-15, vapors associated with impacted soil or groundwater present within these distances have the potential to migrate beneath the subject property.

Petroleum Hydrocarbons

Based on our review of the EDR report information as indicated above, there are no upgradient known or suspect petroleum hydrocarbon-contaminated sites within 528 feet of the subject property. Therefore, per ASTM E 2600-15, as this distance exceeds the 30-foot distance considered the critical distance wherein such migration may pose a threat to the subject property, there are no potential threats to the subject property posed by the potential migration of petroleum hydrocarbon vapors from listed sites.

Other COCs

Based on our review of the EDR report, there are no upgradient known or suspect sites contaminated with other COCs within 1,760 feet of the subject property. Therefore, per ASTM E 2600-15, as this distance exceeds the 100-foot distance considered the critical distance wherein such migration may pose a threat to the subject property, there are no potential threats to the subject property posed by the potential migration of other COC vapors from listed sites.

Historical Use Information on the Property and the Adjoining Properties

The historical records review completed for this Phase I ESA includes aerial photographs, topographic maps, and city directories as detailed in the following sections. Copies of the historical resources reviewed are included in Appendix C.

Review of Aerial Photographs

Aerial photographs from EDR's aerial photograph collection were obtained. In addition, a current aerial from Google Earth was reviewed. The aerial photographs were reviewed on May 5, 2019.

Review of Historical Topographic Maps

Historical topographic maps from EDR's map collection were obtained. The historical topographic maps were reviewed on May 5, 2019.

Review of City Directory Listings

EDR was contracted to provide copies of city directory listings for the subject property. The city directory listings were reviewed on May 5, 2019.



Review of Fire Insurance Maps

As indicated in the attached report, fire insurance maps were not available for the subject property or adjacent properties.

Review of Building Permit Records

Based on the sufficient amount of information obtained from the above sources, building permit records were not reviewed.

Other Historical Sources

Based on the historical information obtained, no additional historical sources were reviewed.

Summary of Historical Uses

Subject Property

Based on our review of the documents listed above, it appears that the subject property has been occupied by a roadway, bridge, and canal since at least 1916. Land within the boundaries of the subject property adjacent to the bridge and canal has been used for agricultural purposes since at least 1937.

Northern Adjacent Property, West of Canal (2861 East Keyes Road)

Based on our review of the documents listed above, it appears that the northern adjacent property located on the west side of the canal was vacant in 1916 and has been used for agricultural purposes since at least 1937. Multiple small structures and barns appeared to be present on the property to the north of the western portion of the subject property in 1937. By 1950 several of the structures had been removed. By 1976 most of the original structures had been removed, with the exception of a house, and the existing structures appeared to be present.

Northern Adjacent Property, East of Canal (3175 East Keyes Road)

Based on our review of the documents listed above, it appears that the northern adjacent property located on the east side of the canal was vacant in 1916 and has been used for agricultural purposes since at least 1937. No structures were located on the property until at least 2016. By this time the existing structure had been constructed.

Southern Adjacent Property, West of Canal (2950 East Keyes Road)

Based on our review of the documents listed above, it appears that a small structure was present on the southern adjacent property located on the west side of the canal in 1916. The property has been used for agricultural purposes since at least 1937. Multiple small structures and a barn were present by 1937 on the west side of the property, near the canal and approximately 140 feet from the subject property. Several buildings were removed by 1957. The existing structure has been present since at least 1984.

Southern Adjacent Property, East of Canal (3218 East Keyes Road)

Based on our review of the documents listed above, it appears that the southern adjacent property located on the east side of the canal was occupied by a small structure near the southwestern



portion of the property by 1916. By 1937 the property was used for agricultural purposes. From at least 1937 through 1967 onsite structures were located at the southwestern corner of the property, at least 800 feet to the south of the subject property. By 1976 all structures had been removed. By 1984 the existing residence had been constructed near the center of the property, approximately 330 feet to the southwest of the subject property.

Gaps in Historical Sources

Several gaps of greater than five years were identified in the historical records reviewed, from 1916 to 1937, 1957 to 1967, 1969 to 1976, 1976 to 1984, 1987 to 1998, and 1998 to 2006. These gaps are considered insignificant because the subject property use appears to be similar prior to and following the gaps.



Interviews

Rincon performed interviews regarding the subject property and surrounding areas. The purpose of the interviews was to discuss current and historical conditions and to obtain information indicating the presence of recognized environmental conditions in connection with the subject property.

Interview with Owner/Site Manager

An interview questionnaire was provided to the property owner. Paul Saini, Associated Civil Engineer for Stanislaus County Public Works, completed the Owner Questionnaire on June 10, 2019. A copy of the completed questionnaire is included in Appendix A. The following information is based on our review of the completed questionnaire.

The property owner indicated the following:

- The subject property was used as a farm.
- The subject property and adjacent properties are currently zoned for agricultural/farmland.

The property owner indicated that he is unaware of the presence of industrial drums, storage tanks (above or below ground), fill dirt, pits, ponds, lagoons, sumps, clarifiers, solvent degreasers, stained soil, vent pipes, fill pipes, or access ways, stained surfaces, private wells, non-public water systems, transformers, capacitors, or hydraulic equipment, records indicating the presence of PCBs, or records indicating the presence of pesticides or herbicides at the subject property.

The property owner indicated that he is not aware of any pending, threatened, or past litigation or administrative proceedings relevant to hazardous substances or petroleum products in, on, or from the property. In addition, he is not aware of any notice from any government entity regarding any possible violation of environmental laws or possible liability relating to hazardous substances or petroleum products at the subject property.

An interview questionnaire was also provided to Turlock Irrigation District (TID). Todd Troglin, Supervising Engineering Technician for TID completed the Owner Questionnaire on June 12, 2019. A copy of the completed questionnaire is included in Appendix A. The following information is based on our review of the completed questionnaire.

The property owner indicated the following:

- The adjoining properties are currently being farmed as almond orchards.
- The portion of the subject property currently owned by TID is an irrigation canal and right-of-way for overhead electrical lines.
- The subject property and adjacent properties may have been used for dry farming and livestock grazing prior to construction of the canal in the early 1900s.
- TID owns the canal right-of-way, and Stanislaus County owns the Keyes Road right-of-way.
- Available records are not sufficient to identify where fill dirt was used to construct the canal bank. In addition, the source of the fill dirt is unknown.
- No electrical transformer is currently located onsite. Since there appears to have been no need for electrical service at the subject property, it is unlikely that electrical transformers were located on the subject property.



- Herbicides have been used for weed control on the canal banks. Aquatic herbicides have been used for aquatic weed control in the canal.

The property owner indicated that he is unaware of the presence of industrial drums, storage tanks (above or below ground), pits, ponds, lagoons, sumps, clarifiers, solvent degreasers, vent pipes, fill pipes, or access ways, stained surfaces, private wells, non-public water systems, or records indicating the presence of PCBs.

The property owner indicated that he is not aware of any pending, threatened, or past litigation or administrative proceedings relevant to hazardous substances or petroleum products in, on, or from the property. In addition, he is not aware of any notice from any government entity regarding any possible violation of environmental laws or possible liability relating to hazardous substances or petroleum products at the subject property.

Interviews with Occupants

Because no structures are present at the project site, no occupants were interviewed as part of this research effort.

Interviews with Local Government Officials

Since no release sites were located on or adjacent to the subject property, no government officials were interviewed.

Interviews with Others

Rincon did not attempt to interview neighboring property owners or others as part of this Phase I ESA.

Site Reconnaissance

Rincon performed a reconnaissance of the subject property on May 1, 2019 accompanied by Paul Saini, Associate Civil Engineer with Stanislaus County Department of Public Works. The purpose of the reconnaissance was to observe existing subject property conditions and to obtain information indicating the presence of recognized environmental conditions in connection with the property.

Methodology and Limiting Conditions

The site reconnaissance was conducted by:

1. Observing the subject property from public thoroughfares,
2. Observing the adjacent properties from public thoroughfares

Current Use of the Property and Adjacent Properties

The subject property is currently in use as a TID canal bridge. Adjacent businesses/properties include orchards and single-family residences.

Past Use of the Property and Adjacent Properties

Based on our site reconnaissance, past uses at the subject property and adjacent properties are not readily apparent.

Current or Past Uses in the Surrounding Areas

The subject property is surrounded by agricultural and rural residential land uses, as detailed in the Site Description section of this report. Past uses of the surrounding area are not readily apparent based on the site reconnaissance.

Geologic, Hydrogeologic, Hydrologic, and Topographic Conditions

Geologic, hydrogeologic, hydrologic, and topographic information are as previously stated in the Physical Settings Section of this report.

General Description of Structures

The project site consisted of a short segment of East Keyes Road bridged over the north-south trending TID water canal. The canal, the canal bridge, and several utility poles are the only structures within the project site boundaries. A water pump was present adjacent to the project site along the canal's western edge, approximately 100 feet north of the bridge.



Roads

East Keyes Road is the only roadway running through or adjacent to the project site.

Potable Water Supply

No potable water is supplied to the project site.

Sewage Disposal System

No sewage disposal system is present at the project site.

Interior and/or Exterior Observations

Hazardous Substances and Petroleum Products in Connection with Identified Uses

No hazardous substances or petroleum products were identified at the subject property.

Storage Tanks

During the site reconnaissance, one above-ground storage tank was observed northwest of the subject property. No other above-ground or below-ground tanks were reported by the subject property representative or observed during the site reconnaissance. Rincon did not observe indications of releases from the tank on the subject property.

Odors

During the site reconnaissance, Rincon did not identify any strong, pungent, or noxious odors.

Pools of Liquid

During the site reconnaissance, no pools of liquid were observed.

Drums

During the site reconnaissance, no drums were observed on the subject property.

Hazardous Substances and Petroleum Products Containers Not in Connection with Identified Uses

No hazardous substances or petroleum products not in connection with identified uses were observed at the subject property.

Unidentified Substance Containers

Unidentified substance containers or unidentified containers that might contain hazardous substances were observed during the site reconnaissance as follows:

- The water pump area contains small quantities of pump lubricants.



Rincon did not observe indications of releases from the unidentified containers identified above.

Indications of Polychlorinated Biphenyls (PCBs)

During the site reconnaissance, Rincon observed one transformer located west of the canal bridge along the northern side of East Keyes Road. Another transformer was observed south of the canal bridge along the eastern side of the canal. No indication of a release was observed in the vicinity of these transformers.

Other Conditions of Concern

During the site reconnaissance, Rincon did not note any of the following:

- Stains or corrosion
- Clarifiers and sumps
- Degreasers/parts washers
- Pools of liquid
- Pits, ponds, and lagoons
- Stained soil or stained pavement
- Stressed vegetation
- Solid waste/debris
- Wastewater
- Septic systems/effluent disposal system

Wells: A water pump was observed in proximity to the subject property, located approximately 100 feet north of the canal bridge.



Evaluation

Findings

Known or suspect recognized environmental conditions associated with the subject property include the following:

- Historical agricultural use of subject property and adjacent properties

Opinions

- A. **Historical agricultural use of the subject property.** According to the historical resources reviewed, portions of the subject property have been used appear to have been used for agricultural purposes since at least 1937. Agricultural land use is typically associated with the use of pesticides and arsenic. Therefore, the former use of the subject property for agricultural purposes is considered a *Recognized Environmental Condition*.

Conclusions

Rincon has performed a Phase I ESA in conformance with the scope and limitations of ASTM Practice E1527 for the Keys Road Bridge over the TID Ceres Main Canal, located in Ceres, California. Any exceptions to, or deletions from, this practice are described in the Deviations section of this report.

This assessment has revealed evidence of one REC in connection with the subject property as follows:

Recognized Environmental Condition

1. Current and historical agricultural use of the subject property

Recommendations

To evaluate the potential subject property impact associated with the historical agricultural use of the subject property we recommend collecting shallow soil samples to be analyzed for organochlorine pesticides and arsenic.

Deviations

A lien search was not completed as part of this assessment.



References

The following reference materials were used in preparation of this Phase I ESA:

Aerial Photographs

Photos provided by Environmental Data Resources, Inc. (EDR) on April 29, 2019.

City Directory Listings

Listings provided by EDR on April 29, 2019.

Environmental Database

EDR report dated April 26, 2019.

Geology

California Division of Mines and Geology, Geologic Map of California, San Jose Sheet, 1966.

California Geologic Survey (CGS), *California Geomorphic Provinces Note 36*, December 2002.

Groundwater

California Department of Water Resources (DWR), *California's Groundwater Bulletin 118*, January, 2006.

RWQCB online database (GeoTracker), <http://geotracker.waterboards.ca.gov/>. Accessed May 5, 2019.

RWQCB Groundwater Ambient Monitoring and Assessment (GAMA), https://www.waterboards.ca.gov/water_issues/programs/gama/online_tools.html. Accessed May 5, 2019.

Stantec, *Quarterly Groundwater Monitoring Report, Fourth Quarter, 2009, Former 7-Eleven Store 23108, 3240 Mitchell Road, Ceres, California*, January 25, 2010.

Historical Topographic Maps

Maps provided by EDR on April 26, 2019.

Oil and Gas Records

State of California, Division of Oil, Gas, and Geothermal Resources (DOGGR) website: <http://www.consrv.ca.gov/DOG/index.html>. Accessed May 5, 2019.

Pipelines

National Pipeline Mapping System (NPMS) Public Map Viewer, <https://www.npms.phmsa.dot.gov/PublicViewer/>. Accessed May 5, 2019.



Topography

USGS topographic map (2012, Ceres Quadrangle).



Signatures of Environmental Professionals

The qualified environmental professional that is responsible for preparing the report include Gib Fates and Lauren Kodama Roenicke. Their qualifications are summarized in the following section.

“We declare that, to the best of our professional knowledge and belief, we meet the definition of Environmental Professional as defined in 312.10 of 40 CFR 312. We have the specific qualifications based on education, training and experience to assess a property of the nature, history, and setting of the subject property. We have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.”

Signature	Date
Gib Fates, PG	Principal
Name	Title
Signature	Date
Lauren Kodama Roenicke	Environmental Scientist
Name	Title



Qualifications of Environmental Consultants

The environmental consultants responsible for conducting this Phase I ESA and preparing the report include Walt Hamann, Jennifer Bauer Morton, and Lance Park. Their qualifications are summarized below.

Environmental Professional Qualifications	X2.1.1 (2) (i) - Professional Engineer or Professional Geologist License or Registration, and 3 years of full-time relevant experience	X2.1.1 (2) (ii) - Licensed or certified by the Federal Government, State, Tribe, or U.S. Territory to perform environmental inquiries	X2.1.1 (2) (iii) – Baccalaureate or Higher Degree from and accredited institution of higher education in a discipline of engineering or science and the equivalent of 5 years of full-time relevant experience	X2.1.1 (2) (iii) – Equivalent of 10 years of full-time relevant experience
Gib Fates	PG		MS Geology	36 years
Lauren Kodama Roenicke			BS Environmental Studies	6 years
Lance Park			MA International Environmental Policy	2 years

Gib Fates is a Senior Geologist and Principal with Rincon Consultants. He holds a Master's Degree in geology and is a registered Professional Geologist in California. Mr. Fates possesses over 36 years of experience in environmental consulting, encompassing environmental program/project management and implementation of groundwater, hazardous waste and geologic investigations and environmental remediation efforts. He provides consulting services to a diverse range of clients in the public and private sectors with specific expertise in environmental program strategy development and regulatory negotiation, pre-acquisition or pre-divestiture due diligence evaluations, complex site characterization efforts, and water quality and hydrogeologic evaluations. He has provided consulting services in support of a wide variety of projects, including infrastructure, commercial and residential development, oil and gas, manufacturing and waste management, including state and federal Superfund sites.

Lauren G. Kodama Roenicke is an Environmental Scientist with Rincon Consultants. She holds a Bachelor of Science degree in Environmental Studies with an outside concentration of Ecology, Evolution, and Marine Biology from the University of California, Santa Barbara. Ms. Roenicke has experience working on Phase I Environmental Site Assessments for a variety of commercial, rural, and industrial properties. In addition, Ms. Roenicke has been involved in working on large scale, multi-site projects for developers, banks, regulatory agencies, and other public and private Clients. Ms. Roenicke's responsibilities at Rincon include implementation of Phase I and Phase II Environmental Site Assessment Reports, which involve soil, groundwater, and soil vapor assessments.

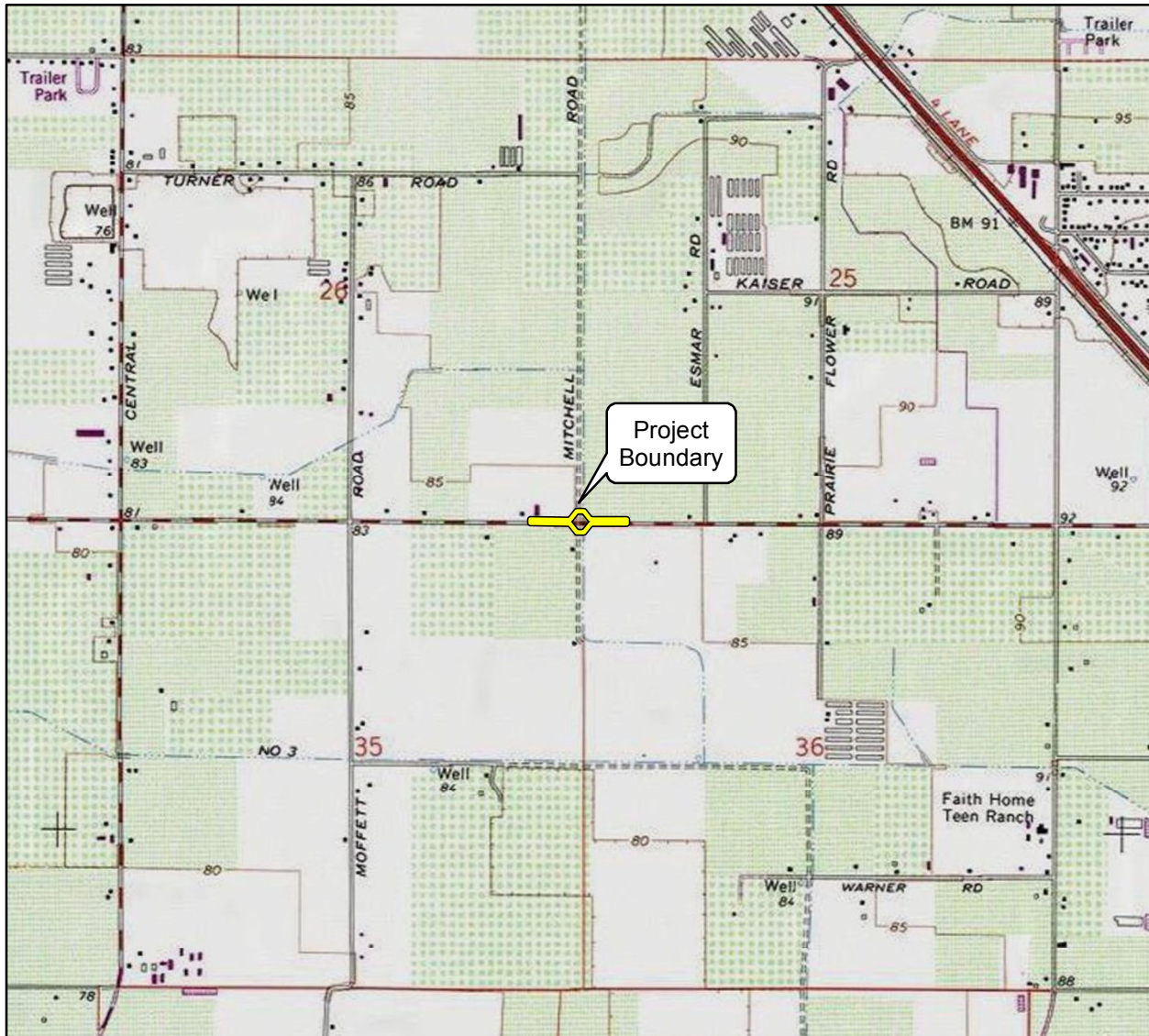


Lance Park is an Environmental Planner/Scientist with Rincon Consultants. He holds a Master of Arts degree in International Environmental Policy with a concentration in Ocean and Coastal Resource Management from the Middlebury Institute of International Studies. Mr. Park has experience working on Phase I Environmental Site Assessments for a variety of commercial, rural, and industrial properties. Mr. Park's responsibilities at Rincon include implementing Phase I Environmental Site Assessments and producing subsequent reports; monitoring Stormwater Pollution Prevention Plan assignments and producing subsequent reports; and conducting energy, air quality, greenhouse gas emission, and hazardous materials analyses in environmental review documents.

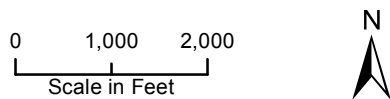


Figures

Keyes Road at Turlock Irrigation District Ceres Main Canal Bridge Replacement Project, Ceres, California
Phase I Environmental Site Assessment



Imagery provided by National Geographic Society, Esri and its licensors © 2019. The topographic representation depicted in this map may not portray all of the features currently found in the vicinity today and/or features depicted in this map may have changed since the original topographic map was assembled.



Vicinity Map

Figure 1

Keyes Road at Turlock Irrigation District Ceres Main Canal Bridge Replacement Project, Ceres, California
Phase I Environmental Site Assessment



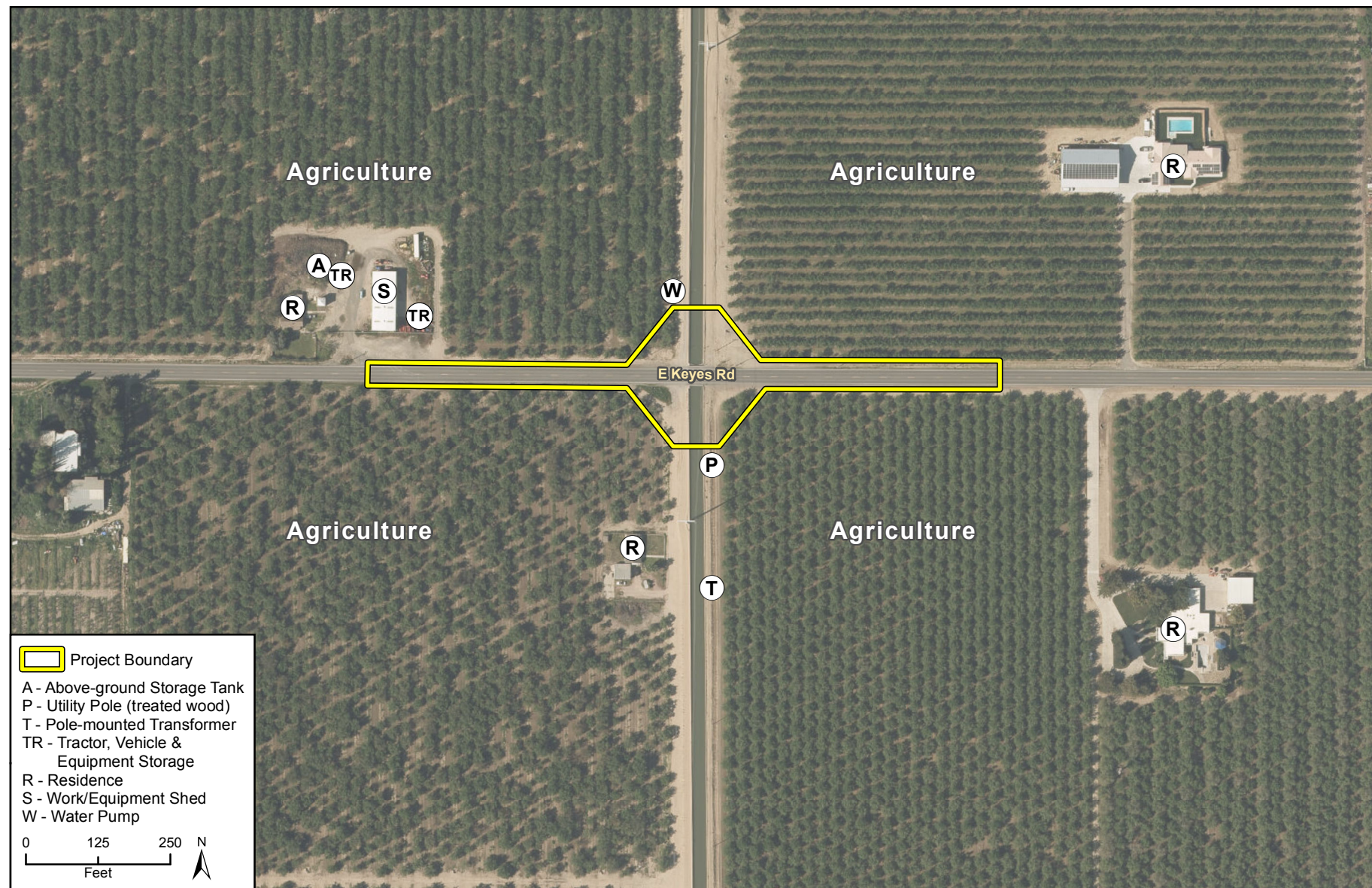
Imagery provided by Esri and its licensors © 2019.

Site Map

Figure 2

Rincon Consultants, Inc.

Keyes Road at Turlock Irrigation District Ceres Main Canal Bridge Replacement Project, Ceres, California
Phase I Environmental Site Assessment



Imagery provided by Esri and its licensors © 2019.

Adjacent Land Use Map

Figure 3

Keyes Road over Turlock Irrigation District Ceres Main Canal Bridge Replacement, Ceres, California
Environmental Site Assessment



Photograph 1. View of E Keyes Rd TID canal bridge, facing south.



Photograph 2. View of the E Keyes Rd TID canal bridge, facing north.



Photograph 3. View of the water pump north of the canal bridge, facing northwest.



Photograph 4. View of lubricant containers for water pump.



Photograph 5. View of northeastern corner of canal bridge where three utility poles are located, looking north.



Photograph 6. View of pole-mounted transformer west of the canal bridge along E Keyes Rd, looking northwest.



Keyes Road over Turlock Irrigation District Ceres Main Canal Bridge Replacement, Ceres, California
Environmental Site Assessment



Photograph 7. View of above-ground storage tank and equipment/vehicle storage area at property northwest of the project site, looking northwest.



Photograph 8. View of a vehicle and equipment storage area at the property northwest of the project site, looking north.



Photograph 9. View of E Keyes Rd east of the canal bridge, looking west.



Photograph 10. View of the canal and pole-mounted transformer south of the canal bridge, looking south.



Photograph 11. View of pole-mounted transformer east of the project site, facing east.



Photograph 12. View of canal bridge from southern project site boundary, looking north.



Figure 5 - Site Photographs

Appendix A

Interview Documentation



RINCON CONSULTANTS, INC.

Environmental Scientists | Planners | Engineers
rinconconsultants.com

Property Owner Interview Questionnaire

Rincon Project Number: 18-07035

Site Name and Full Address: Keyes Rd. over Turlock TID Ceres Main Canal

This questionnaire should be completed by the current property owner or a designated representative of the current property owner. We respectfully request that you fill out and return this form via fax at (760) 918-9444 or email to us at jmorton@rinconconsultants.com within one week from the date of this transmittal.

1. Was the subject property or any adjoining property ever used as:

- | | |
|--|---|
| <input type="checkbox"/> a gasoline or other fueling station | <input type="checkbox"/> a junkyard or landfill |
| <input type="checkbox"/> a motor vehicle repair facility | <input type="checkbox"/> a waste treatment, storage, disposal, processing or recycling facility |
| <input type="checkbox"/> a commercial printing facility | <input type="checkbox"/> a machine shop |
| <input type="checkbox"/> a dry cleaners | <input type="checkbox"/> a manufacturing facility |
| <input type="checkbox"/> a photo developing laboratory | <input type="checkbox"/> an oil production facility (including oil wells) |
| <input type="checkbox"/> a metal plating facility | <input type="checkbox"/> any other industrial use |
| <input checked="" type="checkbox"/> a farm | |

Please check all that apply above and describe:

The adjoining properties are currently being farmed as almond orchards.

2. Please describe the current land uses of the subject property and those surrounding your property. Please indicate all businesses/companies located on property.

2a. Current Use of Subject Property:

Please check all that apply:

- | | |
|--|---|
| <input type="checkbox"/> Commercial (retail, offices, etc.) | Please include a brief description of current operation:
TID property is currently being used as an irrigation canal and right of way for overhead electrical lines. |
| <input type="checkbox"/> Residential (single family or apartments) | |
| <input type="checkbox"/> Industrial (manufacturing, warehousing, processing) | |
| <input checked="" type="checkbox"/> Other- Please Describe | |

2b. Current Use of Northern Adjoining Properties:

Please check all that apply:

- | | |
|--|---|
| <input type="checkbox"/> Commercial (retail, offices, etc.) | Please include a brief description of current operation:
TID canal and overhead electrical lines are linear running north-south. |
| <input type="checkbox"/> Residential (single family or apartments) | |
| <input type="checkbox"/> Industrial (manufacturing, warehousing, processing) | |
| <input checked="" type="checkbox"/> Other- Please Describe | |



Rincon Project Number: 18-07035
Site Name and Full Address: Keyes Rd. over Turlock TID Ceres Main Canal

2c. Current Use of Southern Adjoining Properties:

<p>Please check all that apply:</p> <p><input type="checkbox"/> Commercial (retail, offices, etc.)</p> <p><input type="checkbox"/> Residential (single family or apartments)</p> <p><input type="checkbox"/> Industrial (manufacturing, warehousing, processing)</p> <p><input checked="" type="checkbox"/> Other- Please Describe</p>	<p>Please include a brief description of current operation:</p> <p>TID canal and overhead electrical lines are linear running north-south.</p>
--	--

2d. Current Use of Western Adjoining Properties:

<p>Please check all that apply:</p> <p><input type="checkbox"/> Commercial (retail, offices, etc.)</p> <p><input type="checkbox"/> Residential (single family or apartments)</p> <p><input type="checkbox"/> Industrial (manufacturing, warehousing, processing)</p> <p><input checked="" type="checkbox"/> Other- Please Describe</p>	<p>Please include a brief description of current operation:</p> <p>Almond orchards.</p>
--	---

2e. Current Use of Eastern Adjoining Properties:

<p>Please check all that apply:</p> <p><input type="checkbox"/> Commercial (retail, offices, etc.)</p> <p><input type="checkbox"/> Residential (single family or apartments)</p> <p><input type="checkbox"/> Industrial (manufacturing, warehousing, processing)</p> <p><input checked="" type="checkbox"/> Other- Please Describe</p>	<p>Please include a brief description of current operation:</p> <p>Almond orchards</p>
--	--

3. Please describe the previous land uses of your property and those surrounding your property. Include property ownership and dates of operation if known.

3a. Previous Use of Subject Property:

<p>Please check all that apply:</p> <p><input type="checkbox"/> Commercial (retail, offices, etc.)</p> <p><input type="checkbox"/> Residential (single family or apartments)</p> <p><input type="checkbox"/> Industrial (manufacturing, warehousing, processing)</p> <p><input checked="" type="checkbox"/> Other- Please Describe</p>	<p>Please include a brief description of current operation:</p> <p>Prior to TID being organized as an irrigation district in 1887, and the canal being constructed in early 1900s, the property may have been dry farmed and used for livestock grazing.</p>
--	--

3b. Previous Use of Northern Adjoining Properties:

<p>Please check all that apply:</p> <p><input type="checkbox"/> Commercial (retail, offices, etc.)</p> <p><input type="checkbox"/> Residential (single family or apartments)</p> <p><input type="checkbox"/> Industrial (manufacturing, warehousing, processing)</p> <p><input checked="" type="checkbox"/> Other- Please Describe</p>	<p>Please include a brief description of current operation:</p> <p>Same as above.</p>
--	---



Rincon Project Number: 18-07035
Site Name and Full Address: Keyes Rd. over Turlock TID Ceres Main Canal

3c. Previous Use of Southern Adjoining Properties:

<p>Please check all that apply:</p> <p><input type="checkbox"/> Commercial (retail, offices, etc.)</p> <p><input type="checkbox"/> Residential (single family or apartments)</p> <p><input type="checkbox"/> Industrial (manufacturing, warehousing, processing)</p> <p><input checked="" type="checkbox"/> Other- Please Describe</p>	<p>Please include a brief description of current operation:</p> <p>Same as above.</p>
--	---

3d. Previous Use of Western Adjoining Properties:

<p>Please check all that apply:</p> <p><input type="checkbox"/> Commercial (retail, offices, etc.)</p> <p><input type="checkbox"/> Residential (single family or apartments)</p> <p><input type="checkbox"/> Industrial (manufacturing, warehousing, processing)</p> <p><input type="checkbox"/> Other- Please Describe</p>	<p>Please include a brief description of current operation:</p> <p>Agricultural uses.</p>
---	---

3e. Previous Use of Eastern Adjoining Properties:

<p>Please check all that apply:</p> <p><input type="checkbox"/> Commercial (retail, offices, etc.)</p> <p><input type="checkbox"/> Residential (single family or apartments)</p> <p><input type="checkbox"/> Industrial (manufacturing, warehousing, processing)</p> <p><input checked="" type="checkbox"/> Other- Please Describe</p>	<p>Please include a brief description of current operation:</p> <p>Agricultural uses.</p>
--	---

4. Who is the current owner of the property?

TID owns the canal right of way and the County owns the Keyes Road right of way crossing the canal.

5. When did current ownership begin?

TID acquired the canal right of way north of Keyes Road 02/21/1916 and south of Keyes Road 01/16/1928.

6. What is the age of the on-site facility?

Records indicate the current bridge was constructed in 1920. The 1916 deed noted above, seems to indicate the canal was already constructed at the time of that grant.

7. Who is the previous owner of the property?

North of Keyes was J.F. Mendonca and south of Keyes was M.R. Serpa at the time TID acquired the right of way.

8. Please indicate the property's current:

Electrical service provider	None
Natural Gas service provider	None
Water service provider	None
Sewer service provider	None
Solid waste hauler	None



Rincon Project Number: 18-07035

Site Name and Full Address: Keyes Rd. over Turlock TID Ceres Main Canal

9. To the best of your knowledge, has your facility previously or does your facility currently store or use any of the following in individual containers larger than 5 gallons in volume or 50 gallons in the aggregate? (if Yes or Unknown, include how many, type, and size)

<input type="checkbox"/> Damaged or discarded automotive or industrial batteries	
<input type="checkbox"/> Paints	
<input type="checkbox"/> Oils or solvents	
<input type="checkbox"/> Motor vehicle fleet	
<input type="checkbox"/> Pesticides or herbicides	
<input type="checkbox"/> Other chemicals or hazardous substances	

10. Please indicate any wastes generated at the facility:

Hazardous Waste	Quantity	Disposal Method
None		

11. Are there currently or to the best of your knowledge have there been previously, any industrial drums (typically 55 gallon) or sacks of chemicals located on the property or at the facility?

<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown	If Yes or Unknown, please describe:
--	-------------------------------------

12. Are there currently or to the best of your knowledge have there been previously, any evidence of fill dirt having been brought onto the property that originated from a contaminated site or that is of an unknown origin?

<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unknown	If Yes or Unknown, please describe: Available records are not sufficient to identify where fill dirt used to construct the canal bank was sourced.
--	---



Rincon Project Number: 18-07035

Site Name and Full Address: Keyes Rd. over Turlock TID Ceres Main Canal

- 13. Are there currently or to the best of your knowledge have there been previously, any pits, ponds or lagoons located on the property in connection with waste treatment or waste disposal?**

<input type="checkbox"/> Yes	If Yes or Unknown, please describe:
<input checked="" type="checkbox"/> No	
<input type="checkbox"/> Unknown	

- 14. Are there currently or to the best of your knowledge have there been previously, any sumps, clarifiers, or solvent degreasers on the property?**

<input type="checkbox"/> Yes	If Yes or Unknown, please describe:
<input checked="" type="checkbox"/> No	
<input type="checkbox"/> Unknown	

- 15. Are there currently or to the best of your knowledge have there been previously, any stained soil on the property?**

<input type="checkbox"/> Yes	If Yes or Unknown, please describe: The canal has been there for more than 100 years, no way to know for certain the soil conditions during that entire time.
<input type="checkbox"/> No	
<input checked="" type="checkbox"/> Unknown	

- 16. Are there currently or to the best of your knowledge have there been previously, any storage tanks (above or below ground) located on the property?**

<input type="checkbox"/> Yes	If Yes or Unknown, please describe:
<input checked="" type="checkbox"/> No	
<input type="checkbox"/> Unknown	

- 17. Are there currently or to the best of your knowledge have there been previously, any vent pipes, fill pipes, or access ways (etc.) indicating a fill pipe protruding from the ground on the property or adjacent to any structure located on the property?**

<input type="checkbox"/> Yes	If Yes or Unknown, please describe:
<input checked="" type="checkbox"/> No	
<input type="checkbox"/> Unknown	

- 18. If the property is served by a private well or non-public water system, have contaminants been identified in the well or system that exceed guidelines applicable to the water system or has the well been designated as contaminated by any government agency?**

<input type="checkbox"/> Yes	If Yes or Unknown, please describe: No well or non-public water system located on the property.
<input checked="" type="checkbox"/> No	
<input type="checkbox"/> Unknown	



Rincon Project Number: 18-07035

Site Name and Full Address: Keyes Rd. over Turlock TID Ceres Main Canal

- 19. Are there currently or to the best of your knowledge have there been previously, any flooring, drains, or walls located within the facility that are stained by substances other than water, or are emitting foul odors?**

<input type="checkbox"/> Yes	If Yes or Unknown, please describe:
<input checked="" type="checkbox"/> No	
<input type="checkbox"/> Unknown	

- 20. To the best of your knowledge has your facility previously or does your facility currently, discharge wastewater on or adjacent to the property other than storm water into a sanitary sewer system?**

<input type="checkbox"/> Yes	If Yes or Unknown, please describe:
<input checked="" type="checkbox"/> No	
<input type="checkbox"/> Unknown	

- 21. Have any of the following ever been dumped above grade, buried and/or burned on the property? (please check all that apply and describe if possible)**

<input type="checkbox"/> Hazardous substances	
<input type="checkbox"/> Petroleum products	
<input type="checkbox"/> Unidentified waste materials	
<input type="checkbox"/> Tires	
<input type="checkbox"/> Automotive or industrial batteries	
<input type="checkbox"/> Other waste materials (please describe)	

- 22. Are there currently or to the best of your knowledge have there been previously, a transformer, capacitor or any hydraulic equipment on the property?**

<input type="checkbox"/> Yes	If Yes or Unknown, please describe: While no electric transformer currently exist on the site, it is unknown during TID's tenure as an electric service provider whether a transformer may have previously been located at the site. However, this is unlikely, since there appears to have been no need for electric service at, or immediately adjacent, to the site.
<input type="checkbox"/> No	
<input checked="" type="checkbox"/> Unknown	

- 23. Are there currently or to the best of your knowledge have there been previously any records indicating the presence of PCBs?**

<input type="checkbox"/> Yes	If Yes or Unknown, please describe:
<input checked="" type="checkbox"/> No	
<input type="checkbox"/> Unknown	



Rincon Project Number: 18-07035
Site Name and Full Address: Keyes Rd. over Turlock TID Ceres Main Canal

24. Are there currently or to the best of your knowledge have there been previously any records indicating the presence of pesticides or herbicides?

<input checked="" type="checkbox"/> Yes	If Yes or Unknown, please describe: Herbicides have been used, per label instructions, for weed control on the canal banks . Aquatic herbicides have been used, per label instructions, for aquatic weed control in the canal.
<input type="checkbox"/> No	
<input type="checkbox"/> Unknown	

25. Do you have any knowledge of environmental liens that may have been recorded against the property or governmental notification relating to past or recurrent violations of environmental laws with respect to the property or any facility located on the property?

<input type="checkbox"/> Yes	If Yes or Unknown, please describe:
<input checked="" type="checkbox"/> No	
<input type="checkbox"/> Unknown	

26. Do you have any knowledge of activity and use limitations (AULs) such as engineering controls, deed restrictions, land use restrictions, or institutional controls that may have been recorded against the property?

<input type="checkbox"/> Yes	If Yes or Unknown, please describe:
<input checked="" type="checkbox"/> No	
<input type="checkbox"/> Unknown	

27. Have you been informed of the past or current existence of hazardous substances, petroleum products, or environmental violations with respect to the property or any facility located on the property?

<input type="checkbox"/> Yes	If Yes or Unknown, please describe:
<input checked="" type="checkbox"/> No	
<input type="checkbox"/> Unknown	

28. Do you have any knowledge of any environmental site assessments of the property or facility?

<input type="checkbox"/> Yes	If Yes or Unknown, please describe:
<input checked="" type="checkbox"/> No	
<input type="checkbox"/> Unknown	

29. Do you know of any past, threatened, or pending lawsuits or administrative proceedings concerning a release of any hazardous substances or petroleum products involving the property by any owner or occupant of the property?

<input type="checkbox"/> Yes	If Yes or Unknown, please describe:
<input checked="" type="checkbox"/> No	
<input type="checkbox"/> Unknown	



Rincon Project Number: 18-07035

Site Name and Full Address: Keyes Rd. over Turlock TID Ceres Main Canal

30. Are there any site-specific geotechnical or geologic reports available for the subject property?

<input type="checkbox"/> Yes	If Yes or Unknown, please describe:
<input checked="" type="checkbox"/> No	
<input type="checkbox"/> Unknown	

31. Is there a Title Report available for the subject property?

<input type="checkbox"/> Yes	If Yes or Unknown, please describe:
<input checked="" type="checkbox"/> No	
<input type="checkbox"/> Unknown	

This questionnaire was completed by (please print)

Name: Todd Troglin
Title: Supervising Engineering Technician - Civil
Firm: Turlock Irrigation District
Street Address: 333 E. Canal Drive
City, State, Zip Code: Turlock, CA 95380
Phone Number: (209) 883-8367
Fax Number: (209) 656-2180

What is the Preparer's relationship to the property (i.e., owner, occupant, property manager, employee, agent, consultant, etc.)? employee

Copies of the completed questionnaire should be faxed, emailed (preferably) or mailed to:

Rincon Consultants, Inc.
Attention: Environmental Site Assessment Division
2215 Faraday Avenue, Suite A
Carlsbad, CA 92008
Fax: (760) 918-9444
Email: jmorton@rinconconsultants.com

Preparer represents that to the best of the preparer's knowledge the above statements and facts are true and correct and to the best of the preparer's knowledge no material facts have been suppressed or misstated.

Signature:  Date: 6/12/19



Property Owner Interview Questionnaire

Rincon Project Number: 18-07035

Site Name and Full Address: Keyes Rd. over Turlock TID Ceres Main Canal

This questionnaire should be completed by the current property owner or a designated representative of the current property owner. We respectfully request that you fill out and return this form via fax at (760) 918-9444 or email to us at jmorton@rinconconsultants.com within one week from the date of this transmittal.

1. Was the subject property or any adjoining property ever used as:

- | | |
|--|---|
| <input type="checkbox"/> a gasoline or other fueling station | <input type="checkbox"/> a junkyard or landfill |
| <input type="checkbox"/> a motor vehicle repair facility | <input type="checkbox"/> a waste treatment, storage, disposal, processing or recycling facility |
| <input type="checkbox"/> a commercial printing facility | <input type="checkbox"/> a machine shop |
| <input type="checkbox"/> a dry cleaners | <input type="checkbox"/> a manufacturing facility |
| <input type="checkbox"/> a photo developing laboratory | <input type="checkbox"/> an oil production facility (including oil wells) |
| <input type="checkbox"/> a metal plating facility | <input type="checkbox"/> any other industrial use |
| <input checked="" type="checkbox"/> a farm | |

Please check all that apply above and describe:

The County does not know if the subject property or any adjoining property ever used the above items other than past/current farming activities.

2. Please describe the current land uses of the subject property and those surrounding your property. Please indicate all businesses/companies located on property.

2a. Current Use of Subject Property:

<p>Please check all that apply:</p> <p><input type="checkbox"/> Commercial (retail, offices, etc.)</p> <p><input type="checkbox"/> Residential (single family or apartments)</p> <p><input type="checkbox"/> Industrial (manufacturing, warehousing, processing)</p> <p><input checked="" type="checkbox"/> Other- Please Describe</p>	<p>Please include a brief description of current operation:</p> <p>Current land use zones is AG A-2-40 (agricultural/farmland).</p>
--	---

2b. Current Use of Northern Adjoining Properties:

<p>Please check all that apply:</p> <p><input type="checkbox"/> Commercial (retail, offices, etc.)</p> <p><input type="checkbox"/> Residential (single family or apartments)</p> <p><input type="checkbox"/> Industrial (manufacturing, warehousing, processing)</p> <p><input checked="" type="checkbox"/> Other- Please Describe</p>	<p>Please include a brief description of current operation:</p> <p>Current land use zone is AG A-2-40 (agricultural/farmland).</p>
--	--



Rincon Project Number: 18-07035

Site Name and Full Address: Keyes Rd. over Turlock TID Ceres Main Canal

2c. Current Use of Southern Adjoining Properties:

<p>Please check all that apply:</p> <p><input type="checkbox"/> Commercial (retail, offices, etc.)</p> <p><input type="checkbox"/> Residential (single family or apartments)</p> <p><input type="checkbox"/> Industrial (manufacturing, warehousing, processing)</p> <p><input checked="" type="checkbox"/> Other- Please Describe</p>	<p>Please include a brief description of current operation:</p> <p>Current land use zones is mainly AG A-2-40 (agricultural/farmland)</p>
--	---

2d. Current Use of Western Adjoining Properties:

<p>Please check all that apply:</p> <p><input type="checkbox"/> Commercial (retail, offices, etc.)</p> <p><input type="checkbox"/> Residential (single family or apartments)</p> <p><input type="checkbox"/> Industrial (manufacturing, warehousing, processing)</p> <p><input checked="" type="checkbox"/> Other- Please Describe</p>	<p>Please include a brief description of current operation:</p> <p>Current land use zones is mainly AG A-2-40 (agricultural/farmland)</p>
--	---

2e. Current Use of Eastern Adjoining Properties:

<p>Please check all that apply:</p> <p><input type="checkbox"/> Commercial (retail, offices, etc.)</p> <p><input type="checkbox"/> Residential (single family or apartments)</p> <p><input type="checkbox"/> Industrial (manufacturing, warehousing, processing)</p> <p><input checked="" type="checkbox"/> Other- Please Describe</p>	<p>Please include a brief description of current operation:</p> <p>Current land use zones is mainly AG A-2-40 (agricultural/farmland)</p>
--	---

3. Please describe the previous land uses of your property and those surrounding your property. Include property ownership and dates of operation if known.

3a. Previous Use of Subject Property:

<p>Please check all that apply:</p> <p><input type="checkbox"/> Commercial (retail, offices, etc.)</p> <p><input type="checkbox"/> Residential (single family or apartments)</p> <p><input type="checkbox"/> Industrial (manufacturing, warehousing, processing)</p> <p><input checked="" type="checkbox"/> Other- Please Describe</p>	<p>Please include a brief description of current operation:</p> <p>Current land use zones is mainly AG A-2-40 (agricultural/farmland)</p>
--	---

3b. Previous Use of Northern Adjoining Properties:

<p>Please check all that apply:</p> <p><input type="checkbox"/> Commercial (retail, offices, etc.)</p> <p><input type="checkbox"/> Residential (single family or apartments)</p> <p><input type="checkbox"/> Industrial (manufacturing, warehousing, processing)</p> <p><input checked="" type="checkbox"/> Other- Please Describe</p>	<p>Please include a brief description of current operation:</p> <p>Current land use zones is mainly AG A-2-40 (agricultural/farmland)</p>
--	---



Rincon Project Number: 18-07035

Site Name and Full Address: Keyes Rd. over Turlock TID Ceres Main Canal

3c. Previous Use of Southern Adjoining Properties:

<p>Please check all that apply:</p> <p><input type="checkbox"/> Commercial (retail, offices, etc.)</p> <p><input type="checkbox"/> Residential (single family or apartments)</p> <p><input type="checkbox"/> Industrial (manufacturing, warehousing, processing)</p> <p><input checked="" type="checkbox"/> Other- Please Describe</p>	<p>Please include a brief description of current operation:</p> <p>Current land use zones is mainly AG A-2-40 (agricultural/farmland)</p>
--	---

3d. Previous Use of Western Adjoining Properties:

<p>Please check all that apply:</p> <p><input type="checkbox"/> Commercial (retail, offices, etc.)</p> <p><input type="checkbox"/> Residential (single family or apartments)</p> <p><input type="checkbox"/> Industrial (manufacturing, warehousing, processing)</p> <p><input checked="" type="checkbox"/> Other- Please Describe</p>	<p>Please include a brief description of current operation:</p> <p>Current land use zones is mainly AG A-2-40 (agricultural/farmland)</p>
--	---

3e. Previous Use of Eastern Adjoining Properties:

<p>Please check all that apply:</p> <p><input type="checkbox"/> Commercial (retail, offices, etc.)</p> <p><input type="checkbox"/> Residential (single family or apartments)</p> <p><input type="checkbox"/> Industrial (manufacturing, warehousing, processing)</p> <p><input checked="" type="checkbox"/> Other- Please Describe</p>	<p>Please include a brief description of current operation:</p> <p>Current land use zones is mainly AG A-2-40 (agricultural/farmland)</p>
--	---

4. Who is the current owner of the property?

See attached.

5. When did current ownership begin?

This can be found on title records or reports.

6. What is the age of the on-site facility?

Not sure.

7. Who is the previous owner of the property?

Title report/records will provide ownership history.

8. Please indicate the property's current:

Electrical service provider	TID
Natural Gas service provider	PGE
Water service provider	N/A no water in vicinity
Sewer service provider	N/A no sewer in vicinity
Solid waste hauler	Bertolottie Disposal Area 1



Rincon Project Number: 18-07035

Site Name and Full Address: Keyes Rd. over Turlock TID Ceres Main Canal

9. To the best of your knowledge, has your facility previously or does your facility currently store or use any of the following in individual containers larger than 5 gallons in volume or 50 gallons in the aggregate? (if Yes or Unknown, include how many, type, and size)

<input type="checkbox"/> Damaged or discarded automotive or industrial batteries	Unknown.
<input type="checkbox"/> Paints	Unknown.
<input type="checkbox"/> Oils or solvents	Unknown.
<input type="checkbox"/> Motor vehicle fleet	Unknown.
<input type="checkbox"/> Pesticides or herbicides	Unknown.
<input type="checkbox"/> Other chemicals or hazardous substances	Unknown.

10. Please indicate any wastes generated at the facility:

Hazardous Waste	Quantity	Disposal Method
Unknown.		

11. Are there currently or to the best of your knowledge have there been previously, any industrial drums (typically 55 gallon) or sacks of chemicals located on the property or at the facility?

<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unknown	If Yes or Unknown, please describe:
--	-------------------------------------

12. Are there currently or to the best of your knowledge have there been previously, any evidence of fill dirt having been brought onto the property that originated from a contaminated site or that is of an unknown origin?

<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unknown	If Yes or Unknown, please describe:
--	-------------------------------------



Rincon Project Number: 18-07035

Site Name and Full Address: Keyes Rd. over Turlock TID Ceres Main Canal

13. Are there currently or to the best of your knowledge have there been previously, any pits, ponds or lagoons located on the property in connection with waste treatment or waste disposal?

<input type="checkbox"/> Yes	If Yes or Unknown, please describe:
<input type="checkbox"/> No	
<input checked="" type="checkbox"/> Unknown	

14. Are there currently or to the best of your knowledge have there been previously, any sumps, clarifiers, or solvent degreasers on the property?

<input type="checkbox"/> Yes	If Yes or Unknown, please describe:
<input type="checkbox"/> No	
<input checked="" type="checkbox"/> Unknown	

15. Are there currently or to the best of your knowledge have there been previously, any stained soil on the property?

<input type="checkbox"/> Yes	If Yes or Unknown, please describe:
<input type="checkbox"/> No	
<input checked="" type="checkbox"/> Unknown	

16. Are there currently or to the best of your knowledge have there been previously, any storage tanks (above or below ground) located on the property?

<input type="checkbox"/> Yes	If Yes or Unknown, please describe:
<input type="checkbox"/> No	
<input checked="" type="checkbox"/> Unknown	

17. Are there currently or to the best of your knowledge have there been previously, any vent pipes, fill pipes, or access ways (etc.) indicating a fill pipe protruding from the ground on the property or adjacent to any structure located on the property?

<input type="checkbox"/> Yes	If Yes or Unknown, please describe:
<input type="checkbox"/> No	
<input checked="" type="checkbox"/> Unknown	

18. If the property is served by a private well or non-public water system, have contaminants been identified in the well or system that exceed guidelines applicable to the water system or has the well been designated as contaminated by any government agency?

<input type="checkbox"/> Yes	If Yes or Unknown, please describe:
<input type="checkbox"/> No	
<input checked="" type="checkbox"/> Unknown	



Rincon Project Number: 18-07035

Site Name and Full Address: Keyes Rd. over Turlock TID Ceres Main Canal

- 19. Are there currently or to the best of your knowledge have there been previously, any flooring, drains, or walls located within the facility that are stained by substances other than water, or are emitting foul odors?**

<input type="checkbox"/> Yes	If Yes or Unknown, please describe:
<input type="checkbox"/> No	
<input checked="" type="checkbox"/> Unknown	

- 20. To the best of your knowledge has your facility previously or does your facility currently, discharge wastewater on or adjacent to the property other than storm water into a sanitary sewer system?**

<input type="checkbox"/> Yes	If Yes or Unknown, please describe:
<input checked="" type="checkbox"/> No	
<input type="checkbox"/> Unknown	

- 21. Have any of the following ever been dumped above grade, buried and/or burned on the property? (please check all that apply and describe if possible)**

<input type="checkbox"/> Hazardous substances	Unknown.
<input type="checkbox"/> Petroleum products	Unknown.
<input type="checkbox"/> Unidentified waste materials	Unknown.
<input type="checkbox"/> Tires	Unknown.
<input type="checkbox"/> Automotive or industrial batteries	Unknown.
<input type="checkbox"/> Other waste materials (please describe)	Unknown.

- 22. Are there currently or to the best of your knowledge have there been previously, a transformer, capacitor or any hydraulic equipment on the property?**

<input type="checkbox"/> Yes	If Yes or Unknown, please describe:
<input type="checkbox"/> No	
<input checked="" type="checkbox"/> Unknown	

- 23. Are there currently or to the best of your knowledge have there been previously any records indicating the presence of PCBs?**

<input type="checkbox"/> Yes	If Yes or Unknown, please describe:
<input type="checkbox"/> No	
<input checked="" type="checkbox"/> Unknown	



Rincon Project Number: 18-07035
Site Name and Full Address: Keyes Rd. over Turlock TID Ceres Main Canal

24. Are there currently or to the best of your knowledge have there been previously any records indicating the presence of pesticides or herbicides?

<input type="checkbox"/> Yes	If Yes or Unknown, please describe: Since these parcels are in Ag zone, it is likely past use of pesticides or herbicides may have been used.
<input type="checkbox"/> No	
<input checked="" type="checkbox"/> Unknown	

25. Do you have any knowledge of environmental liens that may have been recorded against the property or governmental notification relating to past or recurrent violations of environmental laws with respect to the property or any facility located on the property?

<input type="checkbox"/> Yes	If Yes or Unknown, please describe:
<input type="checkbox"/> No	
<input checked="" type="checkbox"/> Unknown	

26. Do you have any knowledge of activity and use limitations (AULs) such as engineering controls, deed restrictions, land use restrictions, or institutional controls that may have been recorded against the property?

<input type="checkbox"/> Yes	If Yes or Unknown, please describe: There are TID/County easements at each parcel for driveway/maintenance purposes.
<input type="checkbox"/> No	
<input checked="" type="checkbox"/> Unknown	

27. Have you been informed of the past or current existence of hazardous substances, petroleum products, or environmental violations with respect to the property or any facility located on the property?

<input type="checkbox"/> Yes	If Yes or Unknown, please describe:
<input type="checkbox"/> No	
<input checked="" type="checkbox"/> Unknown	

28. Do you have any knowledge of any environmental site assessments of the property or facility?

<input type="checkbox"/> Yes	If Yes or Unknown, please describe:
<input type="checkbox"/> No	
<input checked="" type="checkbox"/> Unknown	

29. Do you know of any past, threatened, or pending lawsuits or administrative proceedings concerning a release of any hazardous substances or petroleum products involving the property by any owner or occupant of the property?

<input type="checkbox"/> Yes	If Yes or Unknown, please describe:
<input type="checkbox"/> No	
<input checked="" type="checkbox"/> Unknown	



Rincon Project Number: 18-07035

Site Name and Full Address: Keyes Rd. over Turlock TID Ceres Main Canal

30. Are there any site-specific geotechnical or geologic reports available for the subject property?

<input checked="" type="checkbox"/> Yes	If Yes or Unknown, please describe: Yes, a geotechnical soils report has been prepared for this project.
<input type="checkbox"/> No	
<input type="checkbox"/> Unknown	

31. Is there a Title Report available for the subject property?

<input checked="" type="checkbox"/> Yes	If Yes or Unknown, please describe: Title reports are available for these properties.
<input type="checkbox"/> No	
<input type="checkbox"/> Unknown	

This questionnaire was completed by (please print)

Name Paul Saini
Title Associate Civil Engineer
Firm Stanislaus County Public Works
Street Address 1716 Morgan Road
City, State, Zip Code Modesto, CA 95358-5805
Phone Number 209-525-4301
Fax Number 209-541-2509

What is the Preparer's relationship to the property (i.e., owner, occupant, property manager, employee, agent, consultant, etc.)? Design/Project Engineer for Stanislaus County Public Works

Copies of the completed questionnaire should be faxed, emailed (preferably) or mailed to:

Rincon Consultants, Inc.
Attention: Environmental Site Assessment Division
2215 Faraday Avenue, Suite A
Carlsbad, CA 92008
Fax: (760) 918-9444
Email: jmorton@rinconconsultants.com

Preparer represents that to the best of the preparer's knowledge the above statements and facts are true and correct and to the best of the preparer's knowledge no material facts have been suppressed or misstated.

Signature  Date 6-10-19



User Questionnaire

Rincon Project Number: 18-07035
Site Name and Full Address: Keyes Rd Over TID Ceres Main Canal

To qualify for one of the Landowner Liability Protections (LLPs) offered by the Small Business Liability Relief and Brownfields Revitalization Act of 2001 (the "Brownfields Amendments"), the user must provide the following information to the environmental professional. Failure to conduct these inquiries could result in a determination that "all appropriate inquiries" is not complete.

We respectfully request that you fill out this form and email it to Jennifer Morton at jmorton@Rinconconsultants.com within one week from the date of this transmittal.

Project Description

1. Why is the Phase I ESA required or being performed?

In order to identify potential or existing environmental contamination liabilities. A Phase I ESA is necessary in order to research the current and historical uses of a property and to determine if a commercial real estate transaction may be necessary.

2. What type of property transaction is planned? (i.e. sale, purchase, exchange)

For this project, no sales, purchase, or exchange is anticipated.

3. What is the entire site address?

Keyes Road at TID Ceres Main Canal between Moffett Road and Esmar Road west of Highway 99.

4. What is the Assessor's Parcel Number(s)?

041-038-010, 041-041-037, 041-051-032, and 041--53-001

5. Are any considerations beyond the requirements of Practice E1527 to be considered? (i.e. lien search, asbestos & lead based paint, radon)

The environmental field survey has been performed by Lance Park from Rincon Consultants, Inc. on May 1, 2019. Lance can be contacted for the report (805-535-5412 or lpark@rinconconsultants.com).



Rincon Project Number: 18-07035
Site Name and Full Address: Keyes Rd Over TID Ceres Main Canal

6. Identify all parties who will rely on the Phase I report.

County of Stanislaus, DER, TID, Utilities, possibly affected property owners (if any), design consultants, contractor, inspectors.

7. Identify the Site Manager/Contact and how the contact can be reached.

Chris Ingles, from Cornerstone Structural Engineering Group can be considered the Site Manager/Project Manager for this project.

8. Identify the Site Owner and how the owner can be reached.

The Site Owner is Stanislaus County Public Works and Turlock Irrigation District easements.

9. Do you have copies of any available prior environmental site assessment reports, documents, correspondence, etc., concerning any other knowledge or experience with the property that may be pertinent to the environmental professional (i.e. title report, previous Ph I and II ESAs, Environmental Impact Studies)?

None at the moment that we are aware of.



Rincon Project Number: 18-07035

Site Name and Full Address: Keyes Rd Over TID Ceres Main Canal

Subject Property Information

1. Did a search of recorded land title records (or judicial records, where appropriate) identify any environmental liens filed or recorded against the property?

Please mark the box with the most appropriate response:

- ☒ I **have not** reviewed the records and **do not know** if there are any filed or recorded environmental liens.
- ☐ I **have** reviewed the records, and **No, there aren't any** filed or recorded environmental liens.
- ☐ I **have** reviewed the records, and **Yes, there are** environmental liens. Explain:

2. Did a search of recorded land title records (or judicial records, where appropriate) identify any activity and land use limitations (AULs), such as engineering controls, land use restrictions or institutional controls that are in place at the property and/or have been filed or recorded against the property under federal, tribal, state or local law?

Please mark the box with the most appropriate response:

- ☒ I **have not** reviewed the records and **do not know** if there are any filed/recorded AULs or any AULs in place at the site.
- ☐ I **have** reviewed the records, and **No, there aren't any** filed/recorded AULs or any AULs in place at the site.
- ☐ I **have** reviewed the records, and **Yes, there are** AULs filed, recorded, and/or in place at the site. Explain:

3. Does the Title Report provide any information pertaining to environmental cleanup liens or activity and use limitations (AULs) for the subject property?

Please mark the box with the most appropriate response:

- ☒ I **have not** reviewed the Title Report and **do not know** if it provides environmental cleanup liens or AULs information.
- ☐ I **have** reviewed the Title Report, and **No, it does not provide** environmental cleanup liens or AULs information..
- ☐ I **have** reviewed the Title Report, and **Yes, it does provide** environmental cleanup liens or AULs information. Explain:



Rincon Project Number: 18-07035

Site Name and Full Address: Keyes Rd Over TID Ceres Main Canal

4. Do you have any specialized knowledge or experience related to the property or nearby properties? For example, are you involved in the same line of business as the current or former occupants of the property or an adjoining property so that you would have specialized knowledge of the chemicals and processes used by this type of business?

Please mark the box with the most appropriate response:

- ☒ **No, I do not** have any specialized knowledge and/or experience related to the property or nearby properties.
- ☐ **Yes, I do** have specialized knowledge and/or experience related to the property or nearby properties. Explain:

5. As the user of this ESA, based on your knowledge and experience related to the property, are you aware of any information pertaining to a reduction in value for the subject property relative to any known environmental issues?

Please mark the box with the most appropriate response:

- ☒ **No, I do not** have any information about a reduction in property value relative to environmental issues.
- ☐ **Yes, I do** have information about a reduction in property value relative to environmental issues. Explain:

6. Does the purchase price being paid for this property reasonably reflect the fair market value of the property?

Please mark the box with the most appropriate response:

- ☐ **Yes, I do** believe the purchase price being paid for this property reasonably reflects the fair market value of the property. Skip to question #7.
- ☐ **No, I do not** believe the purchase price being paid for this property reasonably reflects the fair market value of the property. Proceed to question #6a.

- a. If you conclude that there is a difference, have you considered whether the lower purchase price is because contamination is known or believed to be present at the property? (40 CFR 312.29)

Please mark the box with the most appropriate response

- ☐ **No, I have not** considered the idea that known or believed contamination at the site has caused the lower purchase price.
- ☐ **Yes, I have** considered the idea that known or believed contamination at the site has caused the lower purchase price. Explain:

N/A. No property is anticipated to be purchased for this project.



Rincon Project Number: 18-07035

Site Name and Full Address: Keyes Rd Over TID Ceres Main Canal

7. Are you aware of commonly known or reasonably ascertainable information about the property that would help the environmental professional to identify conditions indicative of releases or threatened releases? For example:

Please mark the box with the most appropriate response:

- a. Do you know the past uses of the property?

☐ I do not know.
☐ I do know. Explain:

- b. Do you know of specific chemicals are present or once were present at the property?

☐ I do not know.
☐ I do know. Explain:

- c. Do you know of any spills or other chemical releases that have taken place at the property?

☐ I do not know.
☐ I do know. Explain:

- d. Do you know of any environmental cleanups have taken place at the property?

☐ I do not know.
☐ I do know. Explain:

8. Based on your knowledge and experience related to the property are there any obvious indicators that point to the presence or likely presence of releases at the property?

Please mark the box with the most appropriate response:

- ☐ **No**, I do not know and/or do not have any experience with any obvious indicators that point to the presence or likely presence of contamination at the property.
☐ **Yes**, I do know of and/or do have experience with obvious indicators that point to the presence or likely presence of contamination at the property. Explain:



Rincon Project Number: 18-07035
Site Name and Full Address: Keyes Rd Over TID Ceres Main Canal

9. Are you aware of any pending, threatened, or past litigation relevant to hazardous substances or petroleum products, in, on, or from the site?

Please mark the box with the most appropriate response:

- ☒ **No**, I am not aware of any pending, threatened, or past litigation relevant to hazardous substances or petroleum products, in, on, or from the site.
- ☐ **Yes**, I am aware of pending, threatened, or past administrative proceedings relevant to hazardous substances or petroleum products in, on, or from the site. Explain:

10. Are you aware of any pending, threatened, or past administrative proceedings relevant to hazardous substances or petroleum products in, on, or from the site?

Please mark the box with the most appropriate response:

- ☒ **No**, I am not aware of any pending, threatened, or past administrative proceedings relevant to hazardous substances or petroleum products in, on, or from the site.
- ☐ **Yes**, I am aware of pending, threatened, or past administrative proceedings relevant to hazardous substances or petroleum products in, on, or from the site. Explain:

11. Are you aware of any notice from any government entity regarding any possible violation of environmental laws or possible liability relating to hazardous substances or petroleum products?

Please mark the box with the most appropriate response:

- ☒ **No**, I am not aware of any notice from any government entity regarding any possible violation of environmental laws or possible liability relating to hazardous substances or petroleum products..
- ☐ **Yes**, I am aware of a notice, or notices, from a government entity (or multiple government entities) regarding a possible violation of environmental laws or possible liability relating to hazardous substances or petroleum products. Explain:



Rincon Project Number: 18-07035
Site Name and Full Address: Keyes Rd Over TID Ceres Main Canal

This questionnaire was completed by (please print)

Name Mr. Paul Saini
Title Associate Civil Engineer
Firm Stanislaus County Public Works
Street Address 1716 Morgan Road
City, State, Zip Code Modesto, CA 95358-5805
Phone Number 209-525-4301
Fax Number 209-541-2509

What is the Preparer's relationship to the property (i.e., owner, occupant, property manager, employee, agent, consultant, etc.)? Design/Project Manager for Stanislaus County PW

Copies of the completed questionnaire should be faxed, emailed (preferably) or mailed to:

Rincon Consultants, Inc.
Attention: Environmental Site Assessment Division
2215 Faraday Avenue, Suite A
Carlsbad, CA 92008
Fax: (760) 918-9444
Email: jmorton@rinconconsultants.com

Preparer represents that to the best of the preparer's knowledge the above statements and facts are true and correct and to the best of the preparer's knowledge no material facts have been suppressed or misstated.

Signature 

Date 6-10-2019

Appendix B

Regulatory Records Search

Ceres Main Canal Bridge Replacement

East Keyes Road

Ceres, CA 95307

Inquiry Number: 05634836.2r

April 26, 2019

The EDR Radius Map™ Report with GeoCheck®



6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

TABLE OF CONTENTS

<u>SECTION</u>	<u>PAGE</u>
Executive Summary	ES1
Overview Map	2
Detail Map	3
Map Findings Summary	4
Map Findings	8
Orphan Summary	16
Government Records Searched/Data Currency Tracking	GR-1
 <u>GEOCHECK ADDENDUM</u>	
Physical Setting Source Addendum	A-1
Physical Setting Source Summary	A-2
Physical Setting SSURGO Soil Map	A-5
Physical Setting Source Map	A-9
Physical Setting Source Map Findings	A-11
Physical Setting Source Records Searched	PSGR-1

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

Disclaimer - Copyright and Trademark Notice

This Report contains certain information obtained from a variety of public and other sources reasonably available to Environmental Data Resources, Inc. It cannot be concluded from this Report that coverage information for the target and surrounding properties does not exist from other sources. **NO WARRANTY EXPRESSED OR IMPLIED, IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT. ENVIRONMENTAL DATA RESOURCES, INC. SPECIFICALLY DISCLAIMS THE MAKING OF ANY SUCH WARRANTIES, INCLUDING WITHOUT LIMITATION, MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE. ALL RISK IS ASSUMED BY THE USER. IN NO EVENT SHALL ENVIRONMENTAL DATA RESOURCES, INC. BE LIABLE TO ANYONE, WHETHER ARISING OUT OF ERRORS OR OMISSIONS, NEGLIGENCE, ACCIDENT OR ANY OTHER CAUSE, FOR ANY LOSS OF DAMAGE, INCLUDING, WITHOUT LIMITATION, SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR EXEMPLARY DAMAGES. ANY LIABILITY ON THE PART OF ENVIRONMENTAL DATA RESOURCES, INC. IS STRICTLY LIMITED TO A REFUND OF THE AMOUNT PAID FOR THIS REPORT.** Purchaser accepts this Report "AS IS". Any analyses, estimates, ratings, environmental risk levels or risk codes provided in this Report are provided for illustrative purposes only, and are not intended to provide, nor should they be interpreted as providing any facts regarding, or prediction or forecast of, any environmental risk for any property. Only a Phase I Environmental Site Assessment performed by an environmental professional can provide information regarding the environmental risk for any property. Additionally, the information provided in this Report is not to be construed as legal advice.

Copyright 2019 by Environmental Data Resources, Inc. All rights reserved. Reproduction in any media or format, in whole or in part, of any report or map of Environmental Data Resources, Inc., or its affiliates, is prohibited without prior written permission.

EDR and its logos (including Sanborn and Sanborn Map) are trademarks of Environmental Data Resources, Inc. or its affiliates. All other trademarks used herein are the property of their respective owners.

EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13), the ASTM Standard Practice for Environmental Site Assessments for Forestland or Rural Property (E 2247-16), the ASTM Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process (E 1528-14) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

EAST KEYES ROAD
CERES, CA 95307

COORDINATES

Latitude (North):	37.5512260 - 37° 33' 4.41"
Longitude (West):	120.9389030 - 120° 56' 20.05"
Universal Transverse Mercator:	Zone 10
UTM X (Meters):	682070.7
UTM Y (Meters):	4157816.2
Elevation:	87 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	5640206 CERES, CA
Version Date:	2012

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from:	20140625, 20140628, 20140712
Source:	USDA

MAPPED SITES SUMMARY

Target Property Address:
EAST KEYES ROAD
CERES, CA 95307

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
A1	(HOME RANCH)	3218 E KEYES RD	SWEEPS UST, HIST UST	Higher	183, 0.035, East
A2	WESTSTEYN FARM	3218 E KEYES	CUPA Listings, CERS	Higher	183, 0.035, East
B3	GARCIA RANCH 3336	3336 E KEYES RD	CUPA Listings, CERS	Higher	972, 0.184, East
B4	LOVELAND TRUCKING, I	3342 E KEYES RD	SWEEPS UST, HIST UST	Higher	1169, 0.221, East

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL..... National Priority List
Proposed NPL..... Proposed National Priority List Sites
NPL LIENS..... Federal Superfund Liens

Federal Delisted NPL site list

Delisted NPL..... National Priority List Deletions

Federal CERCLIS list

FEDERAL FACILITY..... Federal Facility Site Information listing
SEMS..... Superfund Enterprise Management System

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE..... Superfund Enterprise Management System Archive

Federal RCRA CORRACTS facilities list

CORRACTS..... Corrective Action Report

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF..... RCRA - Treatment, Storage and Disposal

Federal RCRA generators list

RCRA-LQG..... RCRA - Large Quantity Generators
RCRA-SQG..... RCRA - Small Quantity Generators
RCRA-CESQG..... RCRA - Conditionally Exempt Small Quantity Generator

Federal institutional controls / engineering controls registries

LUCIS..... Land Use Control Information System
US ENG CONTROLS..... Engineering Controls Sites List

EXECUTIVE SUMMARY

US INST CONTROL..... Sites with Institutional Controls

Federal ERNS list

ERNS..... Emergency Response Notification System

State- and tribal - equivalent NPL

RESPONSE..... State Response Sites

State- and tribal - equivalent CERCLIS

ENVIROSTOR..... EnviroStor Database

State and tribal landfill and/or solid waste disposal site lists

SWF/LF..... Solid Waste Information System

State and tribal leaking storage tank lists

LUST..... Geotracker's Leaking Underground Fuel Tank Report

INDIAN LUST..... Leaking Underground Storage Tanks on Indian Land

CPS-SLIC..... Statewide SLIC Cases

State and tribal registered storage tank lists

FEMA UST..... Underground Storage Tank Listing

UST..... Active UST Facilities

AST..... Aboveground Petroleum Storage Tank Facilities

INDIAN UST..... Underground Storage Tanks on Indian Land

State and tribal voluntary cleanup sites

INDIAN VCP..... Voluntary Cleanup Priority Listing

VCP..... Voluntary Cleanup Program Properties

State and tribal Brownfields sites

BROWNFIELDS..... Considered Brownfields Sites Listing

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS..... A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT..... Waste Management Unit Database

SWRCY..... Recycler Database

HAULERS..... Registered Waste Tire Haulers Listing

INDIAN ODI..... Report on the Status of Open Dumps on Indian Lands

DEBRIS REGION 9..... Torres Martinez Reservation Illegal Dump Site Locations

ODI..... Open Dump Inventory

EXECUTIVE SUMMARY

IHS OPEN DUMPS..... Open Dumps on Indian Land

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL..... Delisted National Clandestine Laboratory Register
 HIST Cal-Sites..... Historical Calsites Database
 SCH..... School Property Evaluation Program
 CDL..... Clandestine Drug Labs
 CERS HAZ WASTE..... CERS HAZ WASTE
 Toxic Pits..... Toxic Pits Cleanup Act Sites
 US CDL..... National Clandestine Laboratory Register
 PFAS..... PFAS Contamination Site Location Listing

Local Lists of Registered Storage Tanks

CERS TANKS..... California Environmental Reporting System (CERS) Tanks
 CA FID UST..... Facility Inventory Database

Local Land Records

LIENS..... Environmental Liens Listing
 LIENS 2..... CERCLA Lien Information
 DEED..... Deed Restriction Listing

Records of Emergency Release Reports

HMIRS..... Hazardous Materials Information Reporting System
 CHMIRS..... California Hazardous Material Incident Report System
 LDS..... Land Disposal Sites Listing
 MCS..... Military Cleanup Sites Listing
 SPILLS 90..... SPILLS 90 data from FirstSearch

Other Ascertainable Records

RCRA NonGen / NLR..... RCRA - Non Generators / No Longer Regulated
 FUDS..... Formerly Used Defense Sites
 DOD..... Department of Defense Sites
 SCRDRYCLEANERS..... State Coalition for Remediation of Drycleaners Listing
 US FIN ASSUR..... Financial Assurance Information
 EPA WATCH LIST..... EPA WATCH LIST
 2020 COR ACTION..... 2020 Corrective Action Program List
 TSCA..... Toxic Substances Control Act
 TRIS..... Toxic Chemical Release Inventory System
 SSTS..... Section 7 Tracking Systems
 ROD..... Records Of Decision
 RMP..... Risk Management Plans
 RAATS..... RCRA Administrative Action Tracking System
 PRP..... Potentially Responsible Parties
 PADS..... PCB Activity Database System
 ICIS..... Integrated Compliance Information System
 FTTS..... FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
 MLTS..... Material Licensing Tracking System
 COAL ASH DOE..... Steam-Electric Plant Operation Data
 COAL ASH EPA..... Coal Combustion Residues Surface Impoundments List

EXECUTIVE SUMMARY

PCB TRANSFORMER.....	PCB Transformer Registration Database
RADINFO.....	Radiation Information Database
HIST FTTS.....	FIFRA/TSCA Tracking System Administrative Case Listing
DOT OPS.....	Incident and Accident Data
CONSENT.....	Superfund (CERCLA) Consent Decrees
INDIAN RESERV.....	Indian Reservations
FUSRAP.....	Formerly Utilized Sites Remedial Action Program
UMTRA.....	Uranium Mill Tailings Sites
LEAD SMELTERS.....	Lead Smelter Sites
US AIRS.....	Aerometric Information Retrieval System Facility Subsystem
US MINES.....	Mines Master Index File
ABANDONED MINES.....	Abandoned Mines
FINDS.....	Facility Index System/Facility Registry System
DOCKET HWC.....	Hazardous Waste Compliance Docket Listing
UXO.....	Unexploded Ordnance Sites
ECHO.....	Enforcement & Compliance History Information
FUELS PROGRAM.....	EPA Fuels Program Registered Listing
CA BOND EXP. PLAN.....	Bond Expenditure Plan
Cortese.....	"Cortese" Hazardous Waste & Substances Sites List
DRYCLEANERS.....	Cleaner Facilities
EMI.....	Emissions Inventory Data
ENF.....	Enforcement Action Listing
Financial Assurance.....	Financial Assurance Information Listing
HAZNET.....	Facility and Manifest Data
ICE.....	ICE
HIST CORTESE.....	Hazardous Waste & Substance Site List
HWP.....	EnviroStor Permitted Facilities Listing
HWT.....	Registered Hazardous Waste Transporter Database
MINES.....	Mines Site Location Listing
MWMP.....	Medical Waste Management Program Listing
NPDES.....	NPDES Permits Listing
PEST LIC.....	Pesticide Regulation Licenses Listing
PROC.....	Certified Processors Database
Notify 65.....	Proposition 65 Records
UIC.....	UIC Listing
UIC GEO.....	UIC GEO (GEOTRACKER)
WASTEWATER PITS.....	Oil Wastewater Pits Listing
WDS.....	Waste Discharge System
MILITARY PRIV SITES.....	MILITARY PRIV SITES (GEOTRACKER)
PROJECT.....	PROJECT (GEOTRACKER)
WDR.....	Waste Discharge Requirements Listing
CIWQS.....	California Integrated Water Quality System
CERS.....	CERS
WIP.....	Well Investigation Program Case List
NON-CASE INFO.....	NON-CASE INFO (GEOTRACKER)
OTHER OIL GAS.....	OTHER OIL & GAS (GEOTRACKER)
PROD WATER PONDS.....	PROD WATER PONDS (GEOTRACKER)
SAMPLING POINT.....	SAMPLING POINT (GEOTRACKER)
WELL STIM PROJ.....	Well Stimulation Project (GEOTRACKER)

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP.....	EDR Proprietary Manufactured Gas Plants
--------------	---

EXECUTIVE SUMMARY

EDR Hist Auto..... EDR Exclusive Historical Auto Stations
EDR Hist Cleaner..... EDR Exclusive Historical Cleaners

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF..... Recovered Government Archive Solid Waste Facilities List
RGA LUST..... Recovered Government Archive Leaking Underground Storage Tank

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.

Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

ADDITIONAL ENVIRONMENTAL RECORDS

Local Lists of Registered Storage Tanks

SWEEPS UST: Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

A review of the SWEEPS UST list, as provided by EDR, and dated 06/01/1994 has revealed that there are 2 SWEEPS UST sites within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<i>(HOME RANCH)</i> Status: A Tank Status: A Comp Number: 33525	<i>3218 E KEYES RD</i>	<i>E 0 - 1/8 (0.035 mi.)</i>	<i>A1</i>	<i>8</i>
<i>LOVELAND TRUCKING, I</i> Status: A Tank Status: A Comp Number: 27943	<i>3342 E KEYES RD</i>	<i>E 1/8 - 1/4 (0.221 mi.)</i>	<i>B4</i>	<i>15</i>

EXECUTIVE SUMMARY

HIST UST: Historical UST Registered Database.

A review of the HIST UST list, as provided by EDR, and dated 10/15/1990 has revealed that there are 2 HIST UST sites within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
(HOME RANCH) Facility Id: 00000033525	3218 E KEYES RD	E 0 - 1/8 (0.035 mi.)	A1	8
LOVELAND TRUCKING, I Facility Id: 00000027943	3342 E KEYES RD	E 1/8 - 1/4 (0.221 mi.)	B4	15

Other Ascertainable Records

CUPA Listings: A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

A review of the CUPA Listings list, as provided by EDR, has revealed that there are 2 CUPA Listings sites within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
WESTSTEYN FARM Database: CUPA STANISLAUS, Date of Government Version: 12/11/2018	3218 E KEYES	E 0 - 1/8 (0.035 mi.)	A2	9
GARCIA RANCH 3336 Database: CUPA STANISLAUS, Date of Government Version: 12/11/2018	3336 E KEYES RD	E 1/8 - 1/4 (0.184 mi.)	B3	12

EXECUTIVE SUMMARY

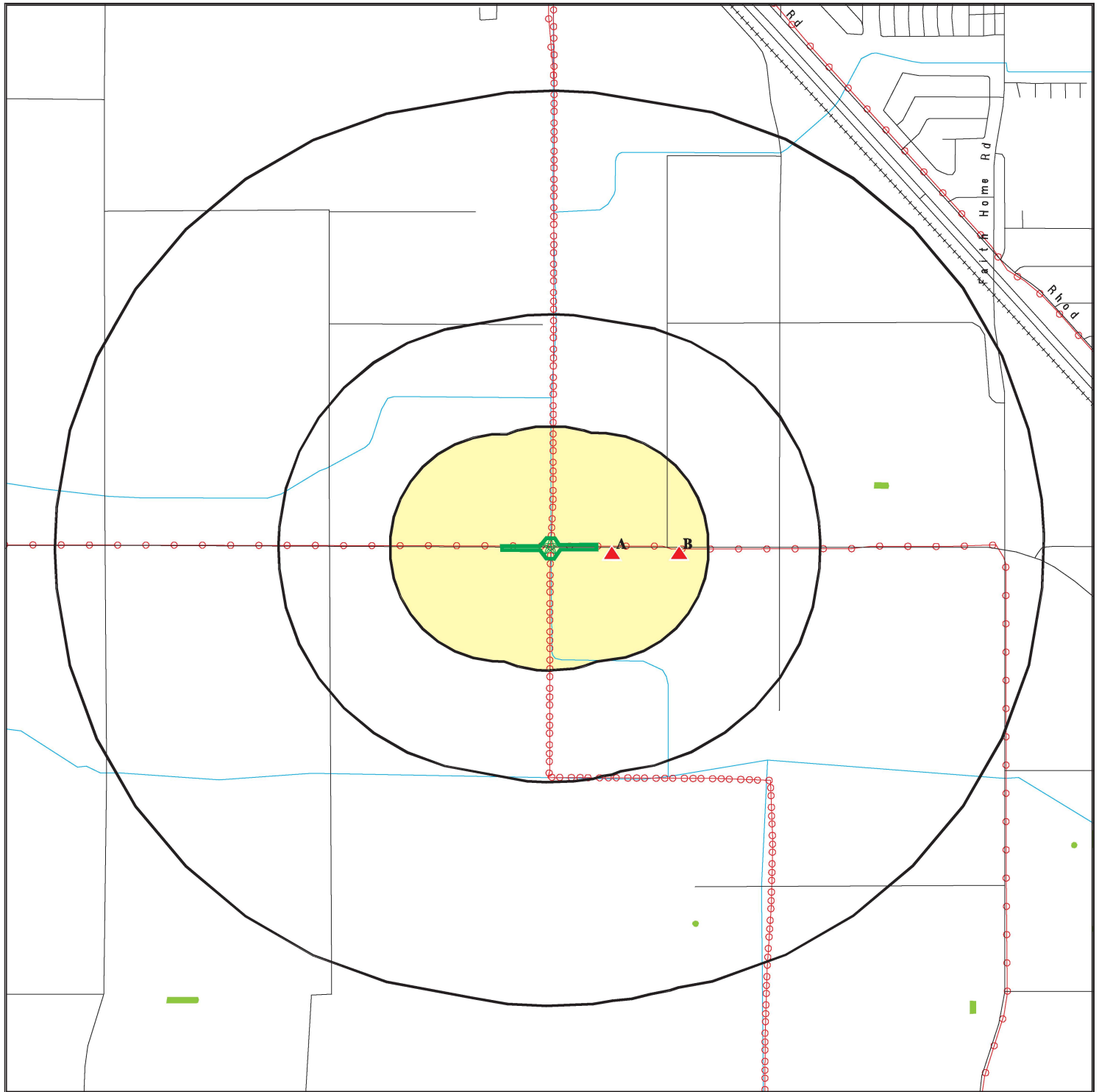
Due to poor or inadequate address information, the following sites were not mapped. Count: 6 records.













Site Name

Database(s)

CDL
CDL
CDL
CDL
CDL
CDL

OVERVIEW MAP - 05634836.2R



-  Target Property
-  Sites at elevations higher than or equal to the target property
-  Sites at elevations lower than the target property
-  Manufactured Gas Plants
-  National Priority List Sites
-  Dept. Defense Sites
-  Indian Reservations BIA
-  Power transmission lines
-  100-year flood zone
-  500-year flood zone
-  National Wetland Inventory
-  State Wetlands

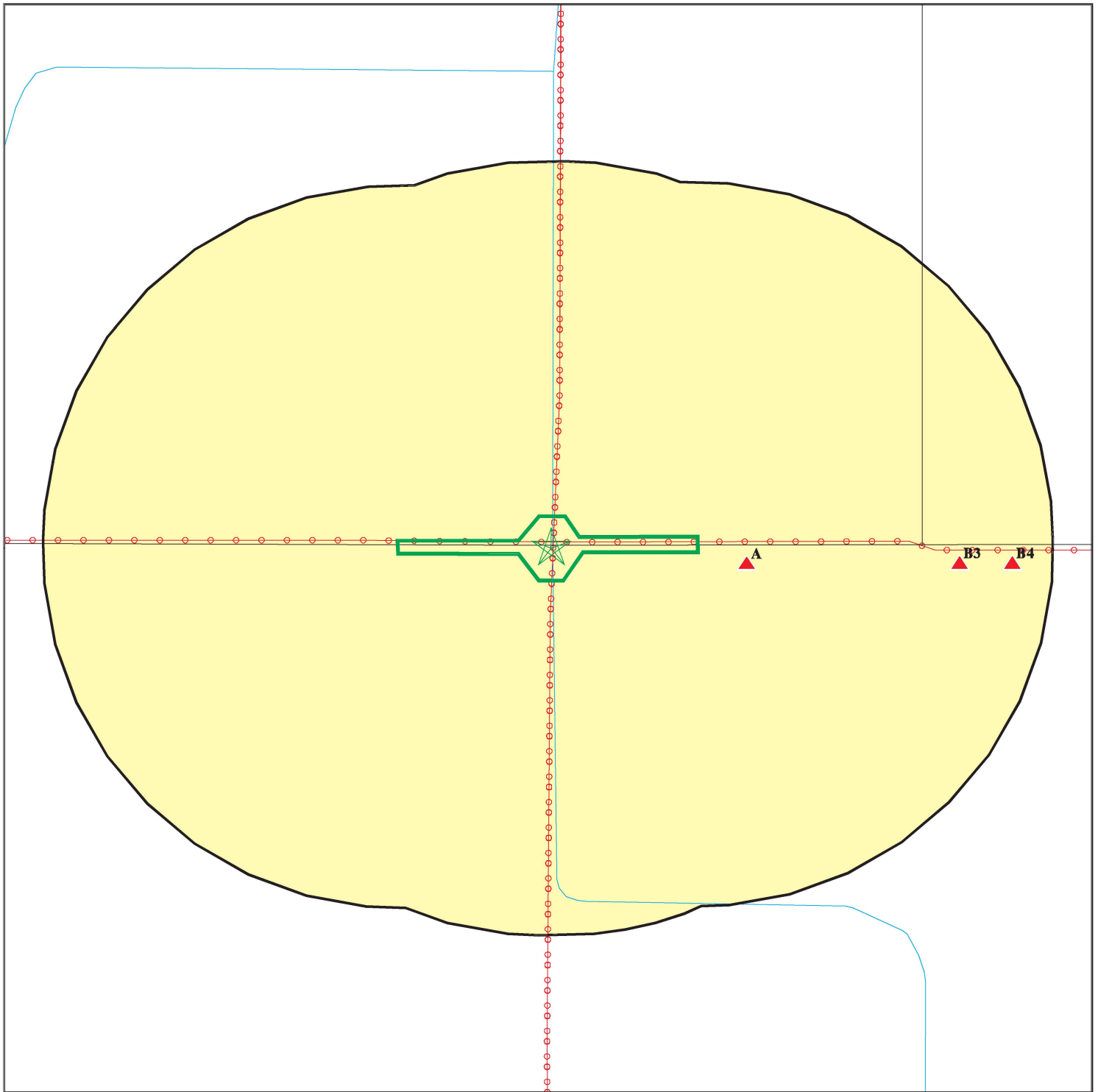
 Areas of Concern








This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.





SITE NAME: Ceres Main Canal Bridge Replacement
 ADDRESS: East Keyes Road
 Ceres CA 95307
 LAT/LONG: 37.551226 / 120.938903

CLIENT: Rincon
 CONTACT: Jennifer Morton
 INQUIRY #: 05634836.2r
 DATE: April 26, 2019 8:08 pm

DETAIL MAP - 05634836.2R



-  Target Property
-  Sites at elevations higher than or equal to the target property
-  Sites at elevations lower than the target property
-  Manufactured Gas Plants
-  Sensitive Receptors
-  National Priority List Sites
-  Dept. Defense Sites

-  Indian Reservations BIA
-  Power transmission lines
-  100-year flood zone
-  500-year flood zone

-  Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Ceres Main Canal Bridge Replacement
 ADDRESS: East Keyes Road
 Ceres CA 95307
 LAT/LONG: 37.551226 / 120.938903

CLIENT: Rincon
 CONTACT: Jennifer Morton
 INQUIRY #: 05634836.2r
 DATE: April 26, 2019 8:09 pm

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
<i>Federal NPL site list</i>								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	0.001		0	NR	NR	NR	NR	0
<i>Federal Delisted NPL site list</i>								
Delisted NPL	1.000		0	0	0	0	NR	0
<i>Federal CERCLIS list</i>								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
SEMS	0.500		0	0	0	NR	NR	0
<i>Federal CERCLIS NFRAP site list</i>								
SEMS-ARCHIVE	0.500		0	0	0	NR	NR	0
<i>Federal RCRA CORRACTS facilities list</i>								
CORRACTS	1.000		0	0	0	0	NR	0
<i>Federal RCRA non-CORRACTS TSD facilities list</i>								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
<i>Federal RCRA generators list</i>								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	0	NR	NR	NR	0
RCRA-CESQG	0.250		0	0	NR	NR	NR	0
<i>Federal institutional controls / engineering controls registries</i>								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
<i>Federal ERNS list</i>								
ERNS	0.001		0	NR	NR	NR	NR	0
<i>State- and tribal - equivalent NPL</i>								
RESPONSE	1.000		0	0	0	0	NR	0
<i>State- and tribal - equivalent CERCLIS</i>								
ENVIROSTOR	1.000		0	0	0	0	NR	0
<i>State and tribal landfill and/or solid waste disposal site lists</i>								
SWF/LF	0.500		0	0	0	NR	NR	0
<i>State and tribal leaking storage tank lists</i>								
LUST	0.500		0	0	0	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
INDIAN LUST	0.500		0	0	0	NR	NR	0
CPS-SLIC	0.500		0	0	0	NR	NR	0
State and tribal registered storage tank lists								
FEMA UST	0.250		0	0	NR	NR	NR	0
UST	0.250		0	0	NR	NR	NR	0
AST	0.250		0	0	NR	NR	NR	0
INDIAN UST	0.250		0	0	NR	NR	NR	0
State and tribal voluntary cleanup sites								
INDIAN VCP	0.500		0	0	0	NR	NR	0
VCP	0.500		0	0	0	NR	NR	0
State and tribal Brownfields sites								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
WMUDS/SWAT	0.500		0	0	0	NR	NR	0
SWRCY	0.500		0	0	0	NR	NR	0
HAULERS	0.001		0	NR	NR	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
IHS OPEN DUMPS	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US HIST CDL	0.001		0	NR	NR	NR	NR	0
HIST Cal-Sites	1.000		0	0	0	0	NR	0
SCH	0.250		0	0	NR	NR	NR	0
CDL	0.001		0	NR	NR	NR	NR	0
CERS HAZ WASTE	0.250		0	0	NR	NR	NR	0
Toxic Pits	1.000		0	0	0	0	NR	0
US CDL	0.001		0	NR	NR	NR	NR	0
PFAS	0.001		0	NR	NR	NR	NR	0
Local Lists of Registered Storage Tanks								
SWEEPS UST	0.250		1	1	NR	NR	NR	2
HIST UST	0.250		1	1	NR	NR	NR	2
CERS TANKS	0.250		0	0	NR	NR	NR	0
CA FID UST	0.250		0	0	NR	NR	NR	0
Local Land Records								
LIENS	0.001		0	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
LIENS 2	0.001		0	NR	NR	NR	NR	0
DEED	0.500		0	0	0	NR	NR	0
Records of Emergency Release Reports								
HMIRS	0.001		0	NR	NR	NR	NR	0
CHMIRS	0.001		0	NR	NR	NR	NR	0
LDS	0.001		0	NR	NR	NR	NR	0
MCS	0.001		0	NR	NR	NR	NR	0
SPILLS 90	0.001		0	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		0	0	NR	NR	NR	0
FUDS	1.000		0	0	0	0	NR	0
DOD	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	0.001		0	NR	NR	NR	NR	0
EPA WATCH LIST	0.001		0	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	0.001		0	NR	NR	NR	NR	0
TRIS	0.001		0	NR	NR	NR	NR	0
SSTS	0.001		0	NR	NR	NR	NR	0
ROD	1.000		0	0	0	0	NR	0
RMP	0.001		0	NR	NR	NR	NR	0
RAATS	0.001		0	NR	NR	NR	NR	0
PRP	0.001		0	NR	NR	NR	NR	0
PADS	0.001		0	NR	NR	NR	NR	0
ICIS	0.001		0	NR	NR	NR	NR	0
FTTS	0.001		0	NR	NR	NR	NR	0
MLTS	0.001		0	NR	NR	NR	NR	0
COAL ASH DOE	0.001		0	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	0.001		0	NR	NR	NR	NR	0
RADINFO	0.001		0	NR	NR	NR	NR	0
HIST FTTS	0.001		0	NR	NR	NR	NR	0
DOT OPS	0.001		0	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
INDIAN RESERV	0.001		0	NR	NR	NR	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	0.001		0	NR	NR	NR	NR	0
US AIRS	0.001		0	NR	NR	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
ABANDONED MINES	0.001		0	NR	NR	NR	NR	0
FINDS	0.001		0	NR	NR	NR	NR	0
DOCKET HWC	0.001		0	NR	NR	NR	NR	0
UXO	1.000		0	0	0	0	NR	0
ECHO	0.001		0	NR	NR	NR	NR	0
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
CA BOND EXP. PLAN	1.000		0	0	0	0	NR	0
Cortese	0.500		0	0	0	NR	NR	0
CUPA Listings	0.250		1	1	NR	NR	NR	2

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
EMI	0.001		0	NR	NR	NR	NR	0
ENF	0.001		0	NR	NR	NR	NR	0
Financial Assurance	0.001		0	NR	NR	NR	NR	0
HAZNET	0.001		0	NR	NR	NR	NR	0
ICE	0.001		0	NR	NR	NR	NR	0
HIST CORTESE	0.500		0	0	0	NR	NR	0
HWP	1.000		0	0	0	0	NR	0
HWT	0.250		0	0	NR	NR	NR	0
MINES	0.001		0	NR	NR	NR	NR	0
MWMP	0.250		0	0	NR	NR	NR	0
NPDES	0.001		0	NR	NR	NR	NR	0
PEST LIC	0.001		0	NR	NR	NR	NR	0
PROC	0.500		0	0	0	NR	NR	0
Notify 65	1.000		0	0	0	0	NR	0
UIC	0.001		0	NR	NR	NR	NR	0
UIC GEO	0.001		0	NR	NR	NR	NR	0
WASTEWATER PITS	0.500		0	0	0	NR	NR	0
WDS	0.001		0	NR	NR	NR	NR	0
MILITARY PRIV SITES	0.001		0	NR	NR	NR	NR	0
PROJECT	0.001		0	NR	NR	NR	NR	0
WDR	0.001		0	NR	NR	NR	NR	0
CIWQS	0.001		0	NR	NR	NR	NR	0
CERS	0.001		0	NR	NR	NR	NR	0
WIP	0.250		0	0	NR	NR	NR	0
NON-CASE INFO	0.001		0	NR	NR	NR	NR	0
OTHER OIL GAS	0.001		0	NR	NR	NR	NR	0
PROD WATER PONDS	0.001		0	NR	NR	NR	NR	0
SAMPLING POINT	0.001		0	NR	NR	NR	NR	0
WELL STIM PROJ	0.001		0	NR	NR	NR	NR	0

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP	1.000		0	0	0	0	NR	0
EDR Hist Auto	0.125		0	NR	NR	NR	NR	0
EDR Hist Cleaner	0.125		0	NR	NR	NR	NR	0

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF	0.001		0	NR	NR	NR	NR	0
RGA LUST	0.001		0	NR	NR	NR	NR	0

- Totals --		0	3	3	0	0	0	6
-------------	--	---	---	---	---	---	---	---

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

A1
East
< 1/8
0.035 mi.
183 ft.
(HOME RANCH)
3218 E KEYES RD
CERES, CA 95307
Site 1 of 2 in cluster A

SWEEPS UST
HIST UST
U001604854
N/A

Relative:
Higher

Actual:
87 ft.

SWEEPS UST:

Status: Active
Comp Number: 33525
Number: 9
Board Of Equalization: Not reported
Referral Date: 07-01-85
Action Date: Not reported
Created Date: 02-29-88
Owner Tank Id: 1
SWRCB Tank Id: 50-000-033525-000001
Tank Status: A
Capacity: 515
Active Date: 07-01-85
Tank Use: M.V. FUEL
STG: P
Content: DIESEL
Number Of Tanks: 2

Status: Active
Comp Number: 33525
Number: 9
Board Of Equalization: Not reported
Referral Date: 07-01-85
Action Date: Not reported
Created Date: 02-29-88
Owner Tank Id: 2
SWRCB Tank Id: 50-000-033525-000002
Tank Status: A
Capacity: 515
Active Date: 07-01-85
Tank Use: M.V. FUEL
STG: P
Content: REG UNLEADED
Number Of Tanks: Not reported

HIST UST:

File Number: 00022291
URL: <http://geotracker.waterboards.ca.gov/ustpdfs/pdf/00022291.pdf>
Region: STATE
Facility ID: 00000033525
Facility Type: Other
Other Type: FARM
Contact Name: W.H. BRESHEARS INC.
Telephone: 2095379553
Owner Name: JALIN L. WESTSTEYN
Owner Address: 3218 E KEYES RD
Owner City,St,Zip: CERES, CA 95307
Total Tanks: 0002

Tank Num: 001
Container Num: 1
Year Installed: 1980
Tank Capacity: 00000515

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

(HOME RANCH) (Continued)

U001604854

Tank Used for: PRODUCT
Type of Fuel: DIESEL
Container Construction Thickness: 12
Leak Detection: Stock Inventor

Tank Num: 002
Container Num: 2
Year Installed: 1980
Tank Capacity: 00000515
Tank Used for: PRODUCT
Type of Fuel: PREMIUM
Container Construction Thickness: 12
Leak Detection: Stock Inventor

[Click here for Geo Tracker PDF:](#)

A2
East
< 1/8
0.035 mi.
183 ft.

WESTSTEYN FARM
3218 E KEYES
CERES, CA 95307

CUPA Listings
CERS

S119105454
N/A

Site 2 of 2 in cluster A

Relative:
Higher

CUPA STANISLAUS:

Actual:
87 ft.

Region: STANISLAUS
Facility ID: FA0000575
CERS ID: 10179619
Mailing Address: 3218 E Keyes Rd
Mailing City/State/Zip: Ceres, CA 95307

CERS TANKS:

Site ID: 85754
CERS ID: 10179619
CERS Description: Chemical Storage Facilities

Violations:

Site ID: 85754
Site Name: Weststeyn Farm
Violation Date: 03-15-2018
Citation: HSC 6.95 25508.2 - California Health and Safety Code, Chapter 6.95, Section(s) 25508.2
Violation Description: Failure to annually review and electronically certify that the business plan is complete and accurate on or before the annual due date.
Violation Notes: Returned to compliance on 03/19/2018. OBSERVATION: The facility has not annually reviewed and certified that the business plan is complete, accurate, and up-to-date. CORRECTIVE ACTION: Review, revise, and certify the business plan electronically in the California Environmental Reporting System (CERS).
Violation Division: Stanislaus County Environmental Resources
Violation Program: HMRRP
Violation Source: CERS

Evaluation:

Eval General Type: Compliance Evaluation Inspection
Eval Date: 03-15-2018
Violations Found: Yes
Eval Type: Routine done by local agency

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

WESTSTEYN FARM (Continued)

S119105454

Eval Notes: Consent to inspect given by owner Jalin Weststeyn via telephone.
Eval Division: Stanislaus County Environmental Resources
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 08-14-2014
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Observed Fuel Tanks, no significant changes. MTM
Eval Division: Stanislaus County Environmental Resources
Eval Program: HMRRP
Eval Source: CERS

Enforcement Action:

Site ID: 85754
Site Name: Weststeyn Farm
Site Address: 3218 E KEYES
Site City: CERES
Site Zip: 95307
Enf Action Date: 03-15-2018
Enf Action Type: Notice of Violation (Unified Program)
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes: Not reported
Enf Action Division: Stanislaus County Environmental Resources
Enf Action Program: HMRRP
Enf Action Source: CERS

Affiliation:

Affiliation Type Desc: CUPA District
Entity Name: Stanislaus Cnty Env Res.
Entity Title: Not reported
Affiliation Address: 3800 Cornucopia Way, Suite C
Affiliation City: Modesto
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 95358
Affiliation Phone: (209) 525-6700

Affiliation Type Desc: Operator
Entity Name: Jalin Weststeyn
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: (209) 985-5448

Affiliation Type Desc: Document Preparer
Entity Name: Jalin L. Weststeyn, Owner
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

WESTSTEYN FARM (Continued)

S119105454

Affiliation Zip:	Not reported
Affiliation Phone:	Not reported
Affiliation Type Desc:	Facility Mailing Address
Entity Name:	Mailing Address
Entity Title:	Not reported
Affiliation Address:	3218 E Keyes Rd
Affiliation City:	Ceres
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	95307
Affiliation Phone:	Not reported
Affiliation Type Desc:	Identification Signer
Entity Name:	Jalin Weststeyn
Entity Title:	Owner
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported
Affiliation Type Desc:	Legal Owner
Entity Name:	Jalin L. Weststeyn
Entity Title:	Not reported
Affiliation Address:	3218 E Keyes Rd
Affiliation City:	Ceres
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	95307
Affiliation Phone:	(209) 537-1735
Affiliation Type Desc:	Property Owner
Entity Name:	Jalin Weststeyn
Entity Title:	Not reported
Affiliation Address:	3218 E Keyes
Affiliation City:	Ceres
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	95307
Affiliation Phone:	(209) 537-1735
Affiliation Type Desc:	Environmental Contact
Entity Name:	Jalin Weststeyn
Entity Title:	Not reported
Affiliation Address:	3218 E Keyes
Affiliation City:	Ceres
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	95307
Affiliation Phone:	(209) 985-5448
Affiliation Type Desc:	Parent Corporation
Entity Name:	Weststeyn Farm
Entity Title:	Not reported
Affiliation Address:	Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

WESTSTEYN FARM (Continued)

S119105454

Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

B3
East
1/8-1/4
0.184 mi.
972 ft.

GARCIA RANCH 3336
3336 E KEYES RD
CERES, CA 95307

CUPA Listings
CERS

S119105002
N/A

Site 1 of 2 in cluster B

Relative:
Higher
Actual:
88 ft.

CUPA STANISLAUS:

Region: STANISLAUS
Facility ID: FA0000093
CERS ID: 10446379
Mailing Address: 6942 Maze
Mailing City/State/Zip: Modesto, CA 95358

CERS TANKS:

Site ID: 13780
CERS ID: 10446379
CERS Description: Chemical Storage Facilities

Violations:

Site ID: 13780
Site Name: Garcia Ranch 3336
Violation Date: 03-21-2017
Citation: HSC 6.95 25508.2 - California Health and Safety Code, Chapter 6.95, Section(s) 25508.2
Violation Description: Failure to annually review and electronically certify that the business plan is complete and accurate on or before the annual due date.
Violation Notes: Returned to compliance on 03/21/2017. CERS reporting completed at time of inspection.-MTM
Violation Division: Stanislaus County Environmental Resources
Violation Program: HMRRP
Violation Source: CERS

Evaluation:

Eval General Type: Compliance Evaluation Inspection
Eval Date: 03-21-2017
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Verified Chemical Inventory. CERS submittal completed at time of inspection and is current, accurate and complete. -MTM
Eval Division: Stanislaus County Environmental Resources
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 01-31-2014
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: Initial Site Map Scanned. Operator given Contingency Plan forms. MTM
Eval Division: Stanislaus County Environmental Resources

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

GARCIA RANCH 3336 (Continued)

S119105002

Eval Program: HMRRP
Eval Source: CERS

Enforcement Action:
Site ID: 13780
Site Name: Garcia Ranch 3336
Site Address: 3336 E KEYES RD
Site City: CERES
Site Zip: 95307
Enf Action Date: 03-21-2017
Enf Action Type: Notice of Violation (Unified Program)
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes: Not reported
Enf Action Division: Stanislaus County Environmental Resources
Enf Action Program: HMRRP
Enf Action Source: CERS

Coordinates:
Site ID: 13780
Facility Name: Garcia Ranch 3336
Env Int Type Code: HMBP
Program ID: 10446379
Coord Name: Not reported
Ref Point Type Desc: Center of a facility or station.
Latitude: 37.594760
Longitude: -120.956300

Affiliation:
Affiliation Type Desc: Environmental Contact
Entity Name: Miguel A. Garcia
Entity Title: Not reported
Affiliation Address: 6942 Maze
Affiliation City: Modesto
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 95358
Affiliation Phone: (209) 678-6486

Affiliation Type Desc: Operator
Entity Name: Miguel A. Garcia
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: (209) 678-6486

Affiliation Type Desc: CUPA District
Entity Name: Stanislaus Cnty Env Res.
Entity Title: Not reported
Affiliation Address: 3800 Cornucopia Way, Suite C
Affiliation City: Modesto
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 95358

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

GARCIA RANCH 3336 (Continued)

S119105002

Affiliation Phone: (209) 525-6700

Affiliation Type Desc: Document Preparer
Entity Name: Miguel Garc a
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Affiliation Type Desc: Facility Mailing Address
Entity Name: Mailing Address
Entity Title: Not reported
Affiliation Address: 6942 Maze
Affiliation City: Modesto
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 95358
Affiliation Phone: Not reported

Affiliation Type Desc: Identification Signer
Entity Name: Miguel Garc a
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Affiliation Type Desc: Parent Corporation
Entity Name: Brughelli Ranch
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Affiliation Type Desc: Legal Owner
Entity Name: Miguel A. Garcia
Entity Title: Not reported
Affiliation Address: 3559 Shiloh Rd
Affiliation City: Modesto
Affiliation State: CA
Affiliation Country: United States
Affiliation Zip: 95358
Affiliation Phone: (209) 678-6486

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

B4
East
1/8-1/4
0.221 mi.
1169 ft.
LOVELAND TRUCKING, INC
3342 E KEYES RD
CERES, CA 95307
Site 2 of 2 in cluster B

SWEEPS UST
HIST UST
U001604941
N/A

Relative:
Higher

Actual:
88 ft.

SWEEPS UST:

Status: Active
Comp Number: 27943
Number: 9
Board Of Equalization: Not reported
Referral Date: 07-01-85
Action Date: Not reported
Created Date: 02-29-88
Owner Tank Id: 1
SWRCB Tank Id: 50-000-027943-000001
Tank Status: A
Capacity: 1000
Active Date: 07-01-85
Tank Use: M.V. FUEL
STG: P
Content: LEADED
Number Of Tanks: 1

HIST UST:

File Number: 00022531
URL: <http://geotracker.waterboards.ca.gov/ustpdfs/pdf/00022531.pdf>
Region: STATE
Facility ID: 00000027943
Facility Type: Other
Other Type: RANCH
Contact Name: EMERY LOVELAND
Telephone: 2095378366
Owner Name: LOVELAND TRUCKING, INC.
Owner Address: 3342 E. KEYES RD.
Owner City,St,Zip: CERES, CA 95307
Total Tanks: 0001

Tank Num: 001
Container Num: 1
Year Installed: Not reported
Tank Capacity: 00001000
Tank Used for: PRODUCT
Type of Fuel: REGULAR
Container Construction Thickness: 12
Leak Detection: None

[Click here for Geo Tracker PDF:](#)

Count: 6 records.

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CERES	S107537977		CANAL NEAR BLAKER & KEYES ROAD	95307	CDL
CERES	S109254151		CENTRAL AVE, 1/2 MILE S OF KEY	95307	CDL
CERES	S107538027		CERES MAIN CANAL, 1/4 MI N OF	95307	CDL
STANISLAUS COUNTY	S107538683		HAWKINS RD, 1/4 MI N OF KEYES		CDL
STANISLAUS COUNTY	S107539116		KEYES RD, 3/4 MI E OF MONTPELL		CDL
STANISLAUS COUNTY	S107538356		E KEYES RD BETW HAWKINS RD & M		CDL

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 03/11/2019	Source: EPA
Date Data Arrived at EDR: 03/14/2019	Telephone: N/A
Date Made Active in Reports: 04/01/2019	Last EDR Contact: 04/18/2019
Number of Days to Update: 18	Next Scheduled EDR Contact: 07/15/2019
	Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 7
Telephone: 913-551-7247

EPA Region 4
Telephone 404-562-8033

EPA Region 8
Telephone: 303-312-6774

EPA Region 5
Telephone 312-886-6686

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 03/11/2019	Source: EPA
Date Data Arrived at EDR: 03/14/2019	Telephone: N/A
Date Made Active in Reports: 04/01/2019	Last EDR Contact: 04/18/2019
Number of Days to Update: 18	Next Scheduled EDR Contact: 07/15/2019
	Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

Federal Delisted NPL site list

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 03/11/2019
Date Data Arrived at EDR: 03/14/2019
Date Made Active in Reports: 04/01/2019
Number of Days to Update: 18

Source: EPA
Telephone: N/A
Last EDR Contact: 04/18/2019
Next Scheduled EDR Contact: 07/15/2019
Data Release Frequency: Quarterly

Federal CERCLIS list

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 11/07/2016
Date Data Arrived at EDR: 01/05/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 92

Source: Environmental Protection Agency
Telephone: 703-603-8704
Last EDR Contact: 04/05/2019
Next Scheduled EDR Contact: 07/15/2019
Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly known as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 03/11/2019
Date Data Arrived at EDR: 03/14/2019
Date Made Active in Reports: 04/17/2019
Number of Days to Update: 34

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 04/18/2019
Next Scheduled EDR Contact: 07/29/2019
Data Release Frequency: Quarterly

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 03/11/2019	Source: EPA
Date Data Arrived at EDR: 03/14/2019	Telephone: 800-424-9346
Date Made Active in Reports: 04/17/2019	Last EDR Contact: 04/18/2019
Number of Days to Update: 34	Next Scheduled EDR Contact: 07/29/2019
	Data Release Frequency: Quarterly

Federal RCRA CORRACTS facilities list

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 03/25/2019	Source: EPA
Date Data Arrived at EDR: 03/27/2019	Telephone: 800-424-9346
Date Made Active in Reports: 04/17/2019	Last EDR Contact: 03/27/2019
Number of Days to Update: 21	Next Scheduled EDR Contact: 07/08/2019
	Data Release Frequency: Quarterly

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 03/25/2019	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/27/2019	Telephone: (415) 495-8895
Date Made Active in Reports: 04/17/2019	Last EDR Contact: 03/27/2019
Number of Days to Update: 21	Next Scheduled EDR Contact: 07/08/2019
	Data Release Frequency: Quarterly

Federal RCRA generators list

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 03/25/2019	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/27/2019	Telephone: (415) 495-8895
Date Made Active in Reports: 04/17/2019	Last EDR Contact: 03/27/2019
Number of Days to Update: 21	Next Scheduled EDR Contact: 07/08/2019
	Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 03/25/2019	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/27/2019	Telephone: (415) 495-8895
Date Made Active in Reports: 04/17/2019	Last EDR Contact: 03/27/2019
Number of Days to Update: 21	Next Scheduled EDR Contact: 07/08/2019
	Data Release Frequency: Quarterly

RCRA-CESQG: RCRA - Conditionally Exempt Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 03/25/2019	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/27/2019	Telephone: (415) 495-8895
Date Made Active in Reports: 04/17/2019	Last EDR Contact: 03/27/2019
Number of Days to Update: 21	Next Scheduled EDR Contact: 07/08/2019
	Data Release Frequency: Quarterly

Federal institutional controls / engineering controls registries

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 02/22/2019	Source: Department of the Navy
Date Data Arrived at EDR: 03/07/2019	Telephone: 843-820-7326
Date Made Active in Reports: 04/17/2019	Last EDR Contact: 02/07/2019
Number of Days to Update: 41	Next Scheduled EDR Contact: 05/27/2019
	Data Release Frequency: Varies

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 01/31/2019	Source: Environmental Protection Agency
Date Data Arrived at EDR: 02/04/2019	Telephone: 703-603-0695
Date Made Active in Reports: 03/08/2019	Last EDR Contact: 02/04/2019
Number of Days to Update: 32	Next Scheduled EDR Contact: 06/10/2019
	Data Release Frequency: Varies

US INST CONTROL: Sites with Institutional Controls

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 01/31/2019	Source: Environmental Protection Agency
Date Data Arrived at EDR: 02/04/2019	Telephone: 703-603-0695
Date Made Active in Reports: 03/08/2019	Last EDR Contact: 02/04/2019
Number of Days to Update: 32	Next Scheduled EDR Contact: 06/10/2019
	Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 02/04/2019

Date Data Arrived at EDR: 02/08/2019

Date Made Active in Reports: 03/08/2019

Number of Days to Update: 28

Source: National Response Center, United States Coast Guard

Telephone: 202-267-2180

Last EDR Contact: 03/26/2019

Next Scheduled EDR Contact: 07/08/2019

Data Release Frequency: Quarterly

State- and tribal - equivalent NPL

RESPONSE: State Response Sites

Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity.

These confirmed release sites are generally high-priority and high potential risk.

Date of Government Version: 01/28/2019

Date Data Arrived at EDR: 01/29/2019

Date Made Active in Reports: 03/05/2019

Number of Days to Update: 35

Source: Department of Toxic Substances Control

Telephone: 916-323-3400

Last EDR Contact: 01/29/2019

Next Scheduled EDR Contact: 05/11/2019

Data Release Frequency: Quarterly

State- and tribal - equivalent CERCLIS

ENVIROSTOR: EnviroStor Database

The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifies sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

Date of Government Version: 01/28/2019

Date Data Arrived at EDR: 01/29/2019

Date Made Active in Reports: 03/05/2019

Number of Days to Update: 35

Source: Department of Toxic Substances Control

Telephone: 916-323-3400

Last EDR Contact: 01/29/2019

Next Scheduled EDR Contact: 05/11/2019

Data Release Frequency: Quarterly

State and tribal landfill and/or solid waste disposal site lists

SWF/LF (SWIS): Solid Waste Information System

Active, Closed and Inactive Landfills. SWF/LF records typically contain an inventory of solid waste disposal facilities or landfills. These may be active or inactive facilities or open dumps that failed to meet RCRA Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 02/11/2019

Date Data Arrived at EDR: 02/12/2019

Date Made Active in Reports: 03/05/2019

Number of Days to Update: 21

Source: Department of Resources Recycling and Recovery

Telephone: 916-341-6320

Last EDR Contact: 02/12/2019

Next Scheduled EDR Contact: 05/27/2019

Data Release Frequency: Quarterly

State and tribal leaking storage tank lists

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

LUST REG 1: Active Toxic Site Investigation

Del Norte, Humboldt, Lake, Mendocino, Modoc, Siskiyou, Sonoma, Trinity counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/01/2001
Date Data Arrived at EDR: 02/28/2001
Date Made Active in Reports: 03/29/2001
Number of Days to Update: 29

Source: California Regional Water Quality Control Board North Coast (1)
Telephone: 707-570-3769
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST REG 7: Leaking Underground Storage Tank Case Listing

Leaking Underground Storage Tank locations. Imperial, Riverside, San Diego, Santa Barbara counties.

Date of Government Version: 02/26/2004
Date Data Arrived at EDR: 02/26/2004
Date Made Active in Reports: 03/24/2004
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Colorado River Basin Region (7)
Telephone: 760-776-8943
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST REG 8: Leaking Underground Storage Tanks

California Regional Water Quality Control Board Santa Ana Region (8). For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/14/2005
Date Data Arrived at EDR: 02/15/2005
Date Made Active in Reports: 03/28/2005
Number of Days to Update: 41

Source: California Regional Water Quality Control Board Santa Ana Region (8)
Telephone: 909-782-4496
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: Varies

LUST REG 6V: Leaking Underground Storage Tank Case Listing

Leaking Underground Storage Tank locations. Inyo, Kern, Los Angeles, Mono, San Bernardino counties.

Date of Government Version: 06/07/2005
Date Data Arrived at EDR: 06/07/2005
Date Made Active in Reports: 06/29/2005
Number of Days to Update: 22

Source: California Regional Water Quality Control Board Victorville Branch Office (6)
Telephone: 760-241-7365
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST REG 6L: Leaking Underground Storage Tank Case Listing

For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/09/2003
Date Data Arrived at EDR: 09/10/2003
Date Made Active in Reports: 10/07/2003
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Lahontan Region (6)
Telephone: 530-542-5572
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST REG 5: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank locations. Alameda, Alpine, Amador, Butte, Colusa, Contra Costa, Calveras, El Dorado, Fresno, Glenn, Kern, Kings, Lake, Lassen, Madera, Mariposa, Merced, Modoc, Napa, Nevada, Placer, Plumas, Sacramento, San Joaquin, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Tuolumne, Yolo, Yuba counties.

Date of Government Version: 07/01/2008
Date Data Arrived at EDR: 07/22/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 9

Source: California Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-4834
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: No Update Planned

LUST: Leaking Underground Fuel Tank Report (GEOTRACKER)

Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 12/10/2018
Date Data Arrived at EDR: 12/11/2018
Date Made Active in Reports: 01/15/2019
Number of Days to Update: 35

Source: State Water Resources Control Board
Telephone: see region list
Last EDR Contact: 12/11/2018
Next Scheduled EDR Contact: 03/25/2019
Data Release Frequency: Quarterly

LUST REG 2: Fuel Leak List

Leaking Underground Storage Tank locations. Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma counties.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: California Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-622-2433
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: Quarterly

LUST REG 3: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank locations. Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz counties.

Date of Government Version: 05/19/2003
Date Data Arrived at EDR: 05/19/2003
Date Made Active in Reports: 06/02/2003
Number of Days to Update: 14

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-542-4786
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: No Update Planned

LUST REG 4: Underground Storage Tank Leak List

Los Angeles, Ventura counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6710
Last EDR Contact: 09/06/2011
Next Scheduled EDR Contact: 12/19/2011
Data Release Frequency: No Update Planned

LUST REG 9: Leaking Underground Storage Tank Report

Orange, Riverside, San Diego counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 03/01/2001
Date Data Arrived at EDR: 04/23/2001
Date Made Active in Reports: 05/21/2001
Number of Days to Update: 28

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-637-5595
Last EDR Contact: 09/26/2011
Next Scheduled EDR Contact: 01/09/2012
Data Release Frequency: No Update Planned

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 04/12/2018
Date Data Arrived at EDR: 05/18/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 63

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 03/07/2019
Next Scheduled EDR Contact: 05/06/2019
Data Release Frequency: Varies

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 04/10/2018
Date Data Arrived at EDR: 05/18/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 63

Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 03/07/2019
Next Scheduled EDR Contact: 05/06/2019
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 04/25/2018	Source: EPA Region 8
Date Data Arrived at EDR: 05/18/2018	Telephone: 303-312-6271
Date Made Active in Reports: 07/20/2018	Last EDR Contact: 03/07/2019
Number of Days to Update: 63	Next Scheduled EDR Contact: 05/06/2019
	Data Release Frequency: Varies

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 04/24/2018	Source: EPA Region 7
Date Data Arrived at EDR: 05/18/2018	Telephone: 913-551-7003
Date Made Active in Reports: 07/20/2018	Last EDR Contact: 03/07/2019
Number of Days to Update: 63	Next Scheduled EDR Contact: 05/06/2019
	Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 04/01/2018	Source: EPA Region 6
Date Data Arrived at EDR: 05/18/2018	Telephone: 214-665-6597
Date Made Active in Reports: 07/20/2018	Last EDR Contact: 03/07/2019
Number of Days to Update: 63	Next Scheduled EDR Contact: 05/06/2019
	Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 05/08/2018	Source: EPA Region 4
Date Data Arrived at EDR: 05/18/2018	Telephone: 404-562-8677
Date Made Active in Reports: 07/20/2018	Last EDR Contact: 03/05/2019
Number of Days to Update: 63	Next Scheduled EDR Contact: 05/06/2019
	Data Release Frequency: Varies

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land

A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 04/13/2018	Source: EPA Region 1
Date Data Arrived at EDR: 05/18/2018	Telephone: 617-918-1313
Date Made Active in Reports: 07/20/2018	Last EDR Contact: 03/07/2019
Number of Days to Update: 63	Next Scheduled EDR Contact: 05/06/2019
	Data Release Frequency: Varies

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land

Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 04/12/2018	Source: EPA, Region 5
Date Data Arrived at EDR: 05/18/2018	Telephone: 312-886-7439
Date Made Active in Reports: 07/20/2018	Last EDR Contact: 03/07/2019
Number of Days to Update: 63	Next Scheduled EDR Contact: 05/06/2019
	Data Release Frequency: Varies

CPS-SLIC: Statewide SLIC Cases (GEOTRACKER)

Cleanup Program Sites (CPS; also known as Site Cleanups [SC] and formerly known as Spills, Leaks, Investigations, and Cleanups [SLIC] sites) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 12/10/2018	Source: State Water Resources Control Board
Date Data Arrived at EDR: 12/11/2018	Telephone: 866-480-1028
Date Made Active in Reports: 01/15/2019	Last EDR Contact: 12/12/2018
Number of Days to Update: 35	Next Scheduled EDR Contact: 03/25/2019
	Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

SLIC REG 1: Active Toxic Site Investigations

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2003
Date Data Arrived at EDR: 04/07/2003
Date Made Active in Reports: 04/25/2003
Number of Days to Update: 18

Source: California Regional Water Quality Control Board, North Coast Region (1)
Telephone: 707-576-2220
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 2: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-286-0457
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: Quarterly

SLIC REG 3: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/18/2006
Date Data Arrived at EDR: 05/18/2006
Date Made Active in Reports: 06/15/2006
Number of Days to Update: 28

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-549-3147
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: Semi-Annually

SLIC REG 4: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/17/2004
Date Data Arrived at EDR: 11/18/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 47

Source: Region Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6600
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: Varies

SLIC REG 5: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/01/2005
Date Data Arrived at EDR: 04/05/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 16

Source: Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-3291
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: Semi-Annually

SLIC REG 6V: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/24/2005
Date Data Arrived at EDR: 05/25/2005
Date Made Active in Reports: 06/16/2005
Number of Days to Update: 22

Source: Regional Water Quality Control Board, Victorville Branch
Telephone: 619-241-6583
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: Semi-Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

SLIC REG 6L: SLIC Sites

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board, Lahontan Region
Telephone: 530-542-5574
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

SLIC REG 7: SLIC List

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/24/2004
Date Data Arrived at EDR: 11/29/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 36

Source: California Regional Quality Control Board, Colorado River Basin Region
Telephone: 760-346-7491
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 8: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2008
Date Data Arrived at EDR: 04/03/2008
Date Made Active in Reports: 04/14/2008
Number of Days to Update: 11

Source: California Region Water Quality Control Board Santa Ana Region (8)
Telephone: 951-782-3298
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: Semi-Annually

SLIC REG 9: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/10/2007
Date Data Arrived at EDR: 09/11/2007
Date Made Active in Reports: 09/28/2007
Number of Days to Update: 17

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-467-2980
Last EDR Contact: 08/08/2011
Next Scheduled EDR Contact: 11/21/2011
Data Release Frequency: Annually

State and tribal registered storage tank lists

FEMA UST: Underground Storage Tank Listing

A listing of all FEMA owned underground storage tanks.

Date of Government Version: 05/15/2017
Date Data Arrived at EDR: 05/30/2017
Date Made Active in Reports: 10/13/2017
Number of Days to Update: 136

Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 04/25/2019
Next Scheduled EDR Contact: 07/22/2019
Data Release Frequency: Varies

UST CLOSURE: Proposed Closure of Underground Storage Tank (UST) Cases

UST cases that are being considered for closure by either the State Water Resources Control Board or the Executive Director have been posted for a 60-day public comment period. UST Case Closures being proposed for consideration by the State Water Resources Control Board. These are primarily UST cases that meet closure criteria under the decisional framework in State Water Board Resolution No. 92-49 and other Board orders. UST Case Closures proposed for consideration by the Executive Director pursuant to State Water Board Resolution No. 2012-0061. These are cases that meet the criteria of the Low-Threat UST Case Closure Policy. UST Case Closure Review Denials and Approved Orders.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 03/11/2019
Date Data Arrived at EDR: 03/13/2019
Date Made Active in Reports: 04/03/2019
Number of Days to Update: 21

Source: State Water Resources Control Board
Telephone: 916-327-7844
Last EDR Contact: 03/13/2019
Next Scheduled EDR Contact: 06/24/2019
Data Release Frequency: Varies

MILITARY UST SITES: Military UST Sites (GEOTRACKER)

Military ust sites

Date of Government Version: 12/10/2018
Date Data Arrived at EDR: 12/11/2018
Date Made Active in Reports: 01/15/2019
Number of Days to Update: 35

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/12/2018
Next Scheduled EDR Contact: 03/25/2019
Data Release Frequency: Varies

UST: Active UST Facilities

Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 12/10/2018
Date Data Arrived at EDR: 12/11/2018
Date Made Active in Reports: 01/15/2019
Number of Days to Update: 35

Source: SWRCB
Telephone: 916-341-5851
Last EDR Contact: 12/11/2018
Next Scheduled EDR Contact: 03/25/2019
Data Release Frequency: Semi-Annually

AST: Aboveground Petroleum Storage Tank Facilities

A listing of aboveground storage tank petroleum storage tank locations.

Date of Government Version: 07/06/2016
Date Data Arrived at EDR: 07/12/2016
Date Made Active in Reports: 09/19/2016
Number of Days to Update: 69

Source: California Environmental Protection Agency
Telephone: 916-327-5092
Last EDR Contact: 03/18/2019
Next Scheduled EDR Contact: 07/01/2019
Data Release Frequency: Quarterly

INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 04/12/2018
Date Data Arrived at EDR: 05/18/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 63

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 03/07/2019
Next Scheduled EDR Contact: 05/06/2019
Data Release Frequency: Varies

INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 04/10/2018
Date Data Arrived at EDR: 05/18/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 63

Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 03/07/2019
Next Scheduled EDR Contact: 05/06/2019
Data Release Frequency: Varies

INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 04/25/2018
Date Data Arrived at EDR: 05/18/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 63

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 03/07/2019
Next Scheduled EDR Contact: 05/06/2019
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 04/24/2018	Source: EPA Region 7
Date Data Arrived at EDR: 05/18/2018	Telephone: 913-551-7003
Date Made Active in Reports: 07/20/2018	Last EDR Contact: 03/07/2019
Number of Days to Update: 63	Next Scheduled EDR Contact: 05/06/2019
	Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 04/01/2018	Source: EPA Region 6
Date Data Arrived at EDR: 05/18/2018	Telephone: 214-665-7591
Date Made Active in Reports: 07/20/2018	Last EDR Contact: 03/07/2019
Number of Days to Update: 63	Next Scheduled EDR Contact: 05/06/2019
	Data Release Frequency: Varies

INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 04/13/2018	Source: EPA, Region 1
Date Data Arrived at EDR: 05/18/2018	Telephone: 617-918-1313
Date Made Active in Reports: 07/20/2018	Last EDR Contact: 03/07/2019
Number of Days to Update: 63	Next Scheduled EDR Contact: 05/06/2019
	Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 05/08/2018	Source: EPA Region 4
Date Data Arrived at EDR: 05/18/2018	Telephone: 404-562-9424
Date Made Active in Reports: 07/20/2018	Last EDR Contact: 03/05/2019
Number of Days to Update: 63	Next Scheduled EDR Contact: 05/06/2019
	Data Release Frequency: Varies

INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 04/12/2018	Source: EPA Region 5
Date Data Arrived at EDR: 05/18/2018	Telephone: 312-886-6136
Date Made Active in Reports: 07/20/2018	Last EDR Contact: 03/07/2019
Number of Days to Update: 63	Next Scheduled EDR Contact: 05/06/2019
	Data Release Frequency: Varies

State and tribal voluntary cleanup sites

INDIAN VCP R1: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015	Source: EPA, Region 1
Date Data Arrived at EDR: 09/29/2015	Telephone: 617-918-1102
Date Made Active in Reports: 02/18/2016	Last EDR Contact: 03/25/2019
Number of Days to Update: 142	Next Scheduled EDR Contact: 07/08/2019
	Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

VCP: Voluntary Cleanup Program Properties

Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

Date of Government Version: 01/28/2019
Date Data Arrived at EDR: 01/29/2019
Date Made Active in Reports: 03/05/2019
Number of Days to Update: 35

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/29/2019
Next Scheduled EDR Contact: 05/11/2019
Data Release Frequency: Quarterly

INDIAN VCP R7: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27

Source: EPA, Region 7
Telephone: 913-551-7365
Last EDR Contact: 04/20/2009
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

State and tribal Brownfields sites

BROWNFIELDS: Considered Brownfields Sites Listing

A listing of sites the SWRCB considers to be Brownfields since these are sites have come to them through the MOA Process.

Date of Government Version: 12/20/2018
Date Data Arrived at EDR: 12/21/2018
Date Made Active in Reports: 02/28/2019
Number of Days to Update: 69

Source: State Water Resources Control Board
Telephone: 916-323-7905
Last EDR Contact: 03/26/2019
Next Scheduled EDR Contact: 07/08/2019
Data Release Frequency: Quarterly

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 12/17/2018
Date Data Arrived at EDR: 12/18/2018
Date Made Active in Reports: 01/11/2019
Number of Days to Update: 24

Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 03/19/2019
Next Scheduled EDR Contact: 07/01/2019
Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT: Waste Management Unit Database

Waste Management Unit Database System. WMUDS is used by the State Water Resources Control Board staff and the Regional Water Quality Control Boards for program tracking and inventory of waste management units. WMUDS is composed of the following databases: Facility Information, Scheduled Inspections Information, Waste Management Unit Information, SWAT Program Information, SWAT Report Summary Information, SWAT Report Summary Data, Chapter 15 (formerly Subchapter 15) Information, Chapter 15 Monitoring Parameters, TPCA Program Information, RCRA Program Information, Closure Information, and Interested Parties Information.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 04/01/2000
Date Data Arrived at EDR: 04/10/2000
Date Made Active in Reports: 05/10/2000
Number of Days to Update: 30

Source: State Water Resources Control Board
Telephone: 916-227-4448
Last EDR Contact: 04/25/2019
Next Scheduled EDR Contact: 08/12/2019
Data Release Frequency: No Update Planned

SWRCY: Recycler Database

A listing of recycling facilities in California.

Date of Government Version: 12/10/2018
Date Data Arrived at EDR: 12/12/2018
Date Made Active in Reports: 01/15/2019
Number of Days to Update: 34

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 03/13/2019
Next Scheduled EDR Contact: 06/24/2019
Data Release Frequency: Quarterly

HAULERS: Registered Waste Tire Haulers Listing

A listing of registered waste tire haulers.

Date of Government Version: 02/09/2019
Date Data Arrived at EDR: 02/12/2019
Date Made Active in Reports: 03/27/2019
Number of Days to Update: 43

Source: Integrated Waste Management Board
Telephone: 916-341-6422
Last EDR Contact: 03/26/2019
Next Scheduled EDR Contact: 05/27/2019
Data Release Frequency: Varies

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands

Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52

Source: Environmental Protection Agency
Telephone: 703-308-8245
Last EDR Contact: 01/29/2019
Next Scheduled EDR Contact: 05/13/2019
Data Release Frequency: Varies

ODI: Open Dump Inventory

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137

Source: EPA, Region 9
Telephone: 415-947-4219
Last EDR Contact: 04/22/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: No Update Planned

IHS OPEN DUMPS: Open Dumps on Indian Land

A listing of all open dumps located on Indian Land in the United States.

Date of Government Version: 04/01/2014
Date Data Arrived at EDR: 08/06/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 176

Source: Department of Health & Human Services, Indian Health Service
Telephone: 301-443-1452
Last EDR Contact: 04/23/2019
Next Scheduled EDR Contact: 08/12/2019
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL: National Clandestine Laboratory Register

A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 02/24/2019
Date Data Arrived at EDR: 02/26/2019
Date Made Active in Reports: 04/17/2019
Number of Days to Update: 50

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 02/21/2019
Next Scheduled EDR Contact: 06/10/2019
Data Release Frequency: No Update Planned

HIST CAL-SITES: Calsites Database

The Calsites database contains potential or confirmed hazardous substance release properties. In 1996, California EPA reevaluated and significantly reduced the number of sites in the Calsites database. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

Date of Government Version: 08/08/2005
Date Data Arrived at EDR: 08/03/2006
Date Made Active in Reports: 08/24/2006
Number of Days to Update: 21

Source: Department of Toxic Substance Control
Telephone: 916-323-3400
Last EDR Contact: 02/23/2009
Next Scheduled EDR Contact: 05/25/2009
Data Release Frequency: No Update Planned

SCH: School Property Evaluation Program

This category contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category depending on the level of threat to public health and safety or the environment they pose.

Date of Government Version: 01/28/2019
Date Data Arrived at EDR: 01/29/2019
Date Made Active in Reports: 03/05/2019
Number of Days to Update: 35

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/29/2019
Next Scheduled EDR Contact: 05/11/2019
Data Release Frequency: Quarterly

CDL: Clandestine Drug Labs

A listing of drug lab locations. Listing of a location in this database does not indicate that any illegal drug lab materials were or were not present there, and does not constitute a determination that the location either requires or does not require additional cleanup work.

Date of Government Version: 12/31/2017
Date Data Arrived at EDR: 06/12/2018
Date Made Active in Reports: 08/06/2018
Number of Days to Update: 55

Source: Department of Toxic Substances Control
Telephone: 916-255-6504
Last EDR Contact: 04/22/2019
Next Scheduled EDR Contact: 07/22/2019
Data Release Frequency: Varies

CERS HAZ WASTE: CERS HAZ WASTE

List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Hazardous Chemical Management, Hazardous Waste Onsite Treatment, Household Hazardous Waste Collection, Hazardous Waste Generator, and RCRA LQ HW Generator programs.

Date of Government Version: 10/22/2018
Date Data Arrived at EDR: 10/23/2018
Date Made Active in Reports: 11/30/2018
Number of Days to Update: 38

Source: CalEPA
Telephone: 916-323-2514
Last EDR Contact: 04/11/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Quarterly

TOXIC PITS: Toxic Pits Cleanup Act Sites

Toxic PITS Cleanup Act Sites. TOXIC PITS identifies sites suspected of containing hazardous substances where cleanup has not yet been completed.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 07/01/1995
Date Data Arrived at EDR: 08/30/1995
Date Made Active in Reports: 09/26/1995
Number of Days to Update: 27

Source: State Water Resources Control Board
Telephone: 916-227-4364
Last EDR Contact: 01/26/2009
Next Scheduled EDR Contact: 04/27/2009
Data Release Frequency: No Update Planned

US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 02/24/2019
Date Data Arrived at EDR: 02/26/2019
Date Made Active in Reports: 04/17/2019
Number of Days to Update: 50

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 02/21/2019
Next Scheduled EDR Contact: 06/10/2019
Data Release Frequency: Quarterly

PFAS: PFAS Contamination Site Location Listing

A listing of PFAS contaminated sites included in the GeoTracker database.

Date of Government Version: 02/21/2019
Date Data Arrived at EDR: 02/22/2019
Date Made Active in Reports: 04/15/2019
Number of Days to Update: 52

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/11/2019
Next Scheduled EDR Contact: 06/24/2019
Data Release Frequency: Varies

Local Lists of Registered Storage Tanks

SWEEPS UST: SWEEPS UST Listing

Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

Date of Government Version: 06/01/1994
Date Data Arrived at EDR: 07/07/2005
Date Made Active in Reports: 08/11/2005
Number of Days to Update: 35

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/03/2005
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

UST MENDOCINO: Mendocino County UST Database

A listing of underground storage tank locations in Mendocino County.

Date of Government Version: 12/04/2018
Date Data Arrived at EDR: 12/06/2018
Date Made Active in Reports: 12/14/2018
Number of Days to Update: 8

Source: Department of Public Health
Telephone: 707-463-4466
Last EDR Contact: 02/21/2019
Next Scheduled EDR Contact: 06/10/2019
Data Release Frequency: Annually

HIST UST: Hazardous Substance Storage Container Database

The Hazardous Substance Storage Container Database is a historical listing of UST sites. Refer to local/county source for current data.

Date of Government Version: 10/15/1990
Date Data Arrived at EDR: 01/25/1991
Date Made Active in Reports: 02/12/1991
Number of Days to Update: 18

Source: State Water Resources Control Board
Telephone: 916-341-5851
Last EDR Contact: 07/26/2001
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

SAN FRANCISCO AST: Aboveground Storage Tank Site Listing

Aboveground storage tank sites

Date of Government Version: 09/11/2018
Date Data Arrived at EDR: 09/12/2018
Date Made Active in Reports: 10/11/2018
Number of Days to Update: 29

Source: San Francisco County Department of Public Health
Telephone: 415-252-3896
Last EDR Contact: 01/31/2019
Next Scheduled EDR Contact: 05/20/2019
Data Release Frequency: Varies

CERS TANKS: California Environmental Reporting System (CERS) Tanks

List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Aboveground Petroleum Storage and Underground Storage Tank regulatory programs.

Date of Government Version: 10/22/2018
Date Data Arrived at EDR: 10/23/2018
Date Made Active in Reports: 11/30/2018
Number of Days to Update: 38

Source: California Environmental Protection Agency
Telephone: 916-323-2514
Last EDR Contact: 04/11/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Quarterly

CA FID UST: Facility Inventory Database

The Facility Inventory Database (FID) contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board. Refer to local/county source for current data.

Date of Government Version: 10/31/1994
Date Data Arrived at EDR: 09/05/1995
Date Made Active in Reports: 09/29/1995
Number of Days to Update: 24

Source: California Environmental Protection Agency
Telephone: 916-341-5851
Last EDR Contact: 12/28/1998
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Local Land Records

LIENS: Environmental Liens Listing

A listing of property locations with environmental liens for California where DTSC is a lien holder.

Date of Government Version: 02/28/2019
Date Data Arrived at EDR: 03/01/2019
Date Made Active in Reports: 04/02/2019
Number of Days to Update: 32

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 02/27/2019
Next Scheduled EDR Contact: 06/17/2019
Data Release Frequency: Varies

LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 03/11/2019
Date Data Arrived at EDR: 03/14/2019
Date Made Active in Reports: 03/21/2019
Number of Days to Update: 7

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 04/18/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Semi-Annually

DEED: Deed Restriction Listing

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Site Mitigation and Brownfields Reuse Program Facility Sites with Deed Restrictions & Hazardous Waste Management Program Facility Sites with Deed / Land Use Restriction. The DTSC Site Mitigation and Brownfields Reuse Program (SMBRP) list includes sites cleaned up under the program's oversight and generally does not include current or former hazardous waste facilities that required a hazardous waste facility permit. The list represents deed restrictions that are active. Some sites have multiple deed restrictions. The DTSC Hazardous Waste Management Program (HWMP) has developed a list of current or former hazardous waste facilities that have a recorded land use restriction at the local county recorder's office. The land use restrictions on this list were required by the DTSC HWMP as a result of the presence of hazardous substances that remain on site after the facility (or part of the facility) has been closed or cleaned up. The types of land use restriction include deed notice, deed restriction, or a land use restriction that binds current and future owners.

Date of Government Version: 03/04/2019	Source: DTSC and SWRCB
Date Data Arrived at EDR: 03/05/2019	Telephone: 916-323-3400
Date Made Active in Reports: 04/01/2019	Last EDR Contact: 03/05/2019
Number of Days to Update: 27	Next Scheduled EDR Contact: 06/17/2019
	Data Release Frequency: Semi-Annually

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 02/08/2019	Source: U.S. Department of Transportation
Date Data Arrived at EDR: 02/08/2019	Telephone: 202-366-4555
Date Made Active in Reports: 03/21/2019	Last EDR Contact: 03/26/2019
Number of Days to Update: 41	Next Scheduled EDR Contact: 07/08/2019
	Data Release Frequency: Quarterly

CHMIRS: California Hazardous Material Incident Report System

California Hazardous Material Incident Reporting System. CHMIRS contains information on reported hazardous material incidents (accidental releases or spills).

Date of Government Version: 10/24/2018	Source: Office of Emergency Services
Date Data Arrived at EDR: 01/24/2019	Telephone: 916-845-8400
Date Made Active in Reports: 03/05/2019	Last EDR Contact: 01/24/2019
Number of Days to Update: 40	Next Scheduled EDR Contact: 05/06/2019
	Data Release Frequency: Semi-Annually

LDS: Land Disposal Sites Listing (GEOTRACKER)

Land Disposal sites (Landfills) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 12/10/2018	Source: State Water Quality Control Board
Date Data Arrived at EDR: 12/11/2018	Telephone: 866-480-1028
Date Made Active in Reports: 01/15/2019	Last EDR Contact: 12/12/2018
Number of Days to Update: 35	Next Scheduled EDR Contact: 03/25/2019
	Data Release Frequency: Quarterly

MCS: Military Cleanup Sites Listing (GEOTRACKER)

Military sites (consisting of: Military UST sites; Military Privatized sites; and Military Cleanup sites [formerly known as DoD non UST]) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 12/10/2018	Source: State Water Resources Control Board
Date Data Arrived at EDR: 12/11/2018	Telephone: 866-480-1028
Date Made Active in Reports: 01/15/2019	Last EDR Contact: 12/12/2018
Number of Days to Update: 35	Next Scheduled EDR Contact: 03/25/2019
	Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

SPILLS 90: SPILLS90 data from FirstSearch

Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 06/06/2012

Date Data Arrived at EDR: 01/03/2013

Date Made Active in Reports: 02/22/2013

Number of Days to Update: 50

Source: FirstSearch

Telephone: N/A

Last EDR Contact: 01/03/2013

Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 03/25/2019

Date Data Arrived at EDR: 03/27/2019

Date Made Active in Reports: 04/17/2019

Number of Days to Update: 21

Source: Environmental Protection Agency

Telephone: (415) 495-8895

Last EDR Contact: 03/27/2019

Next Scheduled EDR Contact: 07/08/2019

Data Release Frequency: Quarterly

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 01/31/2015

Date Data Arrived at EDR: 07/08/2015

Date Made Active in Reports: 10/13/2015

Number of Days to Update: 97

Source: U.S. Army Corps of Engineers

Telephone: 202-528-4285

Last EDR Contact: 04/03/2019

Next Scheduled EDR Contact: 06/03/2019

Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005

Date Data Arrived at EDR: 11/10/2006

Date Made Active in Reports: 01/11/2007

Number of Days to Update: 62

Source: USGS

Telephone: 888-275-8747

Last EDR Contact: 04/12/2019

Next Scheduled EDR Contact: 07/22/2019

Data Release Frequency: Semi-Annually

FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 12/31/2005

Date Data Arrived at EDR: 02/06/2006

Date Made Active in Reports: 01/11/2007

Number of Days to Update: 339

Source: U.S. Geological Survey

Telephone: 888-275-8747

Last EDR Contact: 04/12/2019

Next Scheduled EDR Contact: 07/22/2019

Data Release Frequency: N/A

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 01/01/2017
Date Data Arrived at EDR: 02/03/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 63

Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 02/15/2019
Next Scheduled EDR Contact: 05/27/2019
Data Release Frequency: Varies

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 01/31/2019
Date Data Arrived at EDR: 02/04/2019
Date Made Active in Reports: 03/08/2019
Number of Days to Update: 32

Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 03/26/2019
Next Scheduled EDR Contact: 07/08/2019
Data Release Frequency: Quarterly

EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013
Date Data Arrived at EDR: 03/21/2014
Date Made Active in Reports: 06/17/2014
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: 617-520-3000
Last EDR Contact: 02/08/2019
Next Scheduled EDR Contact: 05/20/2019
Data Release Frequency: Quarterly

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 09/30/2017
Date Data Arrived at EDR: 05/08/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 73

Source: Environmental Protection Agency
Telephone: 703-308-4044
Last EDR Contact: 02/08/2019
Next Scheduled EDR Contact: 05/20/2019
Data Release Frequency: Varies

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2016
Date Data Arrived at EDR: 06/21/2017
Date Made Active in Reports: 01/05/2018
Number of Days to Update: 198

Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 03/22/2019
Next Scheduled EDR Contact: 07/01/2019
Data Release Frequency: Every 4 Years

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 12/31/2016
Date Data Arrived at EDR: 01/10/2018
Date Made Active in Reports: 01/12/2018
Number of Days to Update: 2

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 02/20/2019
Next Scheduled EDR Contact: 06/03/2019
Data Release Frequency: Annually

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2009
Date Data Arrived at EDR: 12/10/2010
Date Made Active in Reports: 02/25/2011
Number of Days to Update: 77

Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 04/24/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Annually

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 03/11/2019
Date Data Arrived at EDR: 03/14/2019
Date Made Active in Reports: 04/01/2019
Number of Days to Update: 18

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 04/18/2019
Next Scheduled EDR Contact: 06/17/2019
Data Release Frequency: Annually

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 02/01/2019
Date Data Arrived at EDR: 02/14/2019
Date Made Active in Reports: 03/21/2019
Number of Days to Update: 35

Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 04/22/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Varies

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Date Data Arrived at EDR: 07/03/1995
Date Made Active in Reports: 08/07/1995
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 06/02/2008
Next Scheduled EDR Contact: 09/01/2008
Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

PRP: Potentially Responsible Parties

A listing of verified Potentially Responsible Parties

Date of Government Version: 03/11/2019	Source: EPA
Date Data Arrived at EDR: 03/14/2019	Telephone: 202-564-6023
Date Made Active in Reports: 04/17/2019	Last EDR Contact: 04/18/2019
Number of Days to Update: 34	Next Scheduled EDR Contact: 05/20/2019
	Data Release Frequency: Quarterly

PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 09/14/2018	Source: EPA
Date Data Arrived at EDR: 10/11/2018	Telephone: 202-566-0500
Date Made Active in Reports: 12/07/2018	Last EDR Contact: 04/10/2019
Number of Days to Update: 57	Next Scheduled EDR Contact: 07/22/2019
	Data Release Frequency: Annually

ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 11/18/2016	Source: Environmental Protection Agency
Date Data Arrived at EDR: 11/23/2016	Telephone: 202-564-2501
Date Made Active in Reports: 02/10/2017	Last EDR Contact: 04/08/2019
Number of Days to Update: 79	Next Scheduled EDR Contact: 07/22/2019
	Data Release Frequency: Quarterly

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009	Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Date Data Arrived at EDR: 04/16/2009	Telephone: 202-566-1667
Date Made Active in Reports: 05/11/2009	Last EDR Contact: 08/18/2017
Number of Days to Update: 25	Next Scheduled EDR Contact: 12/04/2017
	Data Release Frequency: Quarterly

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009	Source: EPA
Date Data Arrived at EDR: 04/16/2009	Telephone: 202-566-1667
Date Made Active in Reports: 05/11/2009	Last EDR Contact: 08/18/2017
Number of Days to Update: 25	Next Scheduled EDR Contact: 12/04/2017
	Data Release Frequency: Quarterly

MLTS: Material Licensing Tracking System

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 08/30/2016	Source: Nuclear Regulatory Commission
Date Data Arrived at EDR: 09/08/2016	Telephone: 301-415-7169
Date Made Active in Reports: 10/21/2016	Last EDR Contact: 04/22/2019
Number of Days to Update: 43	Next Scheduled EDR Contact: 08/05/2019
	Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

COAL ASH DOE: Steam-Electric Plant Operation Data

A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2005	Source: Department of Energy
Date Data Arrived at EDR: 08/07/2009	Telephone: 202-586-8719
Date Made Active in Reports: 10/22/2009	Last EDR Contact: 03/07/2019
Number of Days to Update: 76	Next Scheduled EDR Contact: 06/17/2019
	Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List

A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 07/01/2014	Source: Environmental Protection Agency
Date Data Arrived at EDR: 09/10/2014	Telephone: N/A
Date Made Active in Reports: 10/20/2014	Last EDR Contact: 03/05/2019
Number of Days to Update: 40	Next Scheduled EDR Contact: 06/17/2019
	Data Release Frequency: Varies

PCB TRANSFORMER: PCB Transformer Registration Database

The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 05/24/2017	Source: Environmental Protection Agency
Date Data Arrived at EDR: 11/30/2017	Telephone: 202-566-0517
Date Made Active in Reports: 12/15/2017	Last EDR Contact: 01/25/2019
Number of Days to Update: 15	Next Scheduled EDR Contact: 05/06/2019
	Data Release Frequency: Varies

RADINFO: Radiation Information Database

The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 01/02/2019	Source: Environmental Protection Agency
Date Data Arrived at EDR: 01/03/2019	Telephone: 202-343-9775
Date Made Active in Reports: 03/15/2019	Last EDR Contact: 04/02/2019
Number of Days to Update: 71	Next Scheduled EDR Contact: 07/15/2019
	Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing

A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/01/2007	Telephone: 202-564-2501
Date Made Active in Reports: 04/10/2007	Last EDR Contact: 12/17/2007
Number of Days to Update: 40	Next Scheduled EDR Contact: 03/17/2008
	Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing

A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2008
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

DOT OPS: Incident and Accident Data

Department of Transportation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 12/03/2018
Date Data Arrived at EDR: 01/29/2019
Date Made Active in Reports: 03/21/2019
Number of Days to Update: 51

Source: Department of Transportation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 01/29/2019
Next Scheduled EDR Contact: 05/11/2019
Data Release Frequency: Quarterly

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 02/11/2019
Date Made Active in Reports: 03/21/2019
Number of Days to Update: 38

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 04/05/2019
Next Scheduled EDR Contact: 07/22/2019
Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2015
Date Data Arrived at EDR: 02/22/2017
Date Made Active in Reports: 09/28/2017
Number of Days to Update: 218

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 02/13/2019
Next Scheduled EDR Contact: 06/03/2019
Data Release Frequency: Biennially

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 07/14/2015
Date Made Active in Reports: 01/10/2017
Number of Days to Update: 546

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 04/11/2019
Next Scheduled EDR Contact: 07/22/2019
Data Release Frequency: Semi-Annually

FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 08/08/2017
Date Data Arrived at EDR: 09/11/2018
Date Made Active in Reports: 09/14/2018
Number of Days to Update: 3

Source: Department of Energy
Telephone: 202-586-3559
Last EDR Contact: 01/31/2019
Next Scheduled EDR Contact: 05/20/2019
Data Release Frequency: Varies

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 06/23/2017
Date Data Arrived at EDR: 10/11/2017
Date Made Active in Reports: 11/03/2017
Number of Days to Update: 23

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 02/22/2019
Next Scheduled EDR Contact: 06/03/2019
Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 03/11/2019
Date Data Arrived at EDR: 03/14/2019
Date Made Active in Reports: 03/21/2019
Number of Days to Update: 7

Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 04/18/2019
Next Scheduled EDR Contact: 07/15/2019
Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931 and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001
Date Data Arrived at EDR: 10/27/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 36

Source: American Journal of Public Health
Telephone: 703-305-6451
Last EDR Contact: 12/02/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data

A listing of minor source facilities.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 11/27/2018
Date Data Arrived at EDR: 02/27/2019
Date Made Active in Reports: 04/01/2019
Number of Days to Update: 33

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 02/27/2019
Next Scheduled EDR Contact: 06/10/2019
Data Release Frequency: Semi-Annually

US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing

This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 12/05/2005
Date Data Arrived at EDR: 02/29/2008
Date Made Active in Reports: 04/18/2008
Number of Days to Update: 49

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 03/01/2019
Next Scheduled EDR Contact: 06/10/2019
Data Release Frequency: Varies

US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011
Date Data Arrived at EDR: 06/08/2011
Date Made Active in Reports: 09/13/2011
Number of Days to Update: 97

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 03/01/2019
Next Scheduled EDR Contact: 06/10/2019
Data Release Frequency: Varies

ABANDONED MINES: Abandoned Mines

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Date of Government Version: 09/10/2018
Date Data Arrived at EDR: 09/11/2018
Date Made Active in Reports: 09/14/2018
Number of Days to Update: 3

Source: Department of Interior
Telephone: 202-208-2609
Last EDR Contact: 03/21/2019
Next Scheduled EDR Contact: 06/24/2019
Data Release Frequency: Quarterly

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 02/15/2019
Date Data Arrived at EDR: 03/05/2019
Date Made Active in Reports: 03/15/2019
Number of Days to Update: 10

Source: EPA
Telephone: (415) 947-8000
Last EDR Contact: 03/05/2019
Next Scheduled EDR Contact: 06/17/2019
Data Release Frequency: Quarterly

UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

Date of Government Version: 12/31/2017
Date Data Arrived at EDR: 01/17/2019
Date Made Active in Reports: 04/01/2019
Number of Days to Update: 74

Source: Department of Defense
Telephone: 703-704-1564
Last EDR Contact: 04/15/2019
Next Scheduled EDR Contact: 07/29/2019
Data Release Frequency: Varies

DOCKET HWC: Hazardous Waste Compliance Docket Listing

A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 05/31/2018
Date Data Arrived at EDR: 07/26/2018
Date Made Active in Reports: 10/05/2018
Number of Days to Update: 71

Source: Environmental Protection Agency
Telephone: 202-564-0527
Last EDR Contact: 03/01/2019
Next Scheduled EDR Contact: 06/10/2019
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

ECHO: Enforcement & Compliance History Information

ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 03/03/2019	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/05/2019	Telephone: 202-564-2280
Date Made Active in Reports: 04/01/2019	Last EDR Contact: 04/09/2019
Number of Days to Update: 27	Next Scheduled EDR Contact: 07/22/2019
	Data Release Frequency: Quarterly

FUELS PROGRAM: EPA Fuels Program Registered Listing

This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 02/19/2019	Source: EPA
Date Data Arrived at EDR: 02/21/2019	Telephone: 800-385-6164
Date Made Active in Reports: 04/01/2019	Last EDR Contact: 02/21/2019
Number of Days to Update: 39	Next Scheduled EDR Contact: 06/03/2019
	Data Release Frequency: Quarterly

CA BOND EXP. PLAN: Bond Expenditure Plan

Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.

Date of Government Version: 01/01/1989	Source: Department of Health Services
Date Data Arrived at EDR: 07/27/1994	Telephone: 916-255-2118
Date Made Active in Reports: 08/02/1994	Last EDR Contact: 05/31/1994
Number of Days to Update: 6	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

CORTESE: "Cortese" Hazardous Waste & Substances Sites List

The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

Date of Government Version: 12/20/2018	Source: CAL EPA/Office of Emergency Information
Date Data Arrived at EDR: 12/21/2018	Telephone: 916-323-3400
Date Made Active in Reports: 02/28/2019	Last EDR Contact: 03/26/2019
Number of Days to Update: 69	Next Scheduled EDR Contact: 07/08/2019
	Data Release Frequency: Quarterly

CUPA SAN FRANCISCO CO: CUPA Facility Listing

Cupa facilities

Date of Government Version: 09/11/2018	Source: San Francisco County Department of Environmental Health
Date Data Arrived at EDR: 09/12/2018	Telephone: 415-252-3896
Date Made Active in Reports: 09/19/2018	Last EDR Contact: 04/18/2019
Number of Days to Update: 7	Next Scheduled EDR Contact: 05/20/2019
	Data Release Frequency: Varies

CUPA LIVERMORE-PLEASANTON: CUPA Facility Listing

list of facilities associated with the various CUPA programs in Livermore-Pleasanton

Date of Government Version: 01/23/2019	Source: Livermore-Pleasanton Fire Department
Date Data Arrived at EDR: 02/26/2019	Telephone: 925-454-2361
Date Made Active in Reports: 04/01/2019	Last EDR Contact: 02/26/2019
Number of Days to Update: 34	Next Scheduled EDR Contact: 05/27/2019
	Data Release Frequency: Varies

DRYCLEAN AVAQMD: Antelope Valley Air Quality Management District Drycleaner Listing

A listing of dry cleaners in the Antelope Valley Air Quality Management District.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 02/27/2019
Date Data Arrived at EDR: 02/28/2019
Date Made Active in Reports: 04/01/2019
Number of Days to Update: 32

Source: Antelope Valley Air Quality Management District
Telephone: 661-723-8070
Last EDR Contact: 02/27/2019
Next Scheduled EDR Contact: 06/17/2019
Data Release Frequency: Varies

DRYCLEANERS: Cleaner Facilities

A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaner's agents; linen supply; coin-operated laundries and cleaning; drycleaning plants, except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

Date of Government Version: 12/13/2018
Date Data Arrived at EDR: 01/17/2019
Date Made Active in Reports: 03/05/2019
Number of Days to Update: 47

Source: Department of Toxic Substance Control
Telephone: 916-327-4498
Last EDR Contact: 02/27/2019
Next Scheduled EDR Contact: 06/17/2019
Data Release Frequency: Annually

DRYCLEAN SOUTH COAST: South Coast Air Quality Management District Drycleaner Listing

A listing of dry cleaners in the South Coast Air Quality Management District

Date of Government Version: 03/19/2019
Date Data Arrived at EDR: 03/22/2019
Date Made Active in Reports: 04/09/2019
Number of Days to Update: 18

Source: South Coast Air Quality Management District
Telephone: 909-396-3211
Last EDR Contact: 03/22/2019
Next Scheduled EDR Contact: 06/10/2019
Data Release Frequency: Varies

EMI: Emissions Inventory Data

Toxics and criteria pollutant emissions data collected by the ARB and local air pollution agencies.

Date of Government Version: 12/31/2017
Date Data Arrived at EDR: 06/20/2018
Date Made Active in Reports: 08/06/2018
Number of Days to Update: 47

Source: California Air Resources Board
Telephone: 916-322-2990
Last EDR Contact: 03/22/2019
Next Scheduled EDR Contact: 07/01/2019
Data Release Frequency: Varies

ENF: Enforcement Action Listing

A listing of Water Board Enforcement Actions. Formal is everything except Oral/Verbal Communication, Notice of Violation, Expedited Payment Letter, and Staff Enforcement Letter.

Date of Government Version: 11/01/2018
Date Data Arrived at EDR: 11/02/2018
Date Made Active in Reports: 12/13/2018
Number of Days to Update: 41

Source: State Water Resources Control Board
Telephone: 916-445-9379
Last EDR Contact: 04/23/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Varies

Financial Assurance 1: Financial Assurance Information Listing

Financial Assurance information

Date of Government Version: 01/10/2019
Date Data Arrived at EDR: 01/23/2019
Date Made Active in Reports: 03/05/2019
Number of Days to Update: 41

Source: Department of Toxic Substances Control
Telephone: 916-255-3628
Last EDR Contact: 04/22/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Varies

Financial Assurance 2: Financial Assurance Information Listing

A listing of financial assurance information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 02/15/2019
Date Data Arrived at EDR: 02/19/2019
Date Made Active in Reports: 03/05/2019
Number of Days to Update: 14

Source: California Integrated Waste Management Board
Telephone: 916-341-6066
Last EDR Contact: 02/11/2019
Next Scheduled EDR Contact: 05/27/2019
Data Release Frequency: Varies

HAZNET: Facility and Manifest Data

Facility and Manifest Data. The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000 - 1,000,000 annually, representing approximately 350,000 - 500,000 shipments. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method. This database begins with calendar year 1993.

Date of Government Version: 12/31/2017
Date Data Arrived at EDR: 10/10/2018
Date Made Active in Reports: 11/16/2018
Number of Days to Update: 37

Source: California Environmental Protection Agency
Telephone: 916-255-1136
Last EDR Contact: 04/22/2019
Next Scheduled EDR Contact: 07/22/2019
Data Release Frequency: Annually

ICE: ICE

Contains data pertaining to the Permitted Facilities with Inspections / Enforcements sites tracked in Envirostor.

Date of Government Version: 02/19/2019
Date Data Arrived at EDR: 02/20/2019
Date Made Active in Reports: 03/05/2019
Number of Days to Update: 13

Source: Department of Toxic Substances Control
Telephone: 877-786-9427
Last EDR Contact: 02/20/2019
Next Scheduled EDR Contact: 06/03/2019
Data Release Frequency: Quarterly

HIST CORTESE: Hazardous Waste & Substance Site List

The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

Date of Government Version: 04/01/2001
Date Data Arrived at EDR: 01/22/2009
Date Made Active in Reports: 04/08/2009
Number of Days to Update: 76

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/22/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

HWP: EnviroStor Permitted Facilities Listing

Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.

Date of Government Version: 02/19/2019
Date Data Arrived at EDR: 02/20/2019
Date Made Active in Reports: 03/05/2019
Number of Days to Update: 13

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 02/20/2019
Next Scheduled EDR Contact: 06/03/2019
Data Release Frequency: Quarterly

HWT: Registered Hazardous Waste Transporter Database

A listing of hazardous waste transporters. In California, unless specifically exempted, it is unlawful for any person to transport hazardous wastes unless the person holds a valid registration issued by DTSC. A hazardous waste transporter registration is valid for one year and is assigned a unique registration number.

Date of Government Version: 01/07/2019
Date Data Arrived at EDR: 01/08/2019
Date Made Active in Reports: 03/05/2019
Number of Days to Update: 56

Source: Department of Toxic Substances Control
Telephone: 916-440-7145
Last EDR Contact: 04/09/2019
Next Scheduled EDR Contact: 07/22/2019
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

MINES: Mines Site Location Listing

A listing of mine site locations from the Office of Mine Reclamation.

Date of Government Version: 12/10/2018
Date Data Arrived at EDR: 12/12/2018
Date Made Active in Reports: 01/15/2019
Number of Days to Update: 34

Source: Department of Conservation
Telephone: 916-322-1080
Last EDR Contact: 12/12/2018
Next Scheduled EDR Contact: 03/25/2019
Data Release Frequency: Quarterly

MWMP: Medical Waste Management Program Listing

The Medical Waste Management Program (MWMP) ensures the proper handling and disposal of medical waste by permitting and inspecting medical waste Offsite Treatment Facilities (PDF) and Transfer Stations (PDF) throughout the state. MWMP also oversees all Medical Waste Transporters.

Date of Government Version: 02/20/2019
Date Data Arrived at EDR: 03/05/2019
Date Made Active in Reports: 04/02/2019
Number of Days to Update: 28

Source: Department of Public Health
Telephone: 916-558-1784
Last EDR Contact: 03/05/2019
Next Scheduled EDR Contact: 06/17/2019
Data Release Frequency: Varies

NPDES: NPDES Permits Listing

A listing of NPDES permits, including stormwater.

Date of Government Version: 02/11/2019
Date Data Arrived at EDR: 02/12/2019
Date Made Active in Reports: 03/07/2019
Number of Days to Update: 23

Source: State Water Resources Control Board
Telephone: 916-445-9379
Last EDR Contact: 02/12/2019
Next Scheduled EDR Contact: 05/27/2019
Data Release Frequency: Quarterly

PEST LIC: Pesticide Regulation Licenses Listing

A listing of licenses and certificates issued by the Department of Pesticide Regulation. The DPR issues licenses and/or certificates to: Persons and businesses that apply or sell pesticides; Pest control dealers and brokers; Persons who advise on agricultural pesticide applications.

Date of Government Version: 03/04/2019
Date Data Arrived at EDR: 03/05/2019
Date Made Active in Reports: 04/05/2019
Number of Days to Update: 31

Source: Department of Pesticide Regulation
Telephone: 916-445-4038
Last EDR Contact: 03/05/2019
Next Scheduled EDR Contact: 06/17/2019
Data Release Frequency: Quarterly

PROC: Certified Processors Database

A listing of certified processors.

Date of Government Version: 12/10/2018
Date Data Arrived at EDR: 12/12/2018
Date Made Active in Reports: 01/15/2019
Number of Days to Update: 34

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 03/13/2019
Next Scheduled EDR Contact: 06/24/2019
Data Release Frequency: Quarterly

NOTIFY 65: Proposition 65 Records

Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

Date of Government Version: 09/19/2018
Date Data Arrived at EDR: 09/20/2018
Date Made Active in Reports: 10/19/2018
Number of Days to Update: 29

Source: State Water Resources Control Board
Telephone: 916-445-3846
Last EDR Contact: 03/18/2019
Next Scheduled EDR Contact: 07/01/2019
Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

UIC: UIC Listing

A listing of wells identified as underground injection wells, in the California Oil and Gas Wells database.

Date of Government Version: 04/27/2018	Source: Department of Conservation
Date Data Arrived at EDR: 06/13/2018	Telephone: 916-445-2408
Date Made Active in Reports: 07/17/2018	Last EDR Contact: 03/13/2019
Number of Days to Update: 34	Next Scheduled EDR Contact: 06/24/2019
	Data Release Frequency: Varies

UIC GEO: Underground Injection Control Sites (GEOTRACKER)

Underground control injection sites

Date of Government Version: 12/10/2018	Source: State Water Resource Control Board
Date Data Arrived at EDR: 12/11/2018	Telephone: 866-480-1028
Date Made Active in Reports: 01/15/2019	Last EDR Contact: 12/12/2018
Number of Days to Update: 35	Next Scheduled EDR Contact: 03/25/2019
	Data Release Frequency: Varies

WASTEWATER PITS: Oil Wastewater Pits Listing

Water officials discovered that oil producers have been dumping chemical-laden wastewater into hundreds of unlined pits that are operating without proper permits. Inspections completed by the Central Valley Regional Water Quality Control Board revealed the existence of previously unidentified waste sites. The water boards review found that more than one-third of the region's active disposal pits are operating without permission.

Date of Government Version: 05/08/2018	Source: RWQCB, Central Valley Region
Date Data Arrived at EDR: 07/11/2018	Telephone: 559-445-5577
Date Made Active in Reports: 09/13/2018	Last EDR Contact: 04/12/2019
Number of Days to Update: 64	Next Scheduled EDR Contact: 07/22/2019
	Data Release Frequency: Varies

WDS: Waste Discharge System

Sites which have been issued waste discharge requirements.

Date of Government Version: 06/19/2007	Source: State Water Resources Control Board
Date Data Arrived at EDR: 06/20/2007	Telephone: 916-341-5227
Date Made Active in Reports: 06/29/2007	Last EDR Contact: 02/13/2019
Number of Days to Update: 9	Next Scheduled EDR Contact: 06/03/2019
	Data Release Frequency: Quarterly

MILITARY PRIV SITES: Military Privatized Sites (GEOTRACKER)

Military privatized sites

Date of Government Version: 12/10/2018	Source: State Water Resources Control Board
Date Data Arrived at EDR: 12/11/2018	Telephone: 866-480-1028
Date Made Active in Reports: 01/15/2019	Last EDR Contact: 12/12/2018
Number of Days to Update: 35	Next Scheduled EDR Contact: 03/25/2019
	Data Release Frequency: Varies

PROJECT: Project Sites (GEOTRACKER)

Projects sites

Date of Government Version: 12/10/2018	Source: State Water Resources Control Board
Date Data Arrived at EDR: 12/11/2018	Telephone: 866-480-1028
Date Made Active in Reports: 01/15/2019	Last EDR Contact: 12/12/2018
Number of Days to Update: 35	Next Scheduled EDR Contact: 03/25/2019
	Data Release Frequency: Varies

WDR: Waste Discharge Requirements Listing

In general, the Waste Discharge Requirements (WDRs) Program (sometimes also referred to as the "Non Chapter 15 (Non 15) Program") regulates point discharges that are exempt pursuant to Subsection 20090 of Title 27 and not subject to the Federal Water Pollution Control Act. Exemptions from Title 27 may be granted for nine categories of discharges (e.g., sewage, wastewater, etc.) that meet, and continue to meet, the preconditions listed for each specific exemption. The scope of the WDRs Program also includes the discharge of wastes classified as inert, pursuant to section 20230 of Title 27.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 12/10/2018
Date Data Arrived at EDR: 12/12/2018
Date Made Active in Reports: 01/18/2019
Number of Days to Update: 37

Source: State Water Resources Control Board
Telephone: 916-341-5810
Last EDR Contact: 03/13/2019
Next Scheduled EDR Contact: 06/24/2019
Data Release Frequency: Quarterly

CIWQS: California Integrated Water Quality System

The California Integrated Water Quality System (CIWQS) is a computer system used by the State and Regional Water Quality Control Boards to track information about places of environmental interest, manage permits and other orders, track inspections, and manage violations and enforcement activities.

Date of Government Version: 03/05/2019
Date Data Arrived at EDR: 03/05/2019
Date Made Active in Reports: 04/02/2019
Number of Days to Update: 28

Source: State Water Resources Control Board
Telephone: 866-794-4977
Last EDR Contact: 03/05/2019
Next Scheduled EDR Contact: 06/17/2019
Data Release Frequency: Varies

CERS: CalEPA Regulated Site Portal Data

The CalEPA Regulated Site Portal database combines data about environmentally regulated sites and facilities in California into a single database. It combines data from a variety of state and federal databases, and provides an overview of regulated activities across the spectrum of environmental programs for any given location in California. These activities include hazardous materials and waste, state and federal cleanups, impacted ground and surface waters, and toxic materials

Date of Government Version: 10/22/2018
Date Data Arrived at EDR: 10/23/2018
Date Made Active in Reports: 11/30/2018
Number of Days to Update: 38

Source: California Environmental Protection Agency
Telephone: 916-323-2514
Last EDR Contact: 04/11/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Varies

NON-CASE INFO: Non-Case Information Sites (GEOTRACKER)

Non-Case Information sites

Date of Government Version: 12/10/2018
Date Data Arrived at EDR: 12/11/2018
Date Made Active in Reports: 01/15/2019
Number of Days to Update: 35

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/12/2018
Next Scheduled EDR Contact: 03/25/2019
Data Release Frequency: Varies

WIP: Well Investigation Program Case List

Well Investigation Program case in the San Gabriel and San Fernando Valley area.

Date of Government Version: 07/03/2009
Date Data Arrived at EDR: 07/21/2009
Date Made Active in Reports: 08/03/2009
Number of Days to Update: 13

Source: Los Angeles Water Quality Control Board
Telephone: 213-576-6726
Last EDR Contact: 03/25/2019
Next Scheduled EDR Contact: 07/08/2019
Data Release Frequency: Varies

OTHER OIL GAS: Other Oil & Gas Projects Sites (GEOTRACKER)

Other Oil & Gas Projects sites

Date of Government Version: 12/10/2018
Date Data Arrived at EDR: 12/11/2018
Date Made Active in Reports: 01/15/2019
Number of Days to Update: 35

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/12/2018
Next Scheduled EDR Contact: 03/25/2019
Data Release Frequency: Varies

PROD WATER PONDS: Produced Water Ponds Sites (GEOTRACKER)

Produced water ponds sites

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 12/10/2018
Date Data Arrived at EDR: 12/11/2018
Date Made Active in Reports: 01/15/2019
Number of Days to Update: 35

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/12/2018
Next Scheduled EDR Contact: 03/25/2019
Data Release Frequency: Varies

SAMPLING POINT: Sampling Point ? Public Sites (GEOTRACKER)

Sampling point - public sites

Date of Government Version: 12/10/2018
Date Data Arrived at EDR: 12/11/2018
Date Made Active in Reports: 01/15/2019
Number of Days to Update: 35

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/12/2018
Next Scheduled EDR Contact: 03/25/2019
Data Release Frequency: Varies

WELL STIM PROJ: Well Stimulation Project (GEOTRACKER)

Includes areas of groundwater monitoring plans, a depiction of the monitoring network, and the facilities, boundaries, and subsurface characteristics of the oilfield and the features (oil and gas wells, produced water ponds, UIC wells, water supply wells, etc?) being monitored

Date of Government Version: 12/10/2018
Date Data Arrived at EDR: 12/11/2018
Date Made Active in Reports: 01/15/2019
Number of Days to Update: 35

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/12/2018
Next Scheduled EDR Contact: 03/25/2019
Data Release Frequency: Varies

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR Hist Auto: EDR Exclusive Historical Auto Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

EDR Hist Cleaner: EDR Exclusive Historical Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Resources Recycling and Recovery in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/13/2014
Number of Days to Update: 196

Source: Department of Resources Recycling and Recovery
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the State Water Resources Control Board in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 12/30/2013
Number of Days to Update: 182

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

COUNTY RECORDS

ALAMEDA COUNTY:

CS ALAMEDA: Contaminated Sites

A listing of contaminated sites overseen by the Toxic Release Program (oil and groundwater contamination from chemical releases and spills) and the Leaking Underground Storage Tank Program (soil and ground water contamination from leaking petroleum USTs).

Date of Government Version: 01/09/2019
Date Data Arrived at EDR: 01/11/2019
Date Made Active in Reports: 03/05/2019
Number of Days to Update: 53

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 04/22/2019
Next Scheduled EDR Contact: 07/22/2019
Data Release Frequency: Semi-Annually

UST ALAMEDA: Underground Tanks

Underground storage tank sites located in Alameda county.

Date of Government Version: 01/07/2019
Date Data Arrived at EDR: 01/08/2019
Date Made Active in Reports: 03/08/2019
Number of Days to Update: 59

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 04/08/2019
Next Scheduled EDR Contact: 04/24/2047
Data Release Frequency: Semi-Annually

AMADOR COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CUPA AMADOR: CUPA Facility List Cupa Facility List

Date of Government Version: 01/07/2019
Date Data Arrived at EDR: 01/08/2019
Date Made Active in Reports: 03/07/2019
Number of Days to Update: 58

Source: Amador County Environmental Health
Telephone: 209-223-6439
Last EDR Contact: 02/27/2019
Next Scheduled EDR Contact: 06/17/2019
Data Release Frequency: Varies

BUTTE COUNTY:

CUPA BUTTE: CUPA Facility Listing Cupa facility list.

Date of Government Version: 04/21/2017
Date Data Arrived at EDR: 04/25/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 106

Source: Public Health Department
Telephone: 530-538-7149
Last EDR Contact: 04/08/2019
Next Scheduled EDR Contact: 07/22/2019
Data Release Frequency: No Update Planned

CALVERAS COUNTY:

CUPA CALVERAS: CUPA Facility Listing Cupa Facility Listing

Date of Government Version: 01/24/2019
Date Data Arrived at EDR: 01/25/2019
Date Made Active in Reports: 03/05/2019
Number of Days to Update: 39

Source: Calveras County Environmental Health
Telephone: 209-754-6399
Last EDR Contact: 03/25/2019
Next Scheduled EDR Contact: 07/08/2019
Data Release Frequency: Quarterly

COLUSA COUNTY:

CUPA COLUSA: CUPA Facility List Cupa facility list.

Date of Government Version: 02/27/2019
Date Data Arrived at EDR: 02/28/2019
Date Made Active in Reports: 04/01/2019
Number of Days to Update: 32

Source: Health & Human Services
Telephone: 530-458-0396
Last EDR Contact: 02/27/2019
Next Scheduled EDR Contact: 05/20/2019
Data Release Frequency: Semi-Annually

CONTRA COSTA COUNTY:

SL CONTRA COSTA: Site List

List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 02/14/2019
Date Data Arrived at EDR: 02/19/2019
Date Made Active in Reports: 03/08/2019
Number of Days to Update: 17

Source: Contra Costa Health Services Department
Telephone: 925-646-2286
Last EDR Contact: 01/28/2019
Next Scheduled EDR Contact: 05/11/2019
Data Release Frequency: Semi-Annually

DEL NORTE COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CUPA DEL NORTE: CUPA Facility List Cupa Facility list

Date of Government Version: 01/16/2019
Date Data Arrived at EDR: 02/05/2019
Date Made Active in Reports: 03/05/2019
Number of Days to Update: 28

Source: Del Norte County Environmental Health Division
Telephone: 707-465-0426
Last EDR Contact: 04/25/2019
Next Scheduled EDR Contact: 08/12/2019
Data Release Frequency: Varies

EL DORADO COUNTY:

CUPA EL DORADO: CUPA Facility List CUPA facility list.

Date of Government Version: 02/27/2019
Date Data Arrived at EDR: 02/28/2019
Date Made Active in Reports: 04/01/2019
Number of Days to Update: 32

Source: El Dorado County Environmental Management Department
Telephone: 530-621-6623
Last EDR Contact: 01/28/2019
Next Scheduled EDR Contact: 05/11/2019
Data Release Frequency: Varies

FRESNO COUNTY:

CUPA FRESNO: CUPA Resources List

Certified Unified Program Agency. CUPA's are responsible for implementing a unified hazardous materials and hazardous waste management regulatory program. The agency provides oversight of businesses that deal with hazardous materials, operate underground storage tanks or aboveground storage tanks.

Date of Government Version: 10/16/2018
Date Data Arrived at EDR: 10/18/2018
Date Made Active in Reports: 11/14/2018
Number of Days to Update: 27

Source: Dept. of Community Health
Telephone: 559-445-3271
Last EDR Contact: 03/29/2019
Next Scheduled EDR Contact: 07/15/2019
Data Release Frequency: Semi-Annually

GLENN COUNTY:

CUPA GLENN: CUPA Facility List Cupa facility list

Date of Government Version: 01/22/2018
Date Data Arrived at EDR: 01/24/2018
Date Made Active in Reports: 03/14/2018
Number of Days to Update: 49

Source: Glenn County Air Pollution Control District
Telephone: 830-934-6500
Last EDR Contact: 04/22/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Varies

HUMBOLDT COUNTY:

CUPA HUMBOLDT: CUPA Facility List CUPA facility list.

Date of Government Version: 12/11/2018
Date Data Arrived at EDR: 12/13/2018
Date Made Active in Reports: 01/15/2019
Number of Days to Update: 33

Source: Humboldt County Environmental Health
Telephone: N/A
Last EDR Contact: 11/19/2018
Next Scheduled EDR Contact: 03/04/2019
Data Release Frequency: Semi-Annually

IMPERIAL COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CUPA IMPERIAL: CUPA Facility List Cupa facility list.

Date of Government Version: 01/18/2019
Date Data Arrived at EDR: 01/23/2019
Date Made Active in Reports: 03/05/2019
Number of Days to Update: 41

Source: San Diego Border Field Office
Telephone: 760-339-2777
Last EDR Contact: 04/22/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Varies

INYO COUNTY:

CUPA INYO: CUPA Facility List Cupa facility list.

Date of Government Version: 04/02/2018
Date Data Arrived at EDR: 04/03/2018
Date Made Active in Reports: 06/14/2018
Number of Days to Update: 72

Source: Inyo County Environmental Health Services
Telephone: 760-878-0238
Last EDR Contact: 02/13/2019
Next Scheduled EDR Contact: 06/03/2019
Data Release Frequency: Varies

KERN COUNTY:

UST KERN: Underground Storage Tank Sites & Tank Listing Kern County Sites and Tanks Listing.

Date of Government Version: 01/28/2019
Date Data Arrived at EDR: 02/07/2019
Date Made Active in Reports: 03/08/2019
Number of Days to Update: 29

Source: Kern County Environment Health Services Department
Telephone: 661-862-8700
Last EDR Contact: 01/31/2019
Next Scheduled EDR Contact: 05/20/2019
Data Release Frequency: Quarterly

KINGS COUNTY:

CUPA KINGS: CUPA Facility List

A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 02/14/2019
Date Data Arrived at EDR: 02/19/2019
Date Made Active in Reports: 03/05/2019
Number of Days to Update: 14

Source: Kings County Department of Public Health
Telephone: 559-584-1411
Last EDR Contact: 02/13/2019
Next Scheduled EDR Contact: 06/03/2019
Data Release Frequency: Varies

LAKE COUNTY:

CUPA LAKE: CUPA Facility List Cupa facility list

Date of Government Version: 02/08/2019
Date Data Arrived at EDR: 02/12/2019
Date Made Active in Reports: 03/12/2019
Number of Days to Update: 28

Source: Lake County Environmental Health
Telephone: 707-263-1164
Last EDR Contact: 04/15/2019
Next Scheduled EDR Contact: 07/29/2019
Data Release Frequency: Varies

LASSEN COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CUPA LASSEN: CUPA Facility List Cupa facility list

Date of Government Version: 01/17/2019
Date Data Arrived at EDR: 01/18/2019
Date Made Active in Reports: 03/05/2019
Number of Days to Update: 46

Source: Lassen County Environmental Health
Telephone: 530-251-8528
Last EDR Contact: 04/22/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Varies

LOS ANGELES COUNTY:

AOCONCERN: Key Areas of Concerns in Los Angeles County

San Gabriel Valley areas where VOC contamination is at or above the MCL as designated by region 9 EPA office. Date of Government Version: 3/30/2009 Exide Site area is a cleanup plan of lead-impacted soil surrounding the former Exide Facility as designated by the DTSC. Date of Government Version: 7/17/2017

Date of Government Version: 03/30/2009
Date Data Arrived at EDR: 03/31/2009
Date Made Active in Reports: 10/23/2009
Number of Days to Update: 206

Source: N/A
Telephone: N/A
Last EDR Contact: 03/18/2019
Next Scheduled EDR Contact: 07/01/2019
Data Release Frequency: No Update Planned

HMS LOS ANGELES: HMS: Street Number List Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 12/19/2018
Date Data Arrived at EDR: 01/10/2019
Date Made Active in Reports: 03/07/2019
Number of Days to Update: 56

Source: Department of Public Works
Telephone: 626-458-3517
Last EDR Contact: 04/22/2019
Next Scheduled EDR Contact: 07/22/2019
Data Release Frequency: Semi-Annually

LF LOS ANGELES: List of Solid Waste Facilities Solid Waste Facilities in Los Angeles County.

Date of Government Version: 01/14/2019
Date Data Arrived at EDR: 01/15/2019
Date Made Active in Reports: 03/07/2019
Number of Days to Update: 51

Source: La County Department of Public Works
Telephone: 818-458-5185
Last EDR Contact: 04/16/2019
Next Scheduled EDR Contact: 07/29/2019
Data Release Frequency: Varies

LF LOS ANGELES CITY: City of Los Angeles Landfills Landfills owned and maintained by the City of Los Angeles.

Date of Government Version: 01/01/2019
Date Data Arrived at EDR: 01/15/2019
Date Made Active in Reports: 03/07/2019
Number of Days to Update: 51

Source: Engineering & Construction Division
Telephone: 213-473-7869
Last EDR Contact: 04/15/2019
Next Scheduled EDR Contact: 07/29/2019
Data Release Frequency: Varies

SITE MIT LOS ANGELES: Site Mitigation List Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 01/30/2019
Date Data Arrived at EDR: 02/01/2019
Date Made Active in Reports: 03/07/2019
Number of Days to Update: 34

Source: Community Health Services
Telephone: 323-890-7806
Last EDR Contact: 04/16/2019
Next Scheduled EDR Contact: 07/29/2019
Data Release Frequency: Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

UST EL SEGUNDO: City of El Segundo Underground Storage Tank
Underground storage tank sites located in El Segundo city.

Date of Government Version: 01/21/2017	Source: City of El Segundo Fire Department
Date Data Arrived at EDR: 04/19/2017	Telephone: 310-524-2236
Date Made Active in Reports: 05/10/2017	Last EDR Contact: 04/15/2019
Number of Days to Update: 21	Next Scheduled EDR Contact: 07/29/2019
	Data Release Frequency: Semi-Annually

UST LONG BEACH: City of Long Beach Underground Storage Tank
Underground storage tank sites located in the city of Long Beach.

Date of Government Version: 03/09/2017	Source: City of Long Beach Fire Department
Date Data Arrived at EDR: 03/10/2017	Telephone: 562-570-2563
Date Made Active in Reports: 05/03/2017	Last EDR Contact: 04/22/2019
Number of Days to Update: 54	Next Scheduled EDR Contact: 08/05/2019
	Data Release Frequency: Annually

UST TORRANCE: City of Torrance Underground Storage Tank
Underground storage tank sites located in the city of Torrance.

Date of Government Version: 10/02/2018	Source: City of Torrance Fire Department
Date Data Arrived at EDR: 10/05/2018	Telephone: 310-618-2973
Date Made Active in Reports: 11/02/2018	Last EDR Contact: 04/22/2019
Number of Days to Update: 28	Next Scheduled EDR Contact: 08/05/2019
	Data Release Frequency: Semi-Annually

MADERA COUNTY:

CUPA MADERA: CUPA Facility List

A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 02/20/2019	Source: Madera County Environmental Health
Date Data Arrived at EDR: 02/22/2019	Telephone: 559-675-7823
Date Made Active in Reports: 03/07/2019	Last EDR Contact: 02/15/2019
Number of Days to Update: 13	Next Scheduled EDR Contact: 06/03/2019
	Data Release Frequency: Varies

MARIN COUNTY:

UST MARIN: Underground Storage Tank Sites
Currently permitted USTs in Marin County.

Date of Government Version: 09/26/2018	Source: Public Works Department Waste Management
Date Data Arrived at EDR: 10/04/2018	Telephone: 415-473-6647
Date Made Active in Reports: 11/02/2018	Last EDR Contact: 03/29/2019
Number of Days to Update: 29	Next Scheduled EDR Contact: 07/15/2019
	Data Release Frequency: Semi-Annually

MERCED COUNTY:

CUPA MERCED: CUPA Facility List
CUPA facility list.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 08/29/2018
Date Data Arrived at EDR: 08/31/2018
Date Made Active in Reports: 09/19/2018
Number of Days to Update: 19

Source: Merced County Environmental Health
Telephone: 209-381-1094
Last EDR Contact: 03/18/2019
Next Scheduled EDR Contact: 06/03/2019
Data Release Frequency: Varies

MONO COUNTY:

CUPA MONO: CUPA Facility List CUPA Facility List

Date of Government Version: 02/21/2019
Date Data Arrived at EDR: 02/26/2019
Date Made Active in Reports: 04/01/2019
Number of Days to Update: 34

Source: Mono County Health Department
Telephone: 760-932-5580
Last EDR Contact: 02/21/2019
Next Scheduled EDR Contact: 06/10/2019
Data Release Frequency: Varies

MONTEREY COUNTY:

CUPA MONTEREY: CUPA Facility Listing CUPA Program listing from the Environmental Health Division.

Date of Government Version: 02/05/2019
Date Data Arrived at EDR: 02/07/2019
Date Made Active in Reports: 03/05/2019
Number of Days to Update: 26

Source: Monterey County Health Department
Telephone: 831-796-1297
Last EDR Contact: 04/01/2019
Next Scheduled EDR Contact: 07/15/2019
Data Release Frequency: Varies

NAPA COUNTY:

LUST NAPA: Sites With Reported Contamination

A listing of leaking underground storage tank sites located in Napa county.

Date of Government Version: 01/09/2017
Date Data Arrived at EDR: 01/11/2017
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 50

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 02/21/2019
Next Scheduled EDR Contact: 06/10/2019
Data Release Frequency: No Update Planned

UST NAPA: Closed and Operating Underground Storage Tank Sites

Underground storage tank sites located in Napa county.

Date of Government Version: 02/21/2019
Date Data Arrived at EDR: 02/22/2019
Date Made Active in Reports: 03/08/2019
Number of Days to Update: 14

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 02/21/2019
Next Scheduled EDR Contact: 06/10/2019
Data Release Frequency: No Update Planned

NEVADA COUNTY:

CUPA NEVADA: CUPA Facility List CUPA facility list.

Date of Government Version: 01/25/2019
Date Data Arrived at EDR: 01/29/2019
Date Made Active in Reports: 03/05/2019
Number of Days to Update: 35

Source: Community Development Agency
Telephone: 530-265-1467
Last EDR Contact: 04/25/2019
Next Scheduled EDR Contact: 08/12/2019
Data Release Frequency: Varies

ORANGE COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

IND_SITE ORANGE: List of Industrial Site Cleanups Petroleum and non-petroleum spills.

Date of Government Version: 01/02/2019	Source: Health Care Agency
Date Data Arrived at EDR: 02/07/2019	Telephone: 714-834-3446
Date Made Active in Reports: 03/05/2019	Last EDR Contact: 02/04/2019
Number of Days to Update: 26	Next Scheduled EDR Contact: 05/20/2019
	Data Release Frequency: Annually

LUST ORANGE: List of Underground Storage Tank Cleanups Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 01/02/2019	Source: Health Care Agency
Date Data Arrived at EDR: 02/08/2019	Telephone: 714-834-3446
Date Made Active in Reports: 03/06/2019	Last EDR Contact: 02/04/2019
Number of Days to Update: 26	Next Scheduled EDR Contact: 05/20/2019
	Data Release Frequency: Quarterly

UST ORANGE: List of Underground Storage Tank Facilities Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 01/02/2019	Source: Health Care Agency
Date Data Arrived at EDR: 02/05/2019	Telephone: 714-834-3446
Date Made Active in Reports: 03/08/2019	Last EDR Contact: 02/05/2019
Number of Days to Update: 31	Next Scheduled EDR Contact: 05/20/2019
	Data Release Frequency: Quarterly

PLACER COUNTY:

MS PLACER: Master List of Facilities

List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 02/28/2019	Source: Placer County Health and Human Services
Date Data Arrived at EDR: 03/01/2019	Telephone: 530-745-2363
Date Made Active in Reports: 04/12/2019	Last EDR Contact: 02/27/2019
Number of Days to Update: 42	Next Scheduled EDR Contact: 06/17/2019
	Data Release Frequency: Semi-Annually

PLUMAS COUNTY:

CUPA PLUMAS: CUPA Facility List

Plumas County CUPA Program facilities.

Date of Government Version: 01/14/2019	Source: Plumas County Environmental Health
Date Data Arrived at EDR: 01/18/2019	Telephone: 530-283-6355
Date Made Active in Reports: 03/05/2019	Last EDR Contact: 04/22/2019
Number of Days to Update: 46	Next Scheduled EDR Contact: 08/05/2019
	Data Release Frequency: Varies

RIVERSIDE COUNTY:

LUST RIVERSIDE: Listing of Underground Tank Cleanup Sites Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 01/29/2019	Source: Department of Environmental Health
Date Data Arrived at EDR: 01/31/2019	Telephone: 951-358-5055
Date Made Active in Reports: 03/06/2019	Last EDR Contact: 03/18/2019
Number of Days to Update: 34	Next Scheduled EDR Contact: 07/01/2019
	Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

UST RIVERSIDE: Underground Storage Tank Tank List

Underground storage tank sites located in Riverside county.

Date of Government Version: 01/29/2019

Date Data Arrived at EDR: 01/31/2019

Date Made Active in Reports: 03/08/2019

Number of Days to Update: 36

Source: Department of Environmental Health

Telephone: 951-358-5055

Last EDR Contact: 03/18/2019

Next Scheduled EDR Contact: 07/01/2019

Data Release Frequency: Quarterly

SACRAMENTO COUNTY:

CS SACRAMENTO: Toxic Site Clean-Up List

List of sites where unauthorized releases of potentially hazardous materials have occurred.

Date of Government Version: 11/07/2018

Date Data Arrived at EDR: 01/04/2019

Date Made Active in Reports: 03/05/2019

Number of Days to Update: 60

Source: Sacramento County Environmental Management

Telephone: 916-875-8406

Last EDR Contact: 04/02/2019

Next Scheduled EDR Contact: 07/15/2019

Data Release Frequency: Quarterly

ML SACRAMENTO: Master Hazardous Materials Facility List

Any business that has hazardous materials on site - hazardous material storage sites, underground storage tanks, waste generators.

Date of Government Version: 11/07/2018

Date Data Arrived at EDR: 12/28/2018

Date Made Active in Reports: 03/05/2019

Number of Days to Update: 67

Source: Sacramento County Environmental Management

Telephone: 916-875-8406

Last EDR Contact: 04/02/2019

Next Scheduled EDR Contact: 07/15/2019

Data Release Frequency: Quarterly

SAN BENITO COUNTY:

CUPA SAN BENITO: CUPA Facility List

Cupa facility list

Date of Government Version: 11/15/2018

Date Data Arrived at EDR: 11/16/2018

Date Made Active in Reports: 12/13/2018

Number of Days to Update: 27

Source: San Benito County Environmental Health

Telephone: N/A

Last EDR Contact: 02/27/2019

Next Scheduled EDR Contact: 05/20/2019

Data Release Frequency: Varies

SAN BERNARDINO COUNTY:

PERMITS SAN BERNARDINO: Hazardous Material Permits

This listing includes underground storage tanks, medical waste handlers/generators, hazardous materials handlers, hazardous waste generators, and waste oil generators/handlers.

Date of Government Version: 02/27/2019

Date Data Arrived at EDR: 02/28/2019

Date Made Active in Reports: 04/02/2019

Number of Days to Update: 33

Source: San Bernardino County Fire Department Hazardous Materials Division

Telephone: 909-387-3041

Last EDR Contact: 02/19/2019

Next Scheduled EDR Contact: 05/20/2019

Data Release Frequency: Quarterly

SAN DIEGO COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

HMMD SAN DIEGO: Hazardous Materials Management Division Database

The database includes: HE58 - This report contains the business name, site address, business phone number, establishment 'H' permit number, type of permit, and the business status. HE17 - In addition to providing the same information provided in the HE58 listing, HE17 provides inspection dates, violations received by the establishment, hazardous waste generated, the quantity, method of storage, treatment/disposal of waste and the hauler, and information on underground storage tanks. Unauthorized Release List - Includes a summary of environmental contamination cases in San Diego County (underground tank cases, non-tank cases, groundwater contamination, and soil contamination are included.)

Date of Government Version: 03/04/2019
Date Data Arrived at EDR: 03/05/2019
Date Made Active in Reports: 04/02/2019
Number of Days to Update: 28

Source: Hazardous Materials Management Division
Telephone: 619-338-2268
Last EDR Contact: 03/05/2019
Next Scheduled EDR Contact: 06/17/2019
Data Release Frequency: Quarterly

LF SAN DIEGO: Solid Waste Facilities

San Diego County Solid Waste Facilities.

Date of Government Version: 04/18/2018
Date Data Arrived at EDR: 04/24/2018
Date Made Active in Reports: 06/19/2018
Number of Days to Update: 56

Source: Department of Health Services
Telephone: 619-338-2209
Last EDR Contact: 04/22/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Varies

SAN DIEGO CO LOP: Local Oversight Program Listing

A listing of all LOP release sites that are or were under the County of San Diego's jurisdiction. Included are closed or transferred cases, open cases, and cases that did not have a case type indicated. The cases without a case type are mostly complaints; however, some of them could be LOP cases.

Date of Government Version: 10/22/2018
Date Data Arrived at EDR: 10/23/2018
Date Made Active in Reports: 11/30/2018
Number of Days to Update: 38

Source: Department of Environmental Health
Telephone: 858-505-6874
Last EDR Contact: 04/22/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Varies

SAN DIEGO CO. SAM: Environmental Case Listing

The listing contains all underground tank release cases and projects pertaining to properties contaminated with hazardous substances that are actively under review by the Site Assessment and Mitigation Program.

Date of Government Version: 03/23/2010
Date Data Arrived at EDR: 06/15/2010
Date Made Active in Reports: 07/09/2010
Number of Days to Update: 24

Source: San Diego County Department of Environmental Health
Telephone: 619-338-2371
Last EDR Contact: 02/27/2019
Next Scheduled EDR Contact: 06/17/2019
Data Release Frequency: No Update Planned

SAN FRANCISCO COUNTY:

LUST SAN FRANCISCO: Local Oversight Facilities

A listing of leaking underground storage tank sites located in San Francisco county.

Date of Government Version: 09/19/2008
Date Data Arrived at EDR: 09/19/2008
Date Made Active in Reports: 09/29/2008
Number of Days to Update: 10

Source: Department Of Public Health San Francisco County
Telephone: 415-252-3920
Last EDR Contact: 01/31/2019
Next Scheduled EDR Contact: 05/20/2019
Data Release Frequency: Quarterly

UST SAN FRANCISCO: Underground Storage Tank Information

Underground storage tank sites located in San Francisco county.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 11/05/2018
Date Data Arrived at EDR: 11/06/2018
Date Made Active in Reports: 12/14/2018
Number of Days to Update: 38

Source: Department of Public Health
Telephone: 415-252-3920
Last EDR Contact: 01/31/2019
Next Scheduled EDR Contact: 05/20/2019
Data Release Frequency: Quarterly

SAN JOAQUIN COUNTY:

UST SAN JOAQUIN: San Joaquin Co. UST

A listing of underground storage tank locations in San Joaquin county.

Date of Government Version: 06/22/2018
Date Data Arrived at EDR: 06/26/2018
Date Made Active in Reports: 07/11/2018
Number of Days to Update: 15

Source: Environmental Health Department
Telephone: N/A
Last EDR Contact: 03/18/2019
Next Scheduled EDR Contact: 07/01/2019
Data Release Frequency: Semi-Annually

SAN LUIS OBISPO COUNTY:

CUPA SAN LUIS OBISPO: CUPA Facility List Cupa Facility List.

Date of Government Version: 02/13/2019
Date Data Arrived at EDR: 02/15/2019
Date Made Active in Reports: 03/14/2019
Number of Days to Update: 27

Source: San Luis Obispo County Public Health Department
Telephone: 805-781-5596
Last EDR Contact: 02/13/2019
Next Scheduled EDR Contact: 06/03/2019
Data Release Frequency: Varies

SAN MATEO COUNTY:

BI SAN MATEO: Business Inventory

List includes Hazardous Materials Business Plan, hazardous waste generators, and underground storage tanks.

Date of Government Version: 12/03/2018
Date Data Arrived at EDR: 12/12/2018
Date Made Active in Reports: 01/15/2019
Number of Days to Update: 34

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 03/13/2019
Next Scheduled EDR Contact: 06/24/2019
Data Release Frequency: Annually

LUST SAN MATEO: Fuel Leak List

A listing of leaking underground storage tank sites located in San Mateo county.

Date of Government Version: 12/13/2018
Date Data Arrived at EDR: 12/18/2018
Date Made Active in Reports: 01/23/2019
Number of Days to Update: 36

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 03/25/2019
Next Scheduled EDR Contact: 06/24/2019
Data Release Frequency: Semi-Annually

SANTA BARBARA COUNTY:

CUPA SANTA BARBARA: CUPA Facility Listing

CUPA Program Listing from the Environmental Health Services division.

Date of Government Version: 09/08/2011
Date Data Arrived at EDR: 09/09/2011
Date Made Active in Reports: 10/07/2011
Number of Days to Update: 28

Source: Santa Barbara County Public Health Department
Telephone: 805-686-8167
Last EDR Contact: 02/13/2019
Next Scheduled EDR Contact: 06/03/2019
Data Release Frequency: Varies

SANTA CLARA COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CUPA SANTA CLARA: Cupa Facility List Cupa facility list

Date of Government Version: 02/13/2019
Date Data Arrived at EDR: 02/19/2019
Date Made Active in Reports: 03/06/2019
Number of Days to Update: 15

Source: Department of Environmental Health
Telephone: 408-918-1973
Last EDR Contact: 02/13/2019
Next Scheduled EDR Contact: 06/03/2019
Data Release Frequency: Varies

HIST LUST SANTA CLARA: HIST LUST - Fuel Leak Site Activity Report

A listing of open and closed leaking underground storage tanks. This listing is no longer updated by the county.
Leaking underground storage tanks are now handled by the Department of Environmental Health.

Date of Government Version: 03/29/2005
Date Data Arrived at EDR: 03/30/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 22

Source: Santa Clara Valley Water District
Telephone: 408-265-2600
Last EDR Contact: 03/23/2009
Next Scheduled EDR Contact: 06/22/2009
Data Release Frequency: No Update Planned

LUST SANTA CLARA: LOP Listing

A listing of leaking underground storage tanks located in Santa Clara county.

Date of Government Version: 03/03/2014
Date Data Arrived at EDR: 03/05/2014
Date Made Active in Reports: 03/18/2014
Number of Days to Update: 13

Source: Department of Environmental Health
Telephone: 408-918-3417
Last EDR Contact: 02/21/2019
Next Scheduled EDR Contact: 06/10/2019
Data Release Frequency: Annually

SAN JOSE HAZMAT: Hazardous Material Facilities

Hazardous material facilities, including underground storage tank sites.

Date of Government Version: 01/30/2019
Date Data Arrived at EDR: 02/01/2019
Date Made Active in Reports: 03/07/2019
Number of Days to Update: 34

Source: City of San Jose Fire Department
Telephone: 408-535-7694
Last EDR Contact: 01/31/2019
Next Scheduled EDR Contact: 05/20/2019
Data Release Frequency: Annually

SANTA CRUZ COUNTY:

CUPA SANTA CRUZ: CUPA Facility List CUPA facility listing.

Date of Government Version: 01/21/2017
Date Data Arrived at EDR: 02/22/2017
Date Made Active in Reports: 05/23/2017
Number of Days to Update: 90

Source: Santa Cruz County Environmental Health
Telephone: 831-464-2761
Last EDR Contact: 02/13/2019
Next Scheduled EDR Contact: 06/03/2019
Data Release Frequency: Varies

SHASTA COUNTY:

CUPA SHASTA: CUPA Facility List Cupa Facility List.

Date of Government Version: 06/15/2017
Date Data Arrived at EDR: 06/19/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 51

Source: Shasta County Department of Resource Management
Telephone: 530-225-5789
Last EDR Contact: 02/13/2019
Next Scheduled EDR Contact: 06/03/2019
Data Release Frequency: Varies

SOLANO COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

LUST SOLANO: Leaking Underground Storage Tanks

A listing of leaking underground storage tank sites located in Solano county.

Date of Government Version: 11/29/2018
Date Data Arrived at EDR: 12/04/2018
Date Made Active in Reports: 01/11/2019
Number of Days to Update: 38

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 02/27/2019
Next Scheduled EDR Contact: 06/17/2019
Data Release Frequency: Quarterly

UST SOLANO: Underground Storage Tanks

Underground storage tank sites located in Solano county.

Date of Government Version: 03/05/2019
Date Data Arrived at EDR: 03/07/2019
Date Made Active in Reports: 04/03/2019
Number of Days to Update: 27

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 02/27/2019
Next Scheduled EDR Contact: 06/17/2019
Data Release Frequency: Quarterly

SONOMA COUNTY:

CUPA SONOMA: Cupa Facility List

Cupa Facility list

Date of Government Version: 12/21/2018
Date Data Arrived at EDR: 12/27/2018
Date Made Active in Reports: 01/15/2019
Number of Days to Update: 19

Source: County of Sonoma Fire & Emergency Services Department
Telephone: 707-565-1174
Last EDR Contact: 03/25/2019
Next Scheduled EDR Contact: 07/08/2019
Data Release Frequency: Varies

LUST SONOMA: Leaking Underground Storage Tank Sites

A listing of leaking underground storage tank sites located in Sonoma county.

Date of Government Version: 01/08/2019
Date Data Arrived at EDR: 01/10/2019
Date Made Active in Reports: 03/06/2019
Number of Days to Update: 55

Source: Department of Health Services
Telephone: 707-565-6565
Last EDR Contact: 04/08/2019
Next Scheduled EDR Contact: 07/08/2019
Data Release Frequency: Quarterly

STANISLAUS COUNTY:

CUPA STANISLAUS: CUPA Facility List

Cupa facility list

Date of Government Version: 12/11/2018
Date Data Arrived at EDR: 12/13/2018
Date Made Active in Reports: 01/15/2019
Number of Days to Update: 33

Source: Stanislaus County Department of Environmental Protection
Telephone: 209-525-6751
Last EDR Contact: 04/15/2019
Next Scheduled EDR Contact: 07/29/2019
Data Release Frequency: Varies

SUTTER COUNTY:

UST SUTTER: Underground Storage Tanks

Underground storage tank sites located in Sutter county.

Date of Government Version: 02/28/2019
Date Data Arrived at EDR: 03/01/2019
Date Made Active in Reports: 04/03/2019
Number of Days to Update: 33

Source: Sutter County Environmental Health Services
Telephone: 530-822-7500
Last EDR Contact: 02/27/2019
Next Scheduled EDR Contact: 06/17/2019
Data Release Frequency: Semi-Annually

TEHAMA COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CUPA TEHAMA: CUPA Facility List Cupa facilities

Date of Government Version: 12/13/2018
Date Data Arrived at EDR: 12/18/2018
Date Made Active in Reports: 01/15/2019
Number of Days to Update: 28

Source: Tehama County Department of Environmental Health
Telephone: 530-527-8020
Last EDR Contact: 01/31/2019
Next Scheduled EDR Contact: 05/20/2019
Data Release Frequency: Varies

TRINITY COUNTY:

CUPA TRINITY: CUPA Facility List Cupa facility list

Date of Government Version: 01/18/2019
Date Data Arrived at EDR: 01/23/2019
Date Made Active in Reports: 03/06/2019
Number of Days to Update: 42

Source: Department of Toxic Substances Control
Telephone: 760-352-0381
Last EDR Contact: 04/22/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Varies

TULARE COUNTY:

CUPA TULARE: CUPA Facility List Cupa program facilities

Date of Government Version: 12/26/2018
Date Data Arrived at EDR: 12/27/2018
Date Made Active in Reports: 01/15/2019
Number of Days to Update: 19

Source: Tulare County Environmental Health Services Division
Telephone: 559-624-7400
Last EDR Contact: 01/31/2019
Next Scheduled EDR Contact: 05/20/2019
Data Release Frequency: Varies

TUOLUMNE COUNTY:

CUPA TUOLUMNE: CUPA Facility List Cupa facility list

Date of Government Version: 04/23/2018
Date Data Arrived at EDR: 04/25/2018
Date Made Active in Reports: 06/25/2018
Number of Days to Update: 61

Source: Division of Environmental Health
Telephone: 209-533-5633
Last EDR Contact: 04/22/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Varies

VENTURA COUNTY:

BWT VENTURA: Business Plan, Hazardous Waste Producers, and Operating Underground Tanks The BWT list indicates by site address whether the Environmental Health Division has Business Plan (B), Waste Producer (W), and/or Underground Tank (T) information.

Date of Government Version: 12/26/2018
Date Data Arrived at EDR: 01/24/2019
Date Made Active in Reports: 02/28/2019
Number of Days to Update: 35

Source: Ventura County Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 04/23/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Quarterly

LF VENTURA: Inventory of Illegal Abandoned and Inactive Sites Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 12/01/2011
Date Data Arrived at EDR: 12/01/2011
Date Made Active in Reports: 01/19/2012
Number of Days to Update: 49

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 03/29/2019
Next Scheduled EDR Contact: 07/15/2019
Data Release Frequency: Annually

LUST VENTURA: Listing of Underground Tank Cleanup Sites
Ventura County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 05/29/2008
Date Data Arrived at EDR: 06/24/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 37

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 02/07/2019
Next Scheduled EDR Contact: 05/27/2019
Data Release Frequency: Quarterly

MED WASTE VENTURA: Medical Waste Program List

To protect public health and safety and the environment from potential exposure to disease causing agents, the Environmental Health Division Medical Waste Program regulates the generation, handling, storage, treatment and disposal of medical waste throughout the County.

Date of Government Version: 12/26/2018
Date Data Arrived at EDR: 01/24/2019
Date Made Active in Reports: 03/07/2019
Number of Days to Update: 42

Source: Ventura County Resource Management Agency
Telephone: 805-654-2813
Last EDR Contact: 04/23/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Quarterly

UST VENTURA: Underground Tank Closed Sites List

Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 02/26/2019
Date Data Arrived at EDR: 03/13/2019
Date Made Active in Reports: 04/03/2019
Number of Days to Update: 21

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 03/13/2019
Next Scheduled EDR Contact: 06/24/2019
Data Release Frequency: Quarterly

YOLO COUNTY:

UST YOLO: Underground Storage Tank Comprehensive Facility Report

Underground storage tank sites located in Yolo county.

Date of Government Version: 12/26/2018
Date Data Arrived at EDR: 01/03/2019
Date Made Active in Reports: 01/16/2019
Number of Days to Update: 13

Source: Yolo County Department of Health
Telephone: 530-666-8646
Last EDR Contact: 03/29/2019
Next Scheduled EDR Contact: 07/15/2019
Data Release Frequency: Annually

YUBA COUNTY:

CUPA YUBA: CUPA Facility List

CUPA facility listing for Yuba County.

Date of Government Version: 02/08/2019
Date Data Arrived at EDR: 02/12/2019
Date Made Active in Reports: 03/06/2019
Number of Days to Update: 22

Source: Yuba County Environmental Health Department
Telephone: 530-749-7523
Last EDR Contact: 04/25/2019
Next Scheduled EDR Contact: 08/12/2019
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data

Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 02/11/2019
Date Data Arrived at EDR: 02/12/2019
Date Made Active in Reports: 03/04/2019
Number of Days to Update: 20

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 02/12/2019
Next Scheduled EDR Contact: 05/27/2019
Data Release Frequency: No Update Planned

NJ MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2017
Date Data Arrived at EDR: 07/13/2018
Date Made Active in Reports: 08/01/2018
Number of Days to Update: 19

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 04/10/2019
Next Scheduled EDR Contact: 07/22/2019
Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data

Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 01/01/2019
Date Data Arrived at EDR: 01/30/2019
Date Made Active in Reports: 02/14/2019
Number of Days to Update: 15

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 01/30/2019
Next Scheduled EDR Contact: 05/11/2019
Data Release Frequency: Quarterly

PA MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2017
Date Data Arrived at EDR: 10/23/2018
Date Made Active in Reports: 11/27/2018
Number of Days to Update: 35

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 04/15/2019
Next Scheduled EDR Contact: 07/29/2019
Data Release Frequency: Annually

RI MANIFEST: Manifest information

Hazardous waste manifest information

Date of Government Version: 12/31/2017
Date Data Arrived at EDR: 02/23/2018
Date Made Active in Reports: 04/09/2018
Number of Days to Update: 45

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 02/19/2019
Next Scheduled EDR Contact: 06/03/2019
Data Release Frequency: Annually

WI MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2017
Date Data Arrived at EDR: 06/15/2018
Date Made Active in Reports: 07/09/2018
Number of Days to Update: 24

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 03/11/2019
Next Scheduled EDR Contact: 06/24/2019
Data Release Frequency: Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Oil/Gas Pipelines

Source: PennWell Corporation

Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

Electric Power Transmission Line Data

Source: PennWell Corporation

This map includes information copyrighted by PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:

Source: American Hospital Association, Inc.

Telephone: 312-280-5991

The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing

Source: Centers for Medicare & Medicaid Services

Telephone: 410-786-3000

A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes

Source: National Institutes of Health

Telephone: 301-594-6248

Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Licensed Facilities

Source: Department of Social Services

Telephone: 916-657-4041

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.

Source: FEMA

Telephone: 877-336-2627

Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory

Source: Department of Fish and Wildlife

Telephone: 916-445-0411

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

STREET AND ADDRESS INFORMATION

© 2015 TomTom North America, Inc. All rights reserved. This material is proprietary and the subject of copyright protection and other intellectual property rights owned by or licensed to Tele Atlas North America, Inc. The use of this material is subject to the terms of a license agreement. You will be held liable for any unauthorized copying or disclosure of this material.

GEOCHECK® - PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

CERES MAIN CANAL BRIDGE REPLACEMENT
EAST KEYES ROAD
CERES, CA 95307

TARGET PROPERTY COORDINATES

Latitude (North):	37.551226 - 37° 33' 4.41"
Longitude (West):	120.938903 - 120° 56' 20.05"
Universal Transverse Mercator:	Zone 10
UTM X (Meters):	682070.7
UTM Y (Meters):	4157816.2
Elevation:	87 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	5640206 CERES, CA
Version Date:	2012

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principle investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

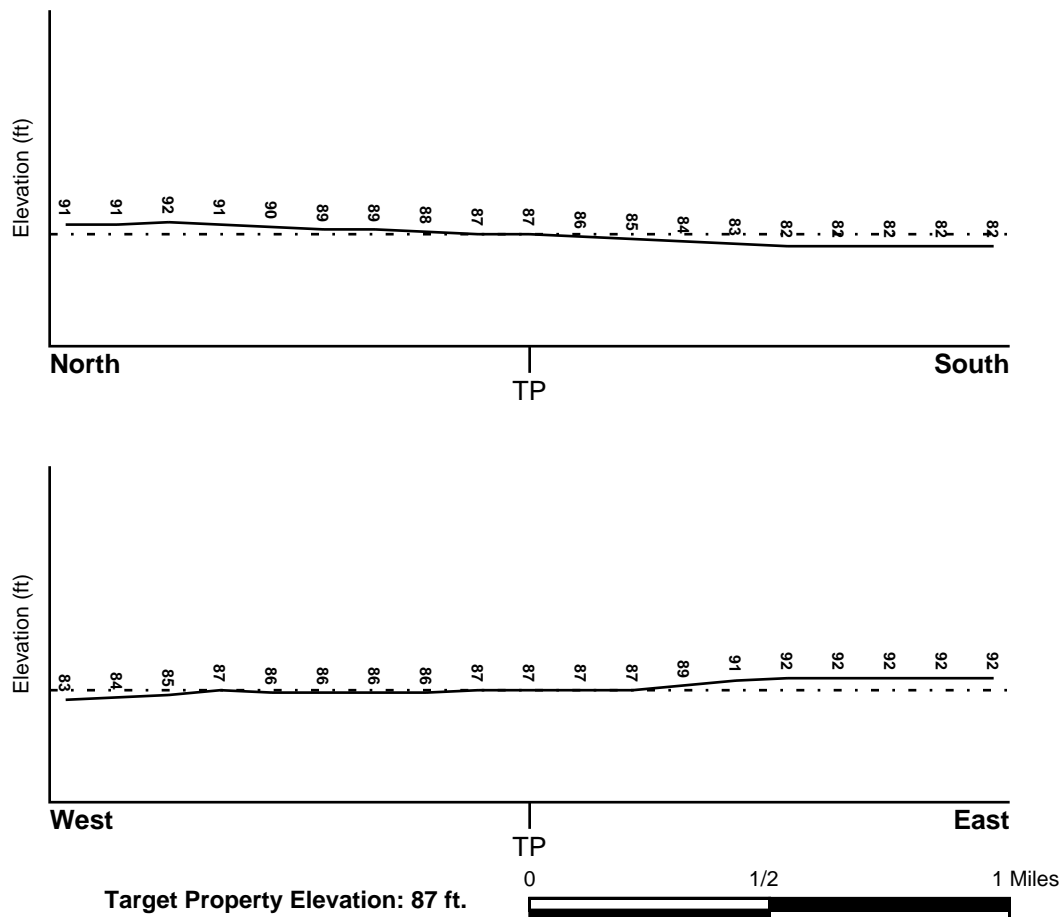
TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General SSW

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

<u>Flood Plain Panel at Target Property</u>	<u>FEMA Source Type</u>
---	-------------------------

0603840515A	FEMA Q3 Flood data
-------------	--------------------

<u>Additional Panels in search area:</u>	<u>FEMA Source Type</u>
--	-------------------------

06099C0555E	FEMA FIRM Flood data
06099C0560E	FEMA FIRM Flood data
0603840510A	FEMA Q3 Flood data
0603840505A	FEMA Q3 Flood data
0603840520A	FEMA Q3 Flood data

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property
CERES

NWI Electronic
Data Coverage
YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Site-Specific Hydrogeological Data*:

Search Radius:	1.25 miles
Status:	Not found

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

<u>MAP ID</u>	<u>LOCATION FROM TP</u>	<u>GENERAL DIRECTION GROUNDWATER FLOW</u>
Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

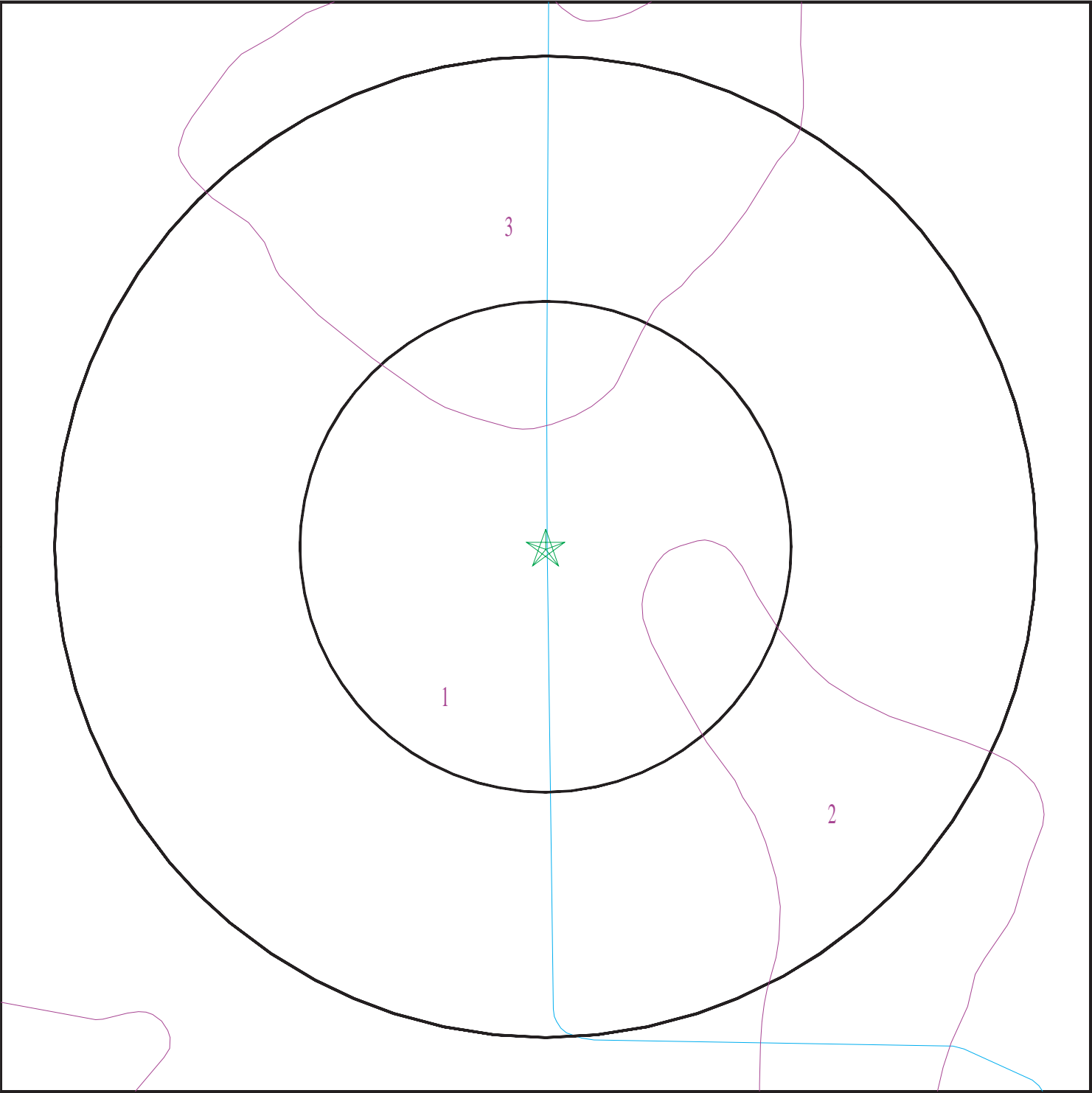
Era:	Cenozoic
System:	Quaternary
Series:	Quaternary
Code:	Q (decoded above as Era, System & Series)

GEOLOGIC AGE IDENTIFICATION

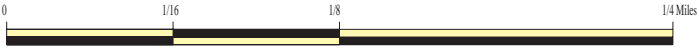
Category: Stratified Sequence

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 05634836.2r



- ★ Target Property
- SSURGO Soil
- Water



SITE NAME: Ceres Main Canal Bridge Replacement
ADDRESS: East Keyes Road
Ceres CA 95307
LAT/LONG: 37.551226 / 120.938903

CLIENT: Rincon
CONTACT: Jennifer Morton
INQUIRY #: 05634836.2r
DATE: April 26, 2019 8:09 pm

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: Dinuba

Soil Surface Texture: sandy loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Moderately well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	9 inches	sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 1.4 Min: 0.42	Max: 8.4 Min: 7.9
2	9 inches	29 inches	sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 1.4 Min: 0.42	Max: 8.4 Min: 7.9
3	29 inches	59 inches	stratified very fine sand to silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 1.4 Min: 0.42	Max: 8.4 Min: 7.9

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Map ID: 2

Soil Component Name: Dinuba

Soil Surface Texture: sandy loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Moderately well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	9 inches	sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 1.4 Min: 0.42	Max: 8.4 Min: 7.9
2	9 inches	18 inches	sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 1.4 Min: 0.42	Max: 8.4 Min: 7.9
3	18 inches	59 inches	stratified very fine sand to silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 1.4 Min: 0.42	Max: 8.4 Min: 7.9

Soil Map ID: 3

Soil Component Name: Hilmar

Soil Surface Texture: loamy sand

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Somewhat excessively drained

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	7 inches	loamy sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 1.4 Min: 0.42	Max: 9.6 Min: 8.4
2	7 inches	20 inches	sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 1.4 Min: 0.42	Max: 9.6 Min: 8.4
3	20 inches	29 inches	sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 1.4 Min: 0.42	Max: 9.6 Min: 8.4
4	29 inches	59 inches	stratified very fine sandy loam to silt loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 1.4 Min: 0.42	Max: 9.6 Min: 8.4

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

WELL SEARCH DISTANCE INFORMATION

<u>DATABASE</u>	<u>SEARCH DISTANCE (miles)</u>
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 0.001 miles
State Database	1.000

FEDERAL USGS WELL INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
A5	USGS40000183778	1/2 - 1 Mile WNW
7	USGS40000183676	1/2 - 1 Mile WSW

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
No PWS System Found		

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

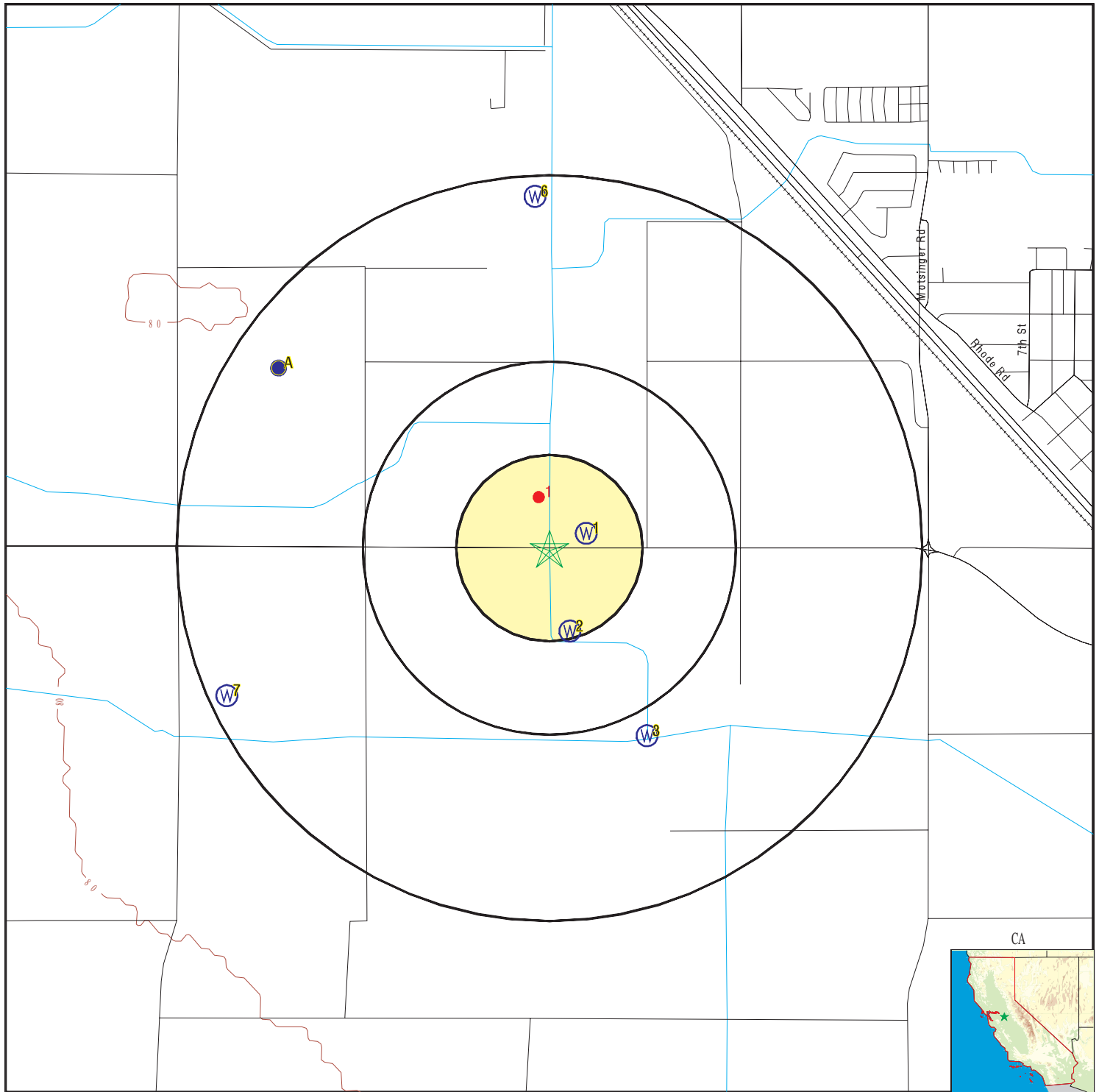
<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
1	CADW60000019488	0 - 1/8 Mile ENE
2	CADW60000017892	1/8 - 1/4 Mile SSE
3	CADW60000017891	1/2 - 1 Mile SSE
A4	CADW60000017084	1/2 - 1 Mile WNW
6	CADW60000030938	1/2 - 1 Mile North

OTHER STATE DATABASE INFORMATION

STATE OIL/GAS WELL INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
1	CAOG11000279404	1/8 - 1/4 Mile NNW

PHYSICAL SETTING SOURCE MAP - 05634836.2r



- County Boundary
- Major Roads
- Contour Lines
- Earthquake Fault Lines
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons

- Groundwater Flow Direction
- Indeterminate Groundwater Flow at Location
- Groundwater Flow Varies at Location
- Closest Hydrogeological Data
- Oil, gas or related wells

SITE NAME: Ceres Main Canal Bridge Replacement
 ADDRESS: East Keyes Road
 Ceres CA 95307
 LAT/LONG: 37.551226 / 120.938903

CLIENT: Rincon
 CONTACT: Jennifer Morton
 INQUIRY #: 05634836.2r
 DATE: April 26, 2019 8:09 pm

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

1
ENE
0 - 1/8 Mile
Higher

CA WELLS CADW60000019488

Objectid: 19488
Longitude: -120.9371
State well numbe: 04S09E25N001M
Well use id: 6
County id: 50
Basin code: '5-22.03'
Dwr region id: 80237
Site id: CADW60000019488

Latitude: 37.5518
Site code: 375518N1209371W001
Local well name: "
Well use descrip: Unknown
County name: Stanislaus
Basin desc: Turlock
Dwr region: South Central Region Office

2
SSE
1/8 - 1/4 Mile
Lower

CA WELLS CADW60000017892

Objectid: 17892
Longitude: -120.9379
State well numbe: 04S09E36E002M
Well use id: 6
County id: 50
Basin code: '5-22.03'
Dwr region id: 80237
Site id: CADW60000017892

Latitude: 37.548
Site code: 375480N1209379W001
Local well name: 'Priv'
Well use descrip: Unknown
County name: Stanislaus
Basin desc: Turlock
Dwr region: South Central Region Office

3
SSE
1/2 - 1 Mile
Lower

CA WELLS CADW60000017891

Objectid: 17891
Longitude: -120.93413
State well numbe: 04S09E36E001M
Well use id: 7
County id: 50
Basin code: '5-22.03'
Dwr region id: 80237
Site id: CADW60000017891

Latitude: 37.543932
Site code: 375441N1209343W001
Local well name: 'TID 022'
Well use descrip: Other
County name: Stanislaus
Basin desc: Turlock
Dwr region: South Central Region Office

A4
WNW
1/2 - 1 Mile
Lower

CA WELLS CADW60000017084

Objectid: 17084
Longitude: -120.9521
State well numbe: 04S09E26L001M
Well use id: 6
County id: 50
Basin code: '5-22.03'
Dwr region id: 80237
Site id: CADW60000017084

Latitude: 37.5582
Site code: 375582N1209521W001
Local well name: '117A'
Well use descrip: Unknown
County name: Stanislaus
Basin desc: Turlock
Dwr region: South Central Region Office

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

A5
WNW
1/2 - 1 Mile
Lower

FED USGS USGS40000183778

Organization ID:	USGS-CA	Type:	Well
Organization Name:	USGS California Water Science Center	HUC:	18040005
Monitor Location:	004S009E26L001M	Drainage Area Units:	Not Reported
Description:	Not Reported	Contrib Drainage Area Units:	Not Reported
Drainage Area:	Not Reported		
Contrib Drainage Area:	Not Reported		
Aquifer:	Central Valley aquifer system		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19470101	Well Depth:	290
Well Depth Units:	ft	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

Ground water levels,Number of Measurements:	1	Level reading date:	1971-01-01
Feet below surface:	5.00	Feet to sea level:	Not Reported
Note:	Not Reported		

6
North
1/2 - 1 Mile
Higher

CA WELLS CADW60000030938

Objectid:	30938	Latitude:	37.5649
Longitude:	-120.9396	Site code:	375649N1209396W001
State well numbe:	04S09E26A001M	Local well name:	"
Well use id:	6	Well use descrip:	Unknown
County id:	50	County name:	Stanislaus
Basin code:	'5-22.03'	Basin desc:	Turlock
Dwr region id:	80237	Dwr region:	South Central Region Office
Site id:	CADW60000030938		

7
WSW
1/2 - 1 Mile
Lower

FED USGS USGS40000183676

Organization ID:	USGS-CA	Type:	Well
Organization Name:	USGS California Water Science Center	HUC:	18040005
Monitor Location:	004S009E35E001M	Drainage Area Units:	Not Reported
Description:	Not Reported	Contrib Drainage Area Units:	Not Reported
Drainage Area:	Not Reported		
Contrib Drainage Area:	Not Reported		
Aquifer:	Central Valley aquifer system		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19590101	Well Depth:	60
Well Depth Units:	ft	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

Ground water levels,Number of Measurements:	1	Level reading date:	1971-01-01
Feet below surface:	10.00	Feet to sea level:	Not Reported
Note:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance

Database EDR ID Number

1

NNW

1/8 - 1/4 Mile

OIL_GAS

CAOG11000279404

Districtnu: 5
Blmwell: N
Dryhole: Y
Operatorna: Great Basins Petroleum Co.
Fieldname: Any Field
Section: 26
Range: 09E
Elevation: Not Reported
Gissourcec: hud
Leasename: Machado
Epawell: N
Confidenti: N
Welldeptha: 7000
Abandonedd: 15-DEC-60
Directiona: Unknown
Site id: CAOG11000279404

Apinumber: 09900046
Redrillcan: Not Reported
Wellstatus: P
Countyname: Stanislaus
Areaname: Any Area
Township: 04S
Basemeridi: MD
Locationde: Fr SE cor 560 Nly 185 Wly
Comments: Not Reported
Wellnumber: 88-26
Hydraulica: N
Spuddate: 05-DEC-60
Redrillfoo: 0
Completion: Not Reported
Gissymbol: PDH

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS RADON

AREA RADON INFORMATION

State Database: CA Radon

Radon Test Results

<u>Zipcode</u>	<u>Num Tests</u>	<u>> 4 pCi/L</u>
95307	3	0

Federal EPA Radon Zone for STANISLAUS County: 3

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for Zip Code: 95307

Number of sites tested: 1

<u>Area</u>	<u>Average Activity</u>	<u>% <4 pCi/L</u>	<u>% 4-20 pCi/L</u>	<u>% >20 pCi/L</u>
Living Area - 1st Floor	0.300 pCi/L	100%	0%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	Not Reported	Not Reported	Not Reported	Not Reported

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)

Source: United States Geologic Survey

EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Current USGS 7.5 Minute Topographic Map

Source: U.S. Geological Survey

HYDROLOGIC INFORMATION

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.

Source: FEMA

Telephone: 877-336-2627

Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory

Source: Department of Fish and Wildlife

Telephone: 916-445-0411

HYDROGEOLOGIC INFORMATION

AQUIFLOW^R Information System

Source: EDR proprietary database of groundwater flow information

EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit

Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)

The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)

Telephone: 800-672-5559

SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)

This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

STATE RECORDS

Water Well Database

Source: Department of Water Resources

Telephone: 916-651-9648

California Drinking Water Quality Database

Source: Department of Public Health

Telephone: 916-324-2319

The database includes all drinking water compliance and special studies monitoring for the state of California since 1984. It consists of over 3,200,000 individual analyses along with well and water system information.

OTHER STATE DATABASE INFORMATION

California Oil and Gas Well Locations

Source: Department of Conservation

Telephone: 916-323-1779

Oil and Gas well locations in the state.

California Earthquake Fault Lines

Source: California Division of Mines and Geology

The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

RADON

State Database: CA Radon

Source: Department of Public Health

Telephone: 916-210-8558

Radon Database for California

Area Radon Information

Source: USGS

Telephone: 703-356-4020

The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

EPA Radon Zones

Source: EPA

Telephone: 703-356-4020

Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities

Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater

Source: Department of Commerce, National Oceanic and Atmospheric Administration

California Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines, prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

STREET AND ADDRESS INFORMATION

© 2015 TomTom North America, Inc. All rights reserved. This material is proprietary and the subject of copyright protection and other intellectual property rights owned by or licensed to Tele Atlas North America, Inc. The use of this material is subject to the terms of a license agreement. You will be held liable for any unauthorized copying or disclosure of this material.

Appendix C

Historical Research Documentation



Ceres Main Canal Bridge Replacement

East Keyes Road

Ceres, CA 95307

Inquiry Number: 5634836.8

April 29, 2019

The EDR Aerial Photo Decade Package



6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Aerial Photo Decade Package

04/29/19

Site Name:

Ceres Main Canal Bridge Repl:
East Keyes Road
Ceres, CA 95307
EDR Inquiry # 5634836.8

Client Name:

Rincon
180 North Ashwood Avenue
Ventura, CA 93003-0000
Contact: Jennifer Morton



Environmental Data Resources, Inc. (EDR) Aerial Photo Decade Package is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's professional researchers provide digitally reproduced historical aerial photographs, and when available, provide one photo per decade.

Search Results:

<u>Year</u>	<u>Scale</u>	<u>Details</u>	<u>Source</u>
2016	1"=500'	Flight Year: 2016	USDA/NAIP
2012	1"=500'	Flight Year: 2012	USDA/NAIP
2009	1"=500'	Flight Year: 2009	USDA/NAIP
2006	1"=500'	Flight Year: 2006	USDA/NAIP
1998	1"=500'	Acquisition Date: August 16, 1998	USGS/DOQQ
1984	1"=500'	Flight Date: June 08, 1984	USDA
1976	1"=500'	Flight Date: July 20, 1976	USGS
1967	1"=500'	Flight Date: May 03, 1967	USGS
1957	1"=500'	Flight Date: March 22, 1957	USGS
1950	1"=500'	Flight Date: March 03, 1950	USDA
1946	1"=500'	Flight Date: April 30, 1946	USGS
1937	1"=500'	Flight Date: August 09, 1937	USDA

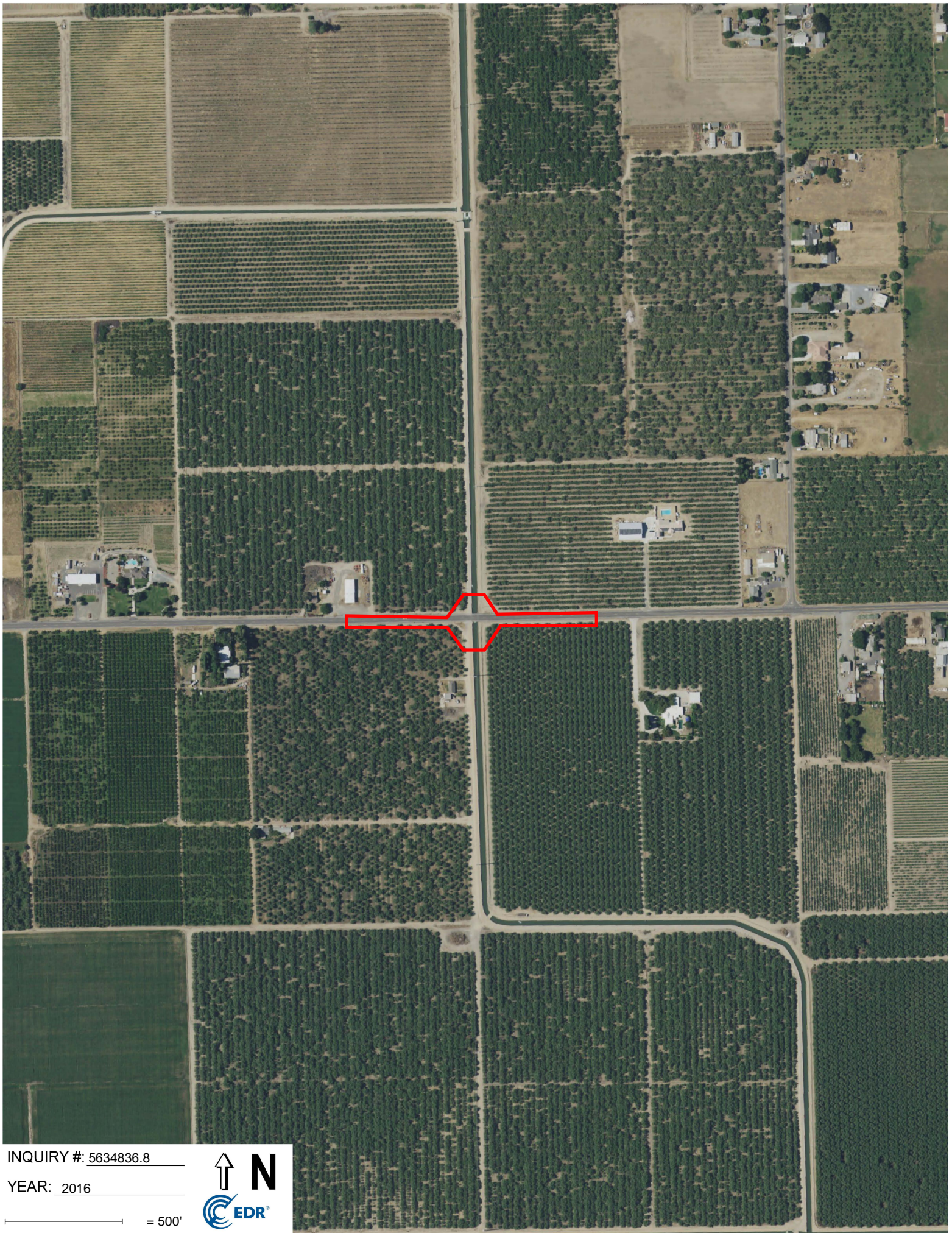
When delivered electronically by EDR, the aerial photo images included with this report are for ONE TIME USE ONLY. Further reproduction of these aerial photo images is prohibited without permission from EDR. For more information contact your EDR Account Executive.

Disclaimer - Copyright and Trademark Notice

This Report contains certain information obtained from a variety of public and other sources reasonably available to Environmental Data Resources, Inc. It cannot be concluded from this Report that coverage information for the target and surrounding properties does not exist from other sources. NO WARRANTY EXPRESSED OR IMPLIED, IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT. ENVIRONMENTAL DATA RESOURCES, INC. SPECIFICALLY DISCLAIMS THE MAKING OF ANY SUCH WARRANTIES, INCLUDING WITHOUT LIMITATION, MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE. ALL RISK IS ASSUMED BY THE USER. IN NO EVENT SHALL ENVIRONMENTAL DATA RESOURCES, INC. BE LIABLE TO ANYONE, WHETHER ARISING OUT OF ERRORS OR OMISSIONS, NEGLIGENCE, ACCIDENT OR ANY OTHER CAUSE, FOR ANY LOSS OF DAMAGE, INCLUDING, WITHOUT LIMITATION, SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR EXEMPLARY DAMAGES. ANY LIABILITY ON THE PART OF ENVIRONMENTAL DATA RESOURCES, INC. IS STRICTLY LIMITED TO A REFUND OF THE AMOUNT PAID FOR THIS REPORT. Purchaser accepts this Report "AS IS". Any analyses, estimates, ratings, environmental risk levels or risk codes provided in this Report are provided for illustrative purposes only, and are not intended to provide, nor should they be interpreted as providing any facts regarding, or prediction or forecast of, any environmental risk for any property. Only a Phase I Environmental Site Assessment performed by an environmental professional can provide information regarding the environmental risk for any property. Additionally, the information provided in this Report is not to be construed as legal advice.

Copyright 2019 by Environmental Data Resources, Inc. All rights reserved. Reproduction in any media or format, in whole or in part, of any report or map of Environmental Data Resources, Inc., or its affiliates, is prohibited without prior written permission.

EDR and its logos (including Sanborn and Sanborn Map) are trademarks of Environmental Data Resources, Inc. or its affiliates. All other trademarks used herein are the property of their respective owners.



INQUIRY #: 5634836.8

YEAR: 2016

— = 500'



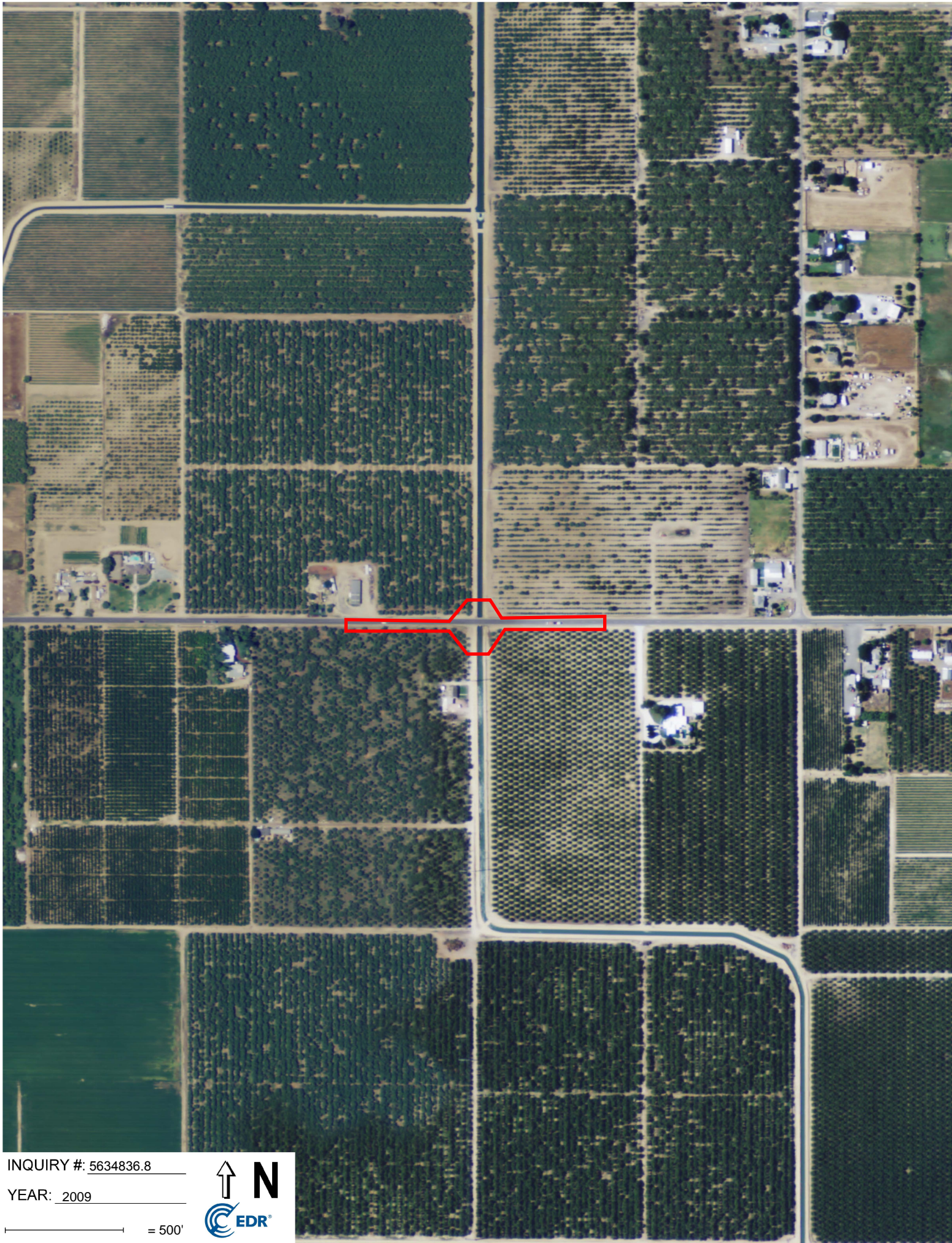


INQUIRY #: 5634836.8

YEAR: 2012

— = 500'





INQUIRY #: 5634836.8

YEAR: 2009

— = 500'





INQUIRY #: 5634836.8

YEAR: 2006

— = 500'





INQUIRY #: 5634836.8

YEAR: 1998

— = 500'



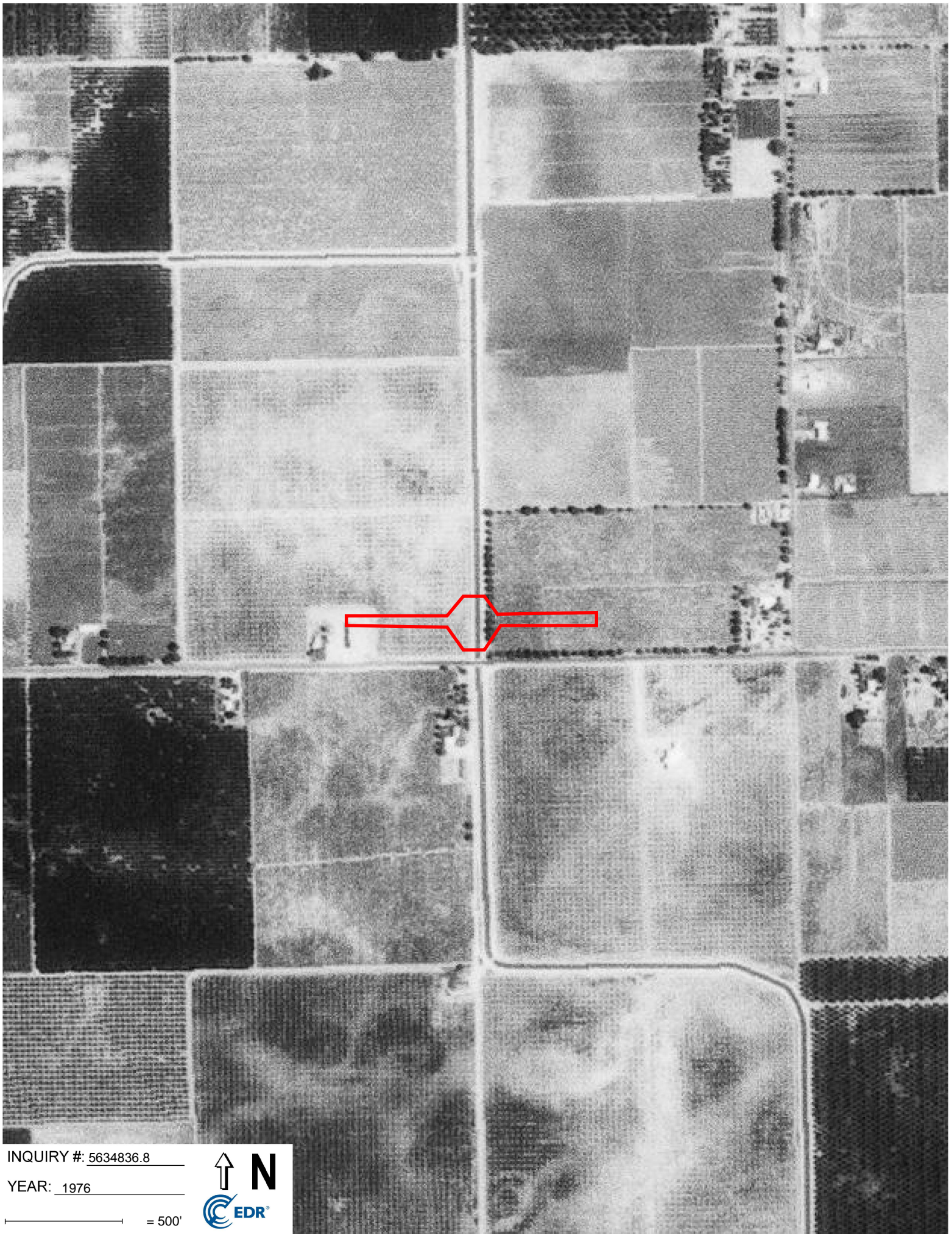


INQUIRY #: 5634836.8

YEAR: 1984

— = 500'





INQUIRY #: 5634836.8

YEAR: 1976

— = 500'





INQUIRY #: 5634836.8

YEAR: 1967

— = 500'





INQUIRY #: 5634836.8

YEAR: 1957

— = 500'





INQUIRY #: 5634836.8

YEAR: 1950

— = 500'





INQUIRY #: 5634836.8

YEAR: 1946

— = 500'





INQUIRY #: 5634836-8
YEAR: 1937
= 500'



Ceres Main Canal Bridge Replacement

East Keyes Road
Ceres, CA 95307

Inquiry Number: 5634836.5
April 29, 2019

The EDR-City Directory Image Report

TABLE OF CONTENTS

SECTION

Executive Summary

Findings

City Directory Images

Thank you for your business.

Please contact EDR at 1-800-352-0050
with any questions or comments.

Disclaimer - Copyright and Trademark Notice

This Report contains certain information obtained from a variety of public and other sources reasonably available to Environmental Data Resources, Inc. It cannot be concluded from this Report that coverage information for the target and surrounding properties does not exist from other sources. **NO WARRANTY EXPRESSED OR IMPLIED, IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT. ENVIRONMENTAL DATA RESOURCES, INC. SPECIFICALLY DISCLAIMS THE MAKING OF ANY SUCH WARRANTIES, INCLUDING WITHOUT LIMITATION, MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE. ALL RISK IS ASSUMED BY THE USER. IN NO EVENT SHALL ENVIRONMENTAL DATA RESOURCES, INC. BE LIABLE TO ANYONE, WHETHER ARISING OUT OF ERRORS OR OMISSIONS, NEGLIGENCE, ACCIDENT OR ANY OTHER CAUSE, FOR ANY LOSS OR DAMAGE, INCLUDING, WITHOUT LIMITATION, SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR EXEMPLARY DAMAGES. ANY LIABILITY ON THE PART OF ENVIRONMENTAL DATA RESOURCES, INC. IS STRICTLY LIMITED TO A REFUND OF THE AMOUNT PAID FOR THIS REPORT.** Purchaser accepts this Report "AS IS". Any analyses, estimates, ratings, environmental risk levels or risk codes provided in this Report are provided for illustrative purposes only, and are not intended to provide, nor should they be interpreted as providing any facts regarding, or prediction or forecast of, any environmental risk for any property. Only a Phase I Environmental Site Assessment performed by an environmental professional can provide information regarding the environmental risk for any property. Additionally, the information provided in this Report is not to be construed as legal advice.

Copyright 2017 by Environmental Data Resources, Inc. All rights reserved. Reproduction in any media or format, in whole or in part, of any report or map of Environmental Data Resources, Inc. or its affiliates is prohibited without prior written permission.

EDR and its logos (including Sanborn and Sanborn Map) are trademarks of Environmental Data Resources, Inc. or its affiliates. All other trademarks used herein are the property of their respective owners.

EXECUTIVE SUMMARY

DESCRIPTION

Environmental Data Resources, Inc.'s (EDR) City Directory Report is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's City Directory Report includes a search of available city directory data at 5 year intervals.

RECORD SOURCES

EDR's Digital Archive combines historical directory listings from sources such as Cole Information and Dun & Bradstreet. These standard sources of property information complement and enhance each other to provide a more comprehensive report.

EDR is licensed to reproduce certain City Directory works by the copyright holders of those works. The purchaser of this EDR City Directory Report may include it in report(s) delivered to a customer. Reproduction of City Directories without permission of the publisher or licensed vendor may be a violation of copyright.

Data by

infoUSA[®]

Copyright©2008
All Rights Reserved

RESEARCH SUMMARY

The following research sources were consulted in the preparation of this report. A check mark indicates where information was identified in the source and provided in this report.

<u>Year</u>	<u>Target Street</u>	<u>Cross Street</u>	<u>Source</u>
2014	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EDR Digital Archive
2010	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EDR Digital Archive
2005	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EDR Digital Archive
2000	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EDR Digital Archive
1995	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EDR Digital Archive
1992	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EDR Digital Archive
1987	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EDR Digital Archive
1985	<input type="checkbox"/>	<input type="checkbox"/>	Polk's City Directory
1980	<input type="checkbox"/>	<input type="checkbox"/>	Polk's City Directory
1975	<input type="checkbox"/>	<input type="checkbox"/>	Polk's City Directory
1970	<input type="checkbox"/>	<input type="checkbox"/>	Polk's City Directory
1965	<input type="checkbox"/>	<input type="checkbox"/>	Polk's City Directory
1960	<input type="checkbox"/>	<input type="checkbox"/>	Polk's City Directory

FINDINGS

TARGET PROPERTY STREET

East Keyes Road
Ceres, CA 95307

<u>Year</u>	<u>CD Image</u>	<u>Source</u>
-------------	-----------------	---------------

E KEYES RD

2014	pg A2	EDR Digital Archive	
2010	pg A4	EDR Digital Archive	
2005	pg A6	EDR Digital Archive	
2000	pg A8	EDR Digital Archive	
1995	pg A9	EDR Digital Archive	
1992	pg A10	EDR Digital Archive	
1987	pg A11	EDR Digital Archive	
1985	-	Polk's City Directory	Street not listed in Source
1980	-	Polk's City Directory	Street not listed in Source
1975	-	Polk's City Directory	Street not listed in Source
1970	-	Polk's City Directory	Street not listed in Source
1965	-	Polk's City Directory	Street not listed in Source
1960	-	Polk's City Directory	Street not listed in Source

FINDINGS

CROSS STREETS

No Cross Streets Identified

City Directory Images

E KEYES RD 2014

525	COIT, GARRY J
607	ACOSTA, A
609	WORD, WARREN
613	WC WORD SHEET METAL & A/C
	WORD BROTHERS INC
	WORD, WARREN C
615	GRIFFIN, DAVID R
619	OCCUPANT UNKNOWN,
749	OCCUPANT UNKNOWN,
	SODERSTROM FARMS
800	WEST COAST GRAPE FARMING INC
1000	NICK S FARM SERVICES
1112	TITUS, JOE W
1130	ROCHE ALICE L
	ROCHE, ALICE L
1706	SANFORD, JANELLE M
1719	MENDOZA, ALFREDO S
1725	JAUREGUI, HORACIO J
1748	BROWN, LINDA
1755	OCCUPANT UNKNOWN,
1767	VOSS, TYREL J
1809	CHS BAND AND GUARD BOOSTERS
	ESCOBEDO, MICHIKO
	JORGE ESCOBEDO
1819	OCHOA, JOSE G
1837	GONTIZ, MANUEL D
1848	DUKE, DAVID A
1855	LEMMONS, CYNTHIA K
1866	WEESE, TROYCE L
1867	LEMMONS, MARY L
2000	PONGBANDITH, LIDDA
	YBARRA, ALEJANDRO
2637	JIMENEZ, CARMEN
2713	MAXWELL WDLF ARTSTRY/ARC
	MAXWELL, ANTHONY D
2725	OCCUPANT UNKNOWN,
2743	FONTANA FARMS INC
	FONTANA, FRANK J
2824	BOER, LOUIS
	LOUIS BOER
2861	C & C ROOF TRIMMING
	CHAVEZ, ENRIQUE
2948	OCCUPANT UNKNOWN,
2950	OCCUPANT UNKNOWN,
3218	WESTSTEYN JALIN
	WESTSTEYN, JUAN
	WHITE CRANE RANCH INCORPORATED
3231	SOUZA, DOUGLAS J
3235	BOOMERANG ENERGY CONCEPTS LLP
	JONES, STEPHEN J

E KEYES RD**2014****(Cont'd)**

3235	WATER WORKS WATER TRUCKS INC
3342	OCCUPANT UNKNOWN,
3424	BACA, PARRA L
3537	BAL PRODUCES
	BAL, BHUPINDER S
	BALJINDER KAUR
	COLDWELL CORPORATION
3749	KENDRICK, JAMES M
3767	OCCUPANT UNKNOWN,
3855	THIEL, EUGENE A
3930	OCCUPANT UNKNOWN,
4207	ORCHARD MACHINERY CORPORATION
4257	CENTRAL AG PRODUCTS INC
	SWENSON STEEL PRODUCT CO INC
4324	APODACA, GILL F

E KEYES RD 2010

525	COIT, GARRY J
609	PEREZ, LOUISE D
611	BILLY J KILGORE
	KILGORE, BILLY J
613	WORD BROTHERS INC
615	PEEK, CHARLES P
619	KING, JOHN K
749	OCCUPANT UNKNOWN,
	SODERSTROM FARMS
800	WEST COAST GRAPE FARMING INC
1000	BURNS, EVELYN F
1112	TITUS, JOE W
1130	ROCHE ALICE L
	ROCHE, C E
1706	SANFORD, JO D
1719	OCCUPANT UNKNOWN,
1725	JAUREGUI, HORACIO J
1748	OCCUPANT UNKNOWN,
1755	OCCUPANT UNKNOWN,
1767	WATSON, KEVIN M
1809	CHS BAND AND GUARD BOOSTERS
	ESCOBEDO, MICHIKO
	JORGE ESCOBEDO
1819	FLORES, JOSE L
1837	GONTIZ, MANUEL D
1848	DUKE, DAVID P
1866	WEESE, TROYCE L
1867	OCCUPANT UNKNOWN,
2637	CANCIMILLA, DAN F
2713	MAXWELL WLDLF ARTSTRY/ARC
	MAXWELL, ANTHONY D
2725	VARGAS, DENISE A
2743	FONTANA FARMS
	FONTANA, FRANK J
2824	LOUIS BOER
2861	C & C ROOF TRIMMING
	OCCUPANT UNKNOWN,
2948	OCCUPANT UNKNOWN,
2950	HUNDAL, NIRBHAI S
	ITS ALL ABOUT NUMBERS
3218	JALINDA LP
	JCORP MANAGEMENT
	WESTSTEYN JALIN
	WHITE CRANE RANCH INCORPORATED
3231	JONES, LINDA K
3235	JONES, JEFFREY J
	WATER WORKS WATER TRUCKS INC
3342	OCCUPANT UNKNOWN,
3424	MELLO, JASON L
3537	BAL PRODUCES

E KEYES RD**2010****(Cont'd)**

3537	COLDWELL CORPORATION
	OCCUPANT UNKNOWN,
3749	OCCUPANT UNKNOWN,
3767	PATTERSON, JOHN W
3855	INGRAM, ROGER E
3930	OCCUPANT UNKNOWN,
4207	ORCHARD MACHINERY CORPORATION
4257	CENTRAL AG PRODUCTS INC
	SWENSON STEEL PRODUCT CO INC
4324	SIMON, JOSE J

E KEYES RD

2005

525	COIT, FRANK
607	WORD, WARREN
609	PEREZ, LOUISE D
611	BILLY J KILGORE
	OCCUPANT UNKNOWN,
615	PEEK, CHARLES P
749	BERRYHILL, MATTHEW C
800	KEYES VINEYARD FJJ PARTNERSHIP
	ROSSINI FARMING CO INC
1000	BURNS, EVELYN F
1112	TIWATER, JOE
1130	ROCHE ALICE L
	ROCHE, C E
1706	SANFORD, JO D
1719	MENDOZA, ALFREDO S
1725	OCCUPANT UNKNOWN,
1748	THORNHILL, JIMMIE D
1755	BARBA, GABRIEL
1767	OCCUPANT UNKNOWN,
1809	ESCOBEDO, MICHICO
1819	MARIN, JOSE S
1837	AMOS, GARY W
1848	DUKE, DAVID P
1855	OCCUPANT UNKNOWN,
1866	WEESE, TROYCE L
1867	GARNER, LUCIOUS P
2000	PRIETO, SALVADOR C
2637	JASON, DON M
	OAKDALE BAIT & TACKLE
	WHEELER ELLEN
2713	MAXWELL WLDLF ARTSTRY/ARC
	MAXWELL, ANTHONY D
2725	VARGAS, DENISE A
2743	FONTANA FARMS
	FONTANA SHARON
	FONTANA, FRANK J
2824	BOER, LOUIS
	LOUIS BOER
2861	C & C ROOF TRIMMING
	CHAVEZ, SERGIO
2948	LOPES, MARY A
2950	HUNDAL, NIRBHAI S
3218	WESTSTEYN JALIN
	WHITE CRANE INDUSTRIES INC
3235	JONES, JUANITA L
3342	GARCIA FARMING
	LOVELAND TRUCKING
	ROSAS AURELIANO A
	ROSAS, AURELIANO
3424	SMITH, LAVONA M

E KEYES RD**2005****(Cont'd)**

3537	BAL PRODUCES
	BAL, DARSHAN S
3749	OCCUPANT UNKNOWN,
3767	PATTERSON, JOHN
3855	INGRAM, ROGER E
3859	CARROLL, JAMES
3930	OCCUPANT UNKNOWN,
4207	DILLABO, DAVID
	ORCHARD MACHINERY CORP
4257	CENTRAL AG PRODUCTS INC
	SWENSON STEEL PRODUCT CO INC
4324	ROSARIO, EMERSON
	STANISLAUS BODY AND PAINT

E KEYES RD

2000

525	COIT FRANK
	COIT, FRANK
607	OCCUPANT UNKNOWN,
609	MATSON, DALE H
611	KILGORE, BILLY J
615	PEEK, CHAS
619	SCOTT, EDITH
800	ROSSINI FARMING CO INC
1000	BURNS EVELYN
	BURNS, EVELYN F
1112	TITUS, JOE
1130	ROCHE, ALICE L
1237	OCCUPANT UNKNOWN,
1706	SANFORD, JOE
1725	OCCUPANT UNKNOWN,
1748	BROWN, LINDA
1754	BARBOUR, LAUREL E
1755	MCKIM DONALD
1767	WATSON, KEVIN M
1809	ESCOBEDO, JORGE L
1819	MARIN, JOSE
1824	JERRY WASHAM
1837	AMOS, GARY W
1848	OCCUPANT UNKNOWN,
1855	ORSER, MARIAN H
1866	WEESE, TROYCE
1867	OCCUPANT UNKNOWN,
2000	PRIETO, MARIA E
2637	WHEELER ELLEN
	WHEELER, GEORGE W
2713	MAXWELL WLDLF ARTSTRY/ARC
	MAXWELL, ANTHONY
2725	SCHARLI, M
2743	FONTANA FARMS
2824	LOUIS BOER
2950	KOETSIER JOHN
3218	WESTSTEYN JALIN
3235	JONES, JUANITA
	MUSTOE, LEE
3342	GARCIA FARMING
	LOVELAND TRUCKING
3424	COY, CYNTHIA D
3537	PARADISE MARKET
3749	OCCUPANT UNKNOWN,
3855	OBERKAMPER, ELDEN L
3859	OCCUPANT UNKNOWN,
4207	ORCHARD MACHINERY CORP
4257	CENTRAL AG PRODUCTS INC
	SWENSON STEEL PRODUCT CO INC
4324	WISE, J

E KEYES RD**1995**

525	COIT, FRANK
619	WEEKS, DONNA L
800	ROSSINI FARMING CO INC
	VINTNERS SUPPLY COMPANY
1000	OCCUPANT UNKNOWNN
1112	TITUS, JOE
1130	OCCUPANT UNKNOWNN
1237	OCCUPANT UNKNOWNN
1706	SANFORD, JOE
1719	MENDOZA, ALFREDO
1725	WOHWEND, CARL
1754	FORTIN, MICHAEL R
1755	OCCUPANT UNKNOWNN
1767	WATSON, KEVIN M
1809	ESCOBEDO, JORGE L
1819	STEWART, JACKIE
1824	WASHAM, WM
1837	AMOS, GARY W
1848	DUKE, DAVID D
1855	ORSER, GEORGE
1866	WEESE, TROYCE
1867	GARNER, LUCIOUS P
2124	ARREOLA, ARMANDO
2637	GW BACKHOE SERVICE & SEPTIC
2743	FONTANA FARMS
3342	LOVELAND TRUCKING
	LOVELAND, DALE
3749	LIGONRE, DAWN
3855	OBERKAMPER, ELDEN L

E KEYES RD**1992**

525	COIT, FRANK
749	TRIPLETT, FAY E
800	ROSSINI FARMING CO INC
	VINTNERS SUPPLY COMPANY
1112	TITUS, JOE
1706	SANFORD, JOE
1855	ORSER, GEORGE
1866	WEESE, TROYCE
1867	GARNER, L P
2401	SHOWCO NEON
2637	GW BACKHOE SERVICE & SEPTIC
2743	FONTANA FARMS
3342	LOVELAND TRUCKING
3855	OBERKAMPER, ELDEN L

E KEYES RD

1987

3218 TRI-DIAMOND ENTERPRISES INC



Ceres Main Canal Bridge Replacement

East Keyes Road

Ceres, CA 95307

Inquiry Number: 5634836.4

April 26, 2019

EDR Historical Topo Map Report

with QuadMatch™



6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Historical Topo Map Report

04/26/19

Site Name:

Ceres Main Canal Bridge Repl:
East Keyes Road
Ceres, CA 95307
EDR Inquiry # 5634836.4

Client Name:

Rincon
180 North Ashwood Avenue
Ventura, CA 93003-0000
Contact: Jennifer Morton



EDR Topographic Map Library has been searched by EDR and maps covering the target property location as provided by Rincon were identified for the years listed below. EDR's Historical Topo Map Report is designed to assist professionals in evaluating potential liability on a target property resulting from past activities. EDR's Historical Topo Map Report includes a search of a collection of public and private color historical topographic maps, dating back to the late 1800s.

Search Results:**Coordinates:**

P.O.#	NA	Latitude:	37.551226 37° 33' 4" North
Project:	18-07035	Longitude:	-120.938903 -120° 56' 20" West
		UTM Zone:	Zone 10 North
		UTM X Meters:	682066.18
		UTM Y Meters:	4158020.85
		Elevation:	87.00' above sea level

Maps Provided:

2012
1987
1976
1969
1953
1941
1939
1916

Disclaimer - Copyright and Trademark Notice

This Report contains certain information obtained from a variety of public and other sources reasonably available to Environmental Data Resources, Inc. It cannot be concluded from this Report that coverage information for the target and surrounding properties does not exist from other sources. NO WARRANTY EXPRESSED OR IMPLIED, IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT. ENVIRONMENTAL DATA RESOURCES, INC. SPECIFICALLY DISCLAIMS THE MAKING OF ANY SUCH WARRANTIES, INCLUDING WITHOUT LIMITATION, MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE. ALL RISK IS ASSUMED BY THE USER. IN NO EVENT SHALL ENVIRONMENTAL DATA RESOURCES, INC. BE LIABLE TO ANYONE, WHETHER ARISING OUT OF ERRORS OR OMISSIONS, NEGLIGENCE, ACCIDENT OR ANY OTHER CAUSE, FOR ANY LOSS OF DAMAGE, INCLUDING, WITHOUT LIMITATION, SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR EXEMPLARY DAMAGES. ANY LIABILITY ON THE PART OF ENVIRONMENTAL DATA RESOURCES, INC. IS STRICTLY LIMITED TO A REFUND OF THE AMOUNT PAID FOR THIS REPORT. Purchaser accepts this Report "AS IS". Any analyses, estimates, ratings, environmental risk levels or risk codes provided in this Report are provided for illustrative purposes only, and are not intended to provide, nor should they be interpreted as providing any facts regarding, or prediction or forecast of, any environmental risk for any property. Only a Phase I Environmental Site Assessment performed by an environmental professional can provide information regarding the environmental risk for any property. Additionally, the information provided in this Report is not to be construed as legal advice.

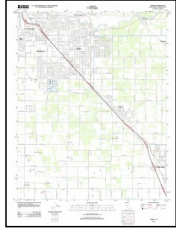
Copyright 2019 by Environmental Data Resources, Inc. All rights reserved. Reproduction in any media or format, in whole or in part, of any report or map of Environmental Data Resources, Inc., or its affiliates, is prohibited without prior written permission.

EDR and its logos (including Sanborn and Sanborn Map) are trademarks of Environmental Data Resources, Inc. or its affiliates. All other trademarks used herein are the property of their respective owners.

Topo Sheet Key

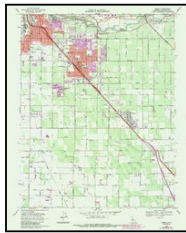
This EDR Topo Map Report is based upon the following USGS topographic map sheets.

2012 Source Sheets



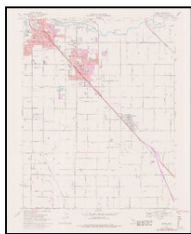
Ceres
2012
7.5-minute, 24000

1987 Source Sheets



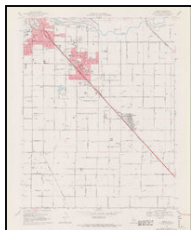
Ceres
1987
7.5-minute, 24000
Aerial Photo Revised 1984

1976 Source Sheets



Ceres
1976
7.5-minute, 24000
Aerial Photo Revised 1967

1969 Source Sheets



Ceres
1969
7.5-minute, 24000
Aerial Photo Revised 1967

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1953 Source Sheets



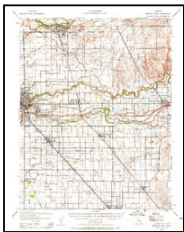
Ceres
1953
7.5-minute, 24000
Aerial Photo Revised 1950

1941 Source Sheets



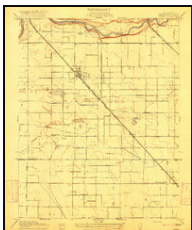
MODESTO EAST
1941
15-minute, 50000

1939 Source Sheets

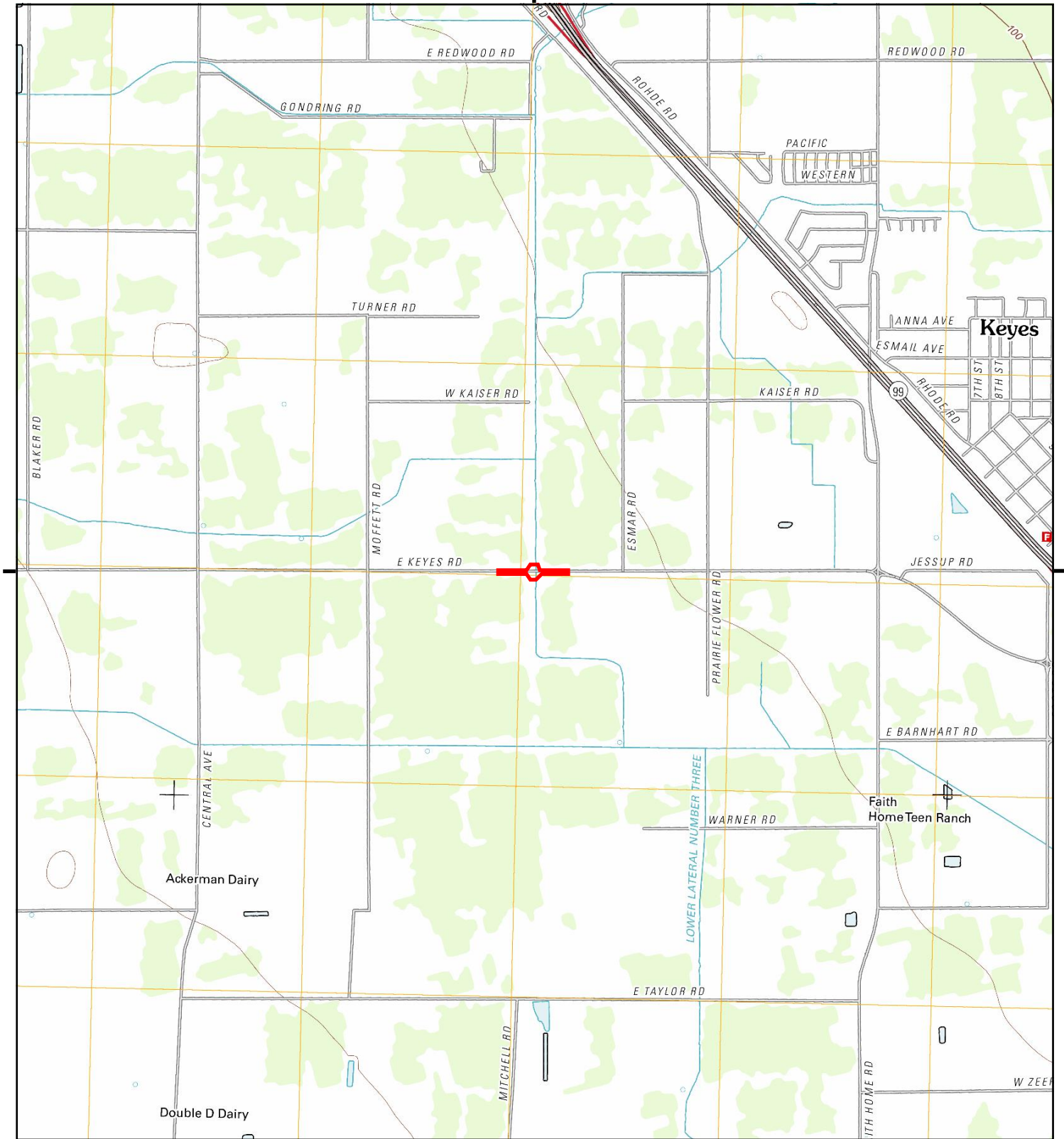


Modesto East
1939
15-minute, 62500
Aerial Photo Revised 1939

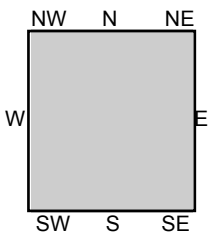
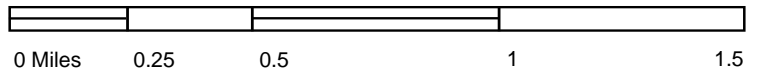
1916 Source Sheets



Ceres
1916
7.5-minute, 31680



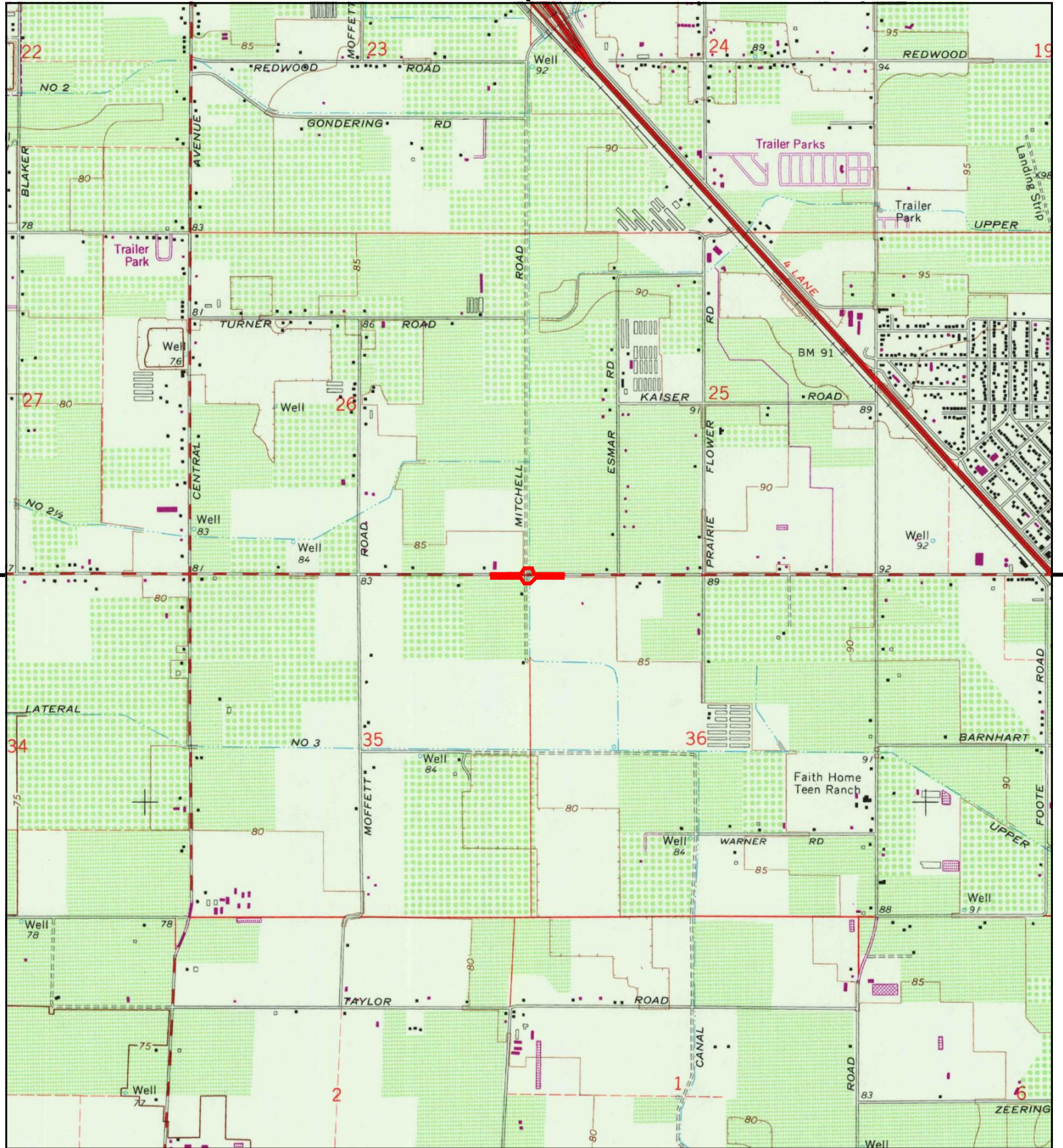
This report includes information from the following map sheet(s).



TP, Ceres, 2012, 7.5-minute

SITE NAME: Ceres Main Canal Bridge Replacement
 ADDRESS: East Keyes Road
 Ceres, CA 95307
 CLIENT: Rincon





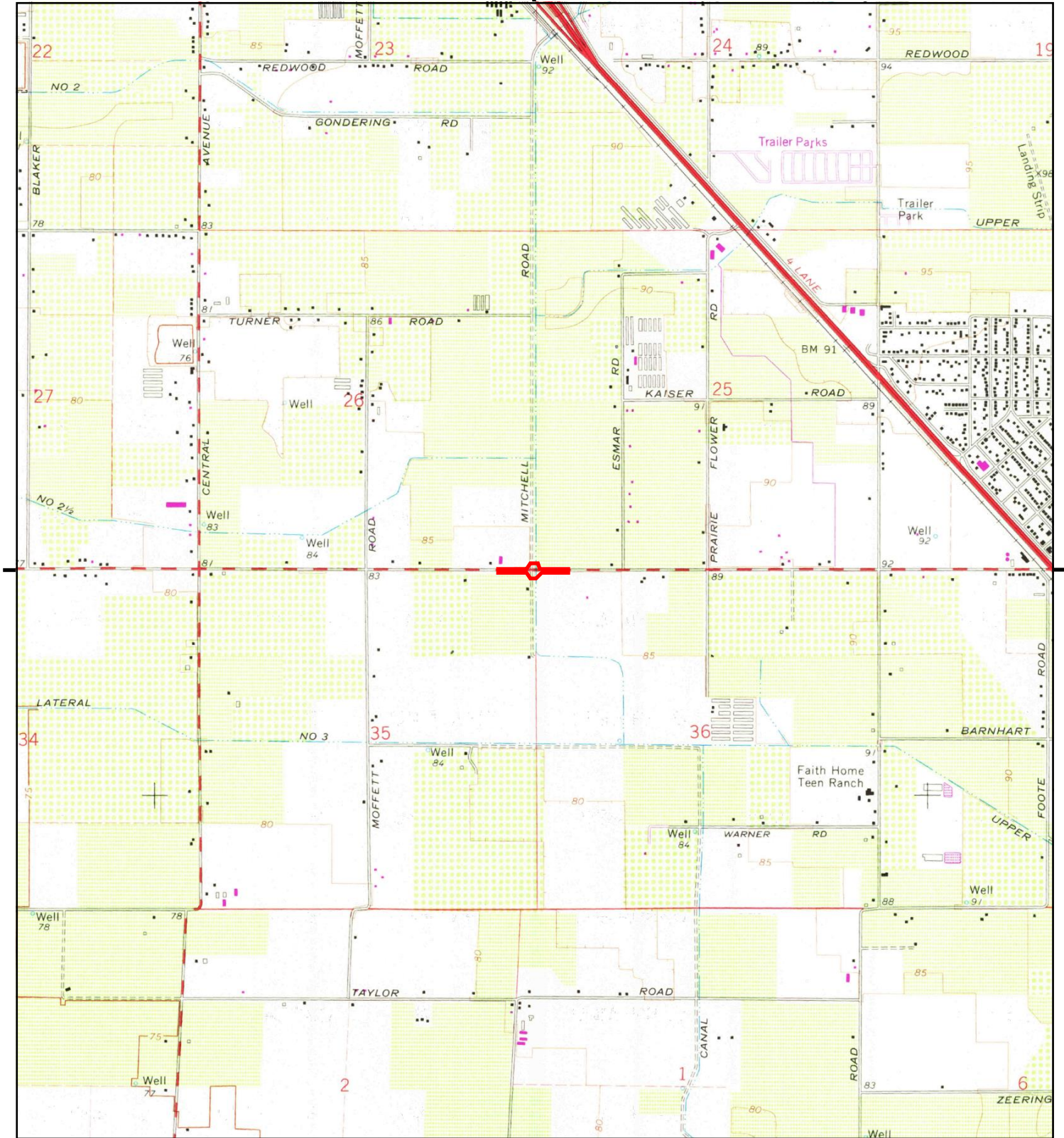
This report includes information from the following map sheet(s).



TP, Ceres, 1987, 7.5-minute

SITE NAME: Ceres Main Canal Bridge Replacement
 ADDRESS: East Keyes Road
 Ceres, CA 95307
 CLIENT: Rincon





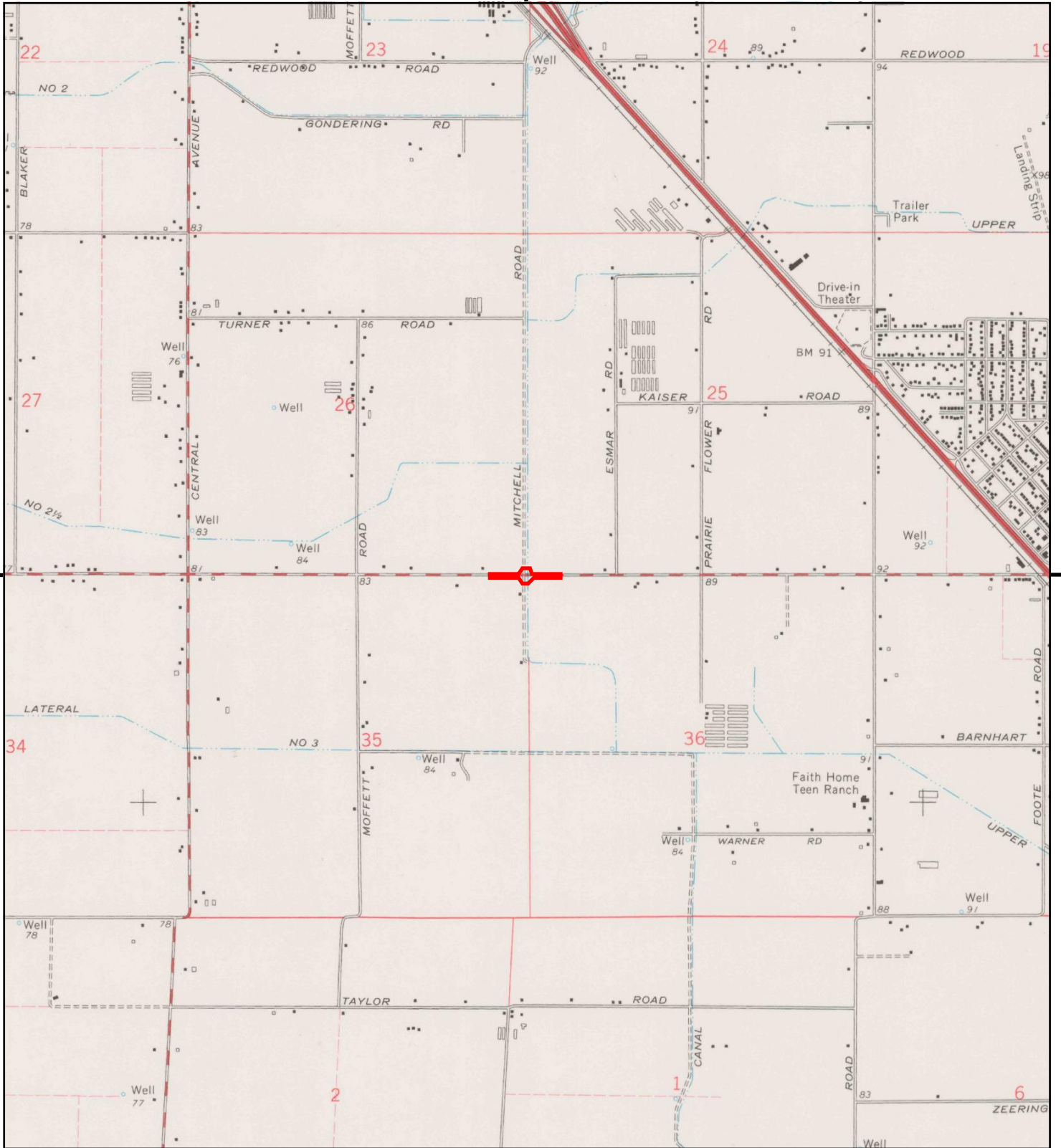
This report includes information from the following map sheet(s).



TP, Ceres, 1976, 7.5-minute

SITE NAME: Ceres Main Canal Bridge Replacement
ADDRESS: East Keyes Road
 Ceres, CA 95307
CLIENT: Rincon





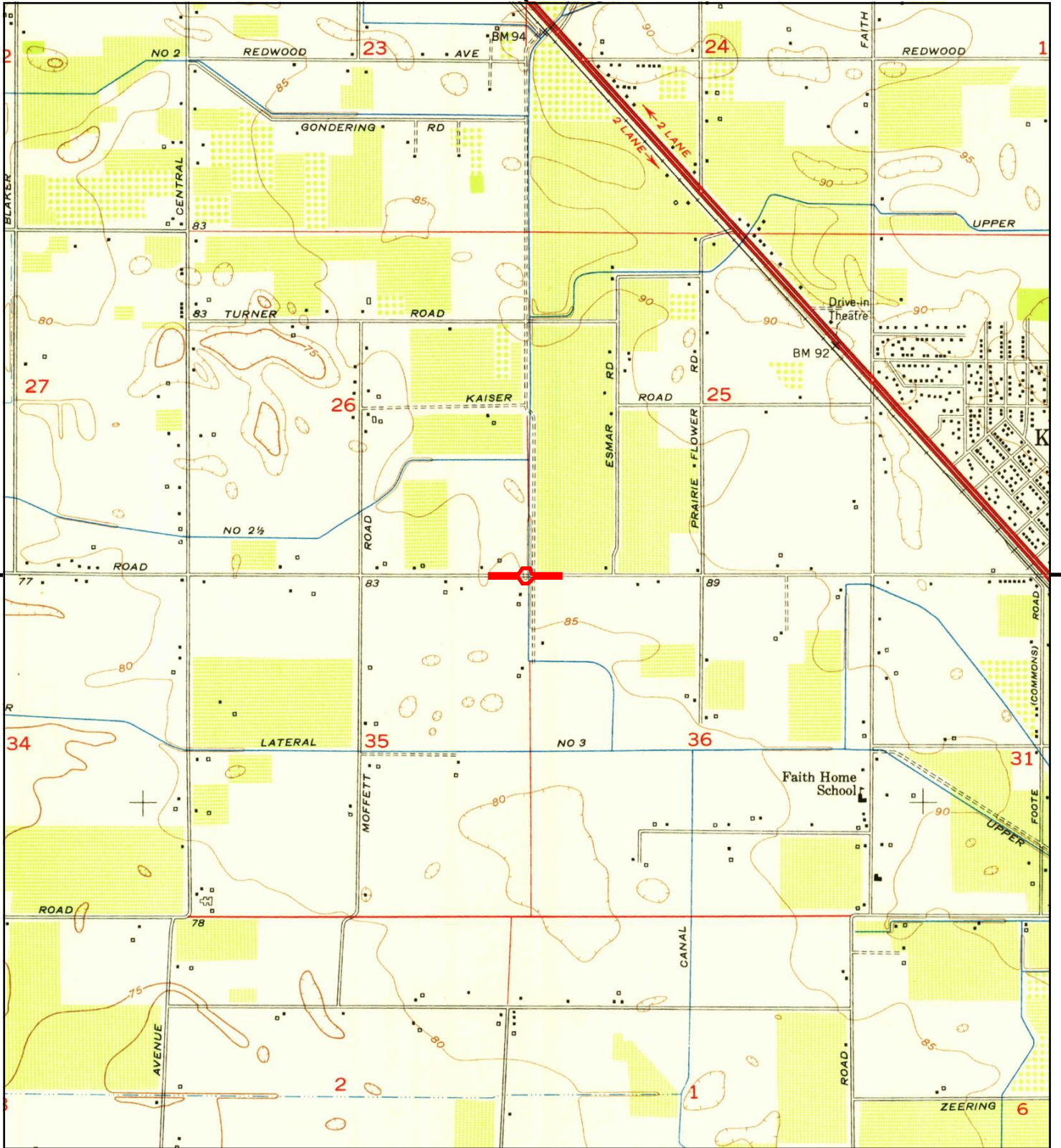
This report includes information from the following map sheet(s).



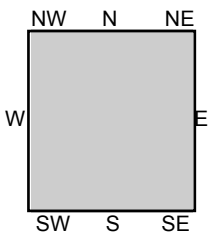
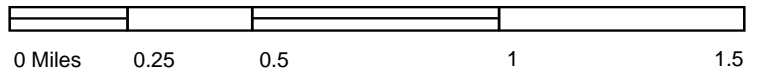
TP, Ceres, 1969, 7.5-minute

SITE NAME: Ceres Main Canal Bridge Replacement
 ADDRESS: East Keyes Road
 Ceres, CA 95307
 CLIENT: Rincon





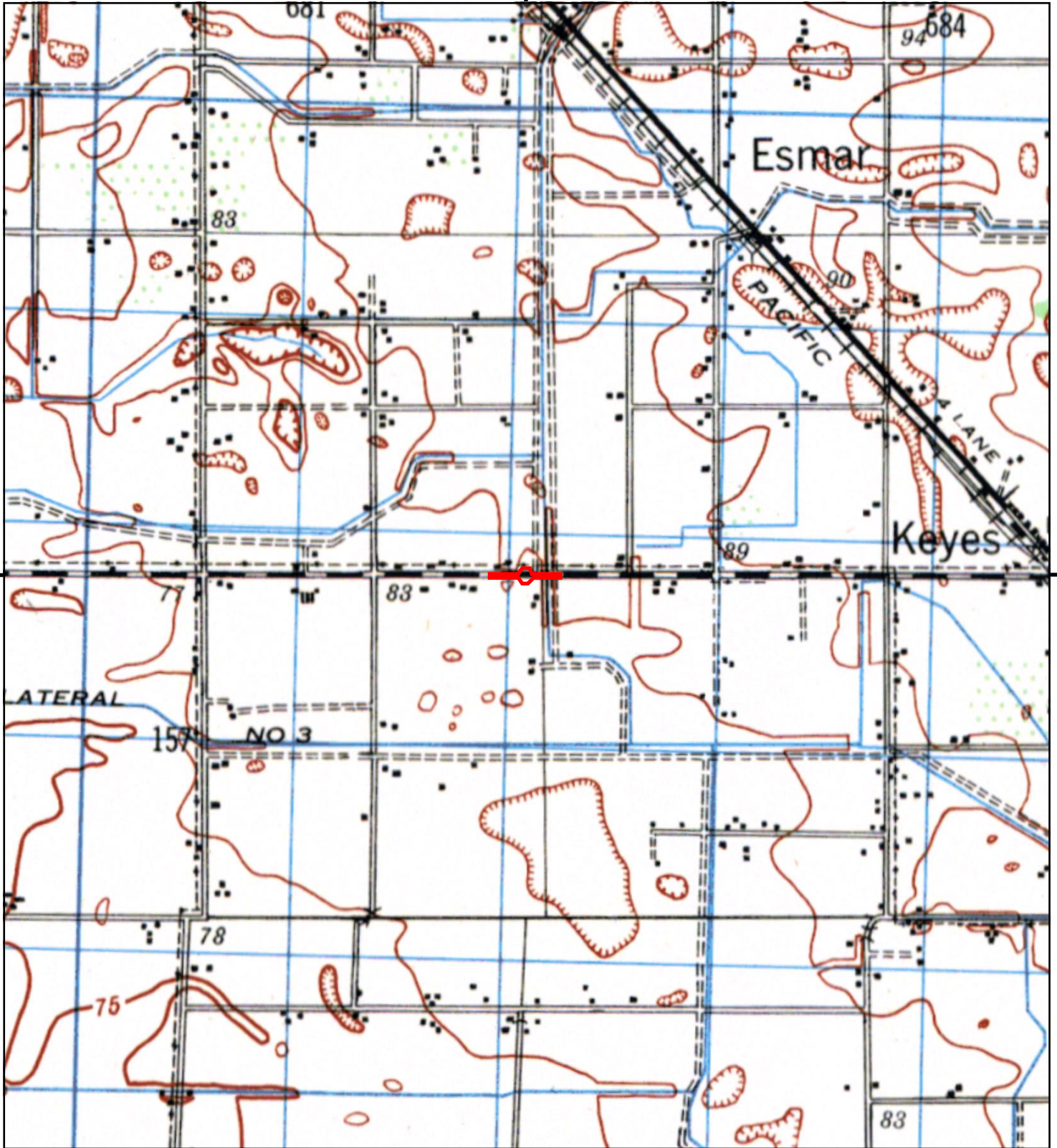
This report includes information from the following map sheet(s).



TP, Ceres, 1953, 7.5-minute

SITE NAME: Ceres Main Canal Bridge Replacement
 ADDRESS: East Keyes Road
 Ceres, CA 95307
 CLIENT: Rincon





This report includes information from the following map sheet(s).



TP, MODESTO EAST, 1941, 15-minute

SITE NAME: Ceres Main Canal Bridge Replacement
 ADDRESS: East Keyes Road
 Ceres, CA 95307
 CLIENT: Rincon





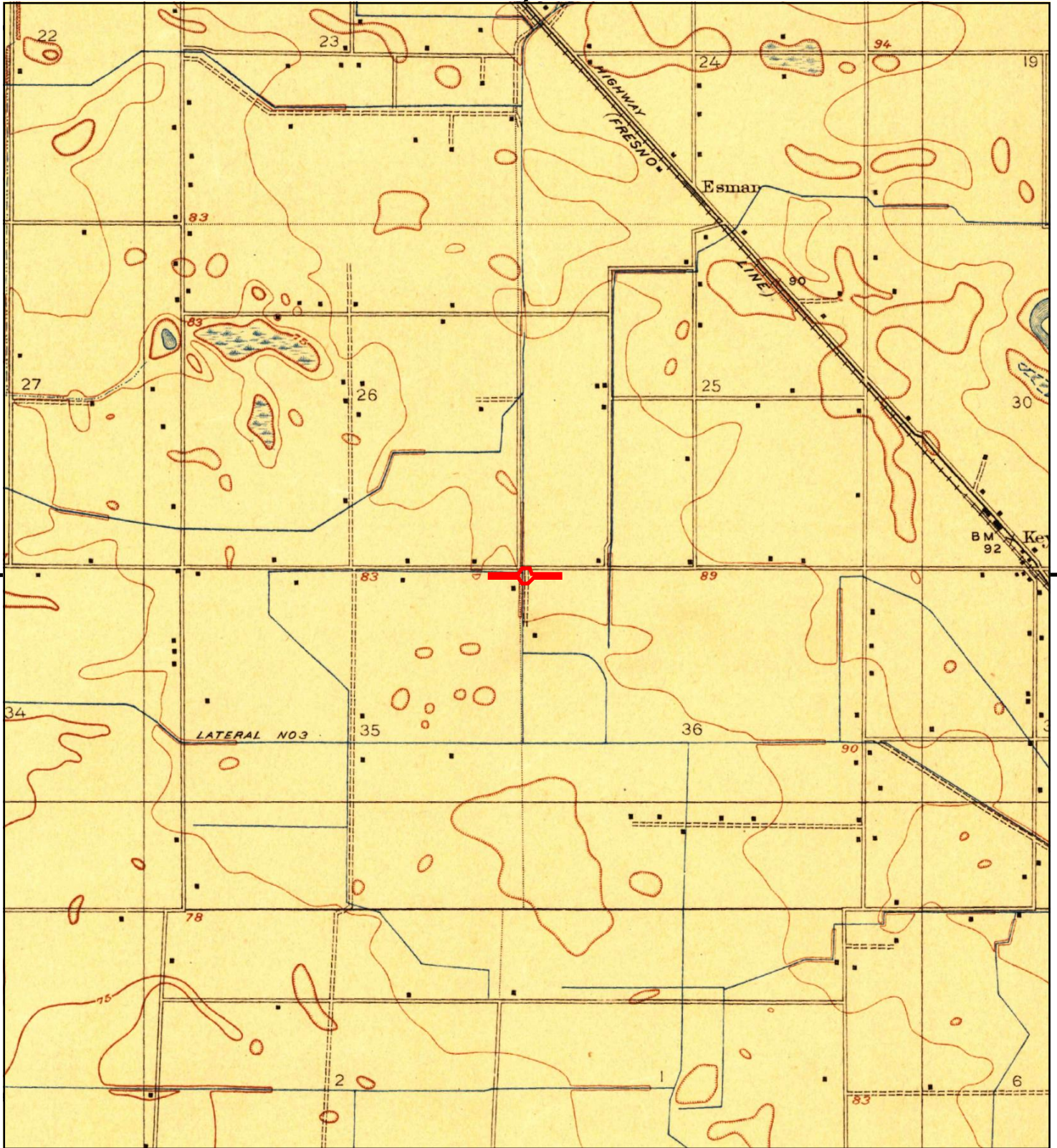
This report includes information from the following map sheet(s).



TP, Modesto East, 1939, 15-minute

SITE NAME: Ceres Main Canal Bridge Replacement
ADDRESS: East Keyes Road
Ceres, CA 95307
CLIENT: Rincon





This report includes information from the following map sheet(s).



TP, Ceres, 1916, 7.5-minute

SITE NAME: Ceres Main Canal Bridge Replacement
 ADDRESS: East Keyes Road
 Ceres, CA 95307
 CLIENT: Rincon





Ceres Main Canal Bridge Replacement

East Keyes Road

Ceres, CA 95307

Inquiry Number: 5634836.3

April 26, 2019

Certified Sanborn® Map Report



6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

Certified Sanborn® Map Report

04/26/19

Site Name:

Ceres Main Canal Bridge Repl;
East Keyes Road
Ceres, CA 95307
EDR Inquiry # 5634836.3

Client Name:

Rincon
180 North Ashwood Avenue
Ventura, CA 93003-0000
Contact: Jennifer Morton



The Sanborn Library has been searched by EDR and maps covering the target property location as provided by Rincon were identified for the years listed below. The Sanborn Library is the largest, most complete collection of fire insurance maps. The collection includes maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow, and others. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by the Sanborn Library LLC, the copyright holder for the collection. Results can be authenticated by visiting www.edrnet.com/sanborn.

The Sanborn Library is continually enhanced with newly identified map archives. This report accesses all maps in the collection as of the day this report was generated.

Certified Sanborn Results:

Certification # A79A-4DC5-ACED

PO # NA

Project 18-07035

UNMAPED PROPERTY

This report certifies that the complete holdings of the Sanborn Library, LLC collection have been searched based on client supplied target property information, and fire insurance maps covering the target property were not found.



Sanborn® Library search results

Certification #: A79A-4DC5-ACED

The Sanborn Library includes more than 1.2 million fire insurance maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow and others which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

- ☒ Library of Congress
- ☒ University Publications of America
- ☒ EDR Private Collection

The Sanborn Library LLC Since 1866™

Limited Permission To Make Copies

Rincon (the client) is permitted to make up to FIVE photocopies of this Sanborn Map transmittal and each fire insurance map accompanying this report solely for the limited use of its customer. No one other than the client is authorized to make copies. Upon request made directly to an EDR Account Executive, the client may be permitted to make a limited number of additional photocopies. This permission is conditioned upon compliance by the client, its customer and their agents with EDR's copyright policy; a copy of which is available upon request.

Disclaimer - Copyright and Trademark Notice

This Report contains certain information obtained from a variety of public and other sources reasonably available to Environmental Data Resources, Inc. It cannot be concluded from this Report that coverage information for the target and surrounding properties does not exist from other sources. NO WARRANTY EXPRESSED OR IMPLIED, IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT. ENVIRONMENTAL DATA RESOURCES, INC. SPECIFICALLY DISCLAIMS THE MAKING OF ANY SUCH WARRANTIES, INCLUDING WITHOUT LIMITATION, MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE. ALL RISK IS ASSUMED BY THE USER. IN NO EVENT SHALL ENVIRONMENTAL DATA RESOURCES, INC. BE LIABLE TO ANYONE, WHETHER ARISING OUT OF ERRORS OR OMISSIONS, NEGLIGENCE, ACCIDENT OR ANY OTHER CAUSE, FOR ANY LOSS OF DAMAGE, INCLUDING, WITHOUT LIMITATION, SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR EXEMPLARY DAMAGES. ANY LIABILITY ON THE PART OF ENVIRONMENTAL DATA RESOURCES, INC. IS STRICTLY LIMITED TO A REFUND OF THE AMOUNT PAID FOR THIS REPORT. Purchaser accepts this Report "AS IS". Any analyses, estimates, ratings, environmental risk levels or risk codes provided in this Report are provided for illustrative purposes only, and are not intended to provide, nor should they be interpreted as providing any facts regarding, or prediction or forecast of, any environmental risk for any property. Only a Phase I Environmental Site Assessment performed by an environmental professional can provide information regarding the environmental risk for any property. Additionally, the information provided in this Report is not to be construed as legal advice.

Copyright 2019 by Environmental Data Resources, Inc. All rights reserved. Reproduction in any media or format, in whole or in part, of any report or map of Environmental Data Resources, Inc., or its affiliates, is prohibited without prior written permission.

EDR and its logos (including Sanborn and Sanborn Map) are trademarks of Environmental Data Resources, Inc. or its affiliates. All other trademarks used herein are the property of their respective owners.

Appendix E

Assembly Bill 52 Correspondence



DEPARTMENT OF PUBLIC WORKS

David A. Leamon, PE, MPA
Public Works Director

Chris Brady, PE
Deputy Director - Design/Survey/Fleet Maintenance

Frederic Clark, PE, LS
Deputy Director - Development/Traffic

Collin Yerzy, PE, QSD/P
Deputy Director – Construction Administration/Operations

Tracie Madison
Senior Business and Finance Manager

www.stancounty.com/publicworks

June 10, 2019

California Valley Miwok Tribe
Sheep Rancheria of Me-Wuk Indians
P.O. Box 395
West Point, California 95255

RE: AB 52 Consultation: Keyes Road over Turlock Irrigation District Ceres Main Canal Bridge Replacement Project, near the Community of Keyes, Stanislaus County, California

Dear California Valley Miwok Tribe:

The Stanislaus County Department of Public Works is preparing an Initial Study – Mitigated Negative Declaration for the proposed Keyes Road over Turlock Irrigation District Ceres Main Canal Bridge Replacement Project (Project). The project would reconstruct the existing Keyes Road Bridge (Bridge No. 38C-193) to correct structural damage found during recent inspections. The new bridge will be built in accordance with the latest California Department of Transportation Structure Design standards as well as in conformance with Turlock Irrigation District and County requirements. The project would increase the load limit and permit rating of the bridge, improve safety for motorists and minimize vehicular accidents. The proposed Project is subject to the California Environmental Quality Act.

The proposed Project must comply with California Public Resources Code § 21080.3.1 (Assembly Bill [AB] 52 of 2014), which requires local governments to conduct meaningful consultation with California Native American tribes that have requested to be notified by lead agencies of proposed projects in the geographic area with which the tribe is traditionally and culturally affiliated.

The input of the California Valley Miwok Tribe is important to the Stanislaus County Department of Public Works' planning process. Under AB 52, you have 30 days from receipt of this letter to respond in writing if you wish you consult on the proposed project. If you require any additional information or have any questions, please contact me at 209-525-4301 or by sending e-mail to paul.saini@stancounty.com

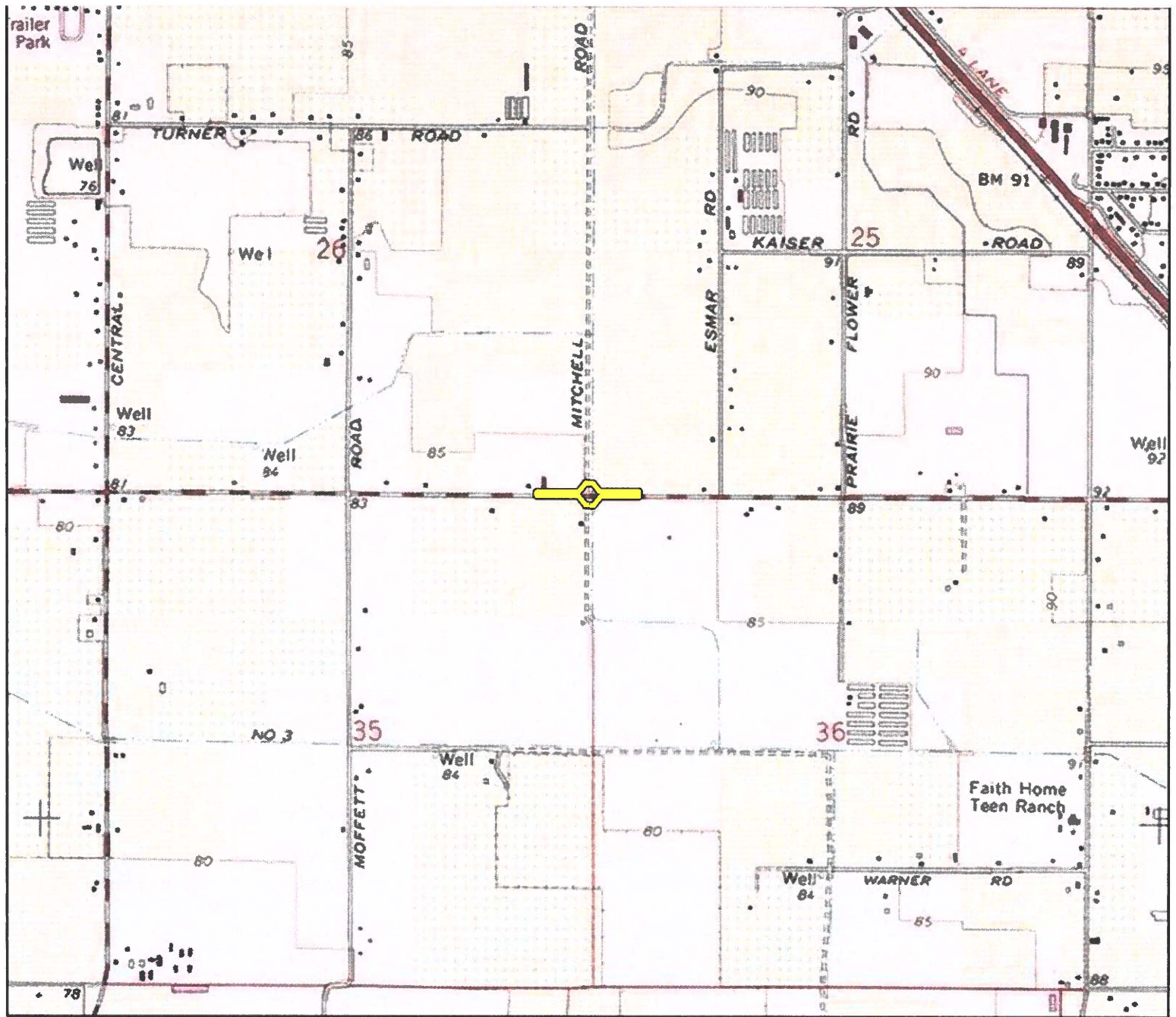
Thank you for your assistance.

Sincerely,

A handwritten signature in black ink that reads "Paul Saini".

Paul Saini, Associate Civil Engineer – R.C.E., QSD/P, M.B.A.

Enclosure: Project Location Map



Imagery provided by National Geographic Society, Esri and its licensors
 © 2019. Ceres Quadrangle. T04S R09E S25,26,35,36. The topographic
 representation depicted in this map may not portray all of the features
 currently found in the vicinity today and/or features depicted in this map
 may have changed since the original topographic map was assembled.



Project Location

0 1,000 2,000 Feet





DEPARTMENT OF PUBLIC WORKS

David A. Leamon, PE, MPA
Public Works Director

Chris Brady, PE
Deputy Director - Design/Survey/Fleet Maintenance

Frederic Clark, PE, LS
Deputy Director - Development/Traffic

Collin Yerzy, PE, QSD/P
Deputy Director – Construction Administration/Operations

Tracie Madison
Senior Business and Finance Manager

www.stancounty.com/publicworks

June 10, 2019

Tule River Indian Tribe
Neil Peyron, Chairperson
P.O. Box 589
Porterville, California 93258

RE: AB 52 Consultation: Keyes Road over Turlock Irrigation District Ceres Main Canal Bridge Replacement Project, near the Community of Keyes, Stanislaus County, California

Dear Chairperson Peyron:

The Stanislaus County Department of Public Works is preparing an Initial Study – Mitigated Negative Declaration for the proposed Keyes Road over Turlock Irrigation District Ceres Main Canal Bridge Replacement Project (Project). The project would reconstruct the existing Keyes Road Bridge (Bridge No. 38C-193) to correct structural damage found during recent inspections. The new bridge will be built in accordance with the latest California Department of Transportation Structure Design standards as well as in conformance with Turlock Irrigation District and County requirements. The project would increase the load limit and permit rating of the bridge, improve safety for motorists and minimize vehicular accidents. The proposed Project is subject to the California Environmental Quality Act.

The proposed Project must comply with California Public Resources Code § 21080.3.1 (Assembly Bill [AB] 52 of 2014), which requires local governments to conduct meaningful consultation with California Native American tribes that have requested to be notified by lead agencies of proposed projects in the geographic area with which the tribe is traditionally and culturally affiliated.

The input of the Tule River Indian Tribe is important to the Stanislaus County Department of Public Works' planning process. Under AB 52, you have 30 days from receipt of this letter to respond in writing if you wish you consult on the proposed project. If you require any additional information or have any questions, please contact me at 209-525-4301 or by sending e-mail to paul.saini@stancounty.com

Thank you for your assistance.

Sincerely,

Paul Saini, Associate Civil Engineer – R.C.E., QSD/P, M.B.A.

Enclosure: Project Location Map



DEPARTMENT OF PUBLIC WORKS

David A. Leamon, PE, MPA
Public Works Director

Chris Brady, PE
Deputy Director - Design/Survey/Fleet Maintenance

Frederic Clark, PE, LS
Deputy Director - Development/Traffic

Collin Yerzy, PE, QSD/P
Deputy Director – Construction Administration/Operations

Tracie Madison
Senior Business and Finance Manager

www.stancounty.com/publicworks

June 10, 2019

North Valley Yokuts Tribe
Katherine Erolinda Perez, Chairperson
P.O. Box 717
Linden, California 95236

RE: AB 52 Consultation: Keyes Road over Turlock Irrigation District Ceres Main Canal Bridge Replacement Project, near the Community of Keyes, Stanislaus County, California

Dear Chairperson Perez:

The Stanislaus County Department of Public Works is preparing an Initial Study – Mitigated Negative Declaration for the proposed Keyes Road over Turlock Irrigation District Ceres Main Canal Bridge Replacement Project (Project). The project would reconstruct the existing Keyes Road Bridge (Bridge No. 38C-193) to correct structural damage found during recent inspections. The new bridge will be built in accordance with the latest California Department of Transportation Structure Design standards as well as in conformance with Turlock Irrigation District and County requirements. The project would increase the load limit and permit rating of the bridge, improve safety for motorists and minimize vehicular accidents. The proposed Project is subject to the California Environmental Quality Act.

The proposed Project must comply with California Public Resources Code § 21080.3.1 (Assembly Bill [AB] 52 of 2014), which requires local governments to conduct meaningful consultation with California Native American tribes that have requested to be notified by lead agencies of proposed projects in the geographic area with which the tribe is traditionally and culturally affiliated.

The input of the North Valley Yokuts Tribe is important to the Stanislaus County Department of Public Works' planning process. Under AB 52, you have 30 days from receipt of this letter to respond in writing if you wish you consult on the proposed project. If you require any additional information or have any questions, please contact me at 209-525-4301 or by sending e-mail to paul.saini@stancounty.com

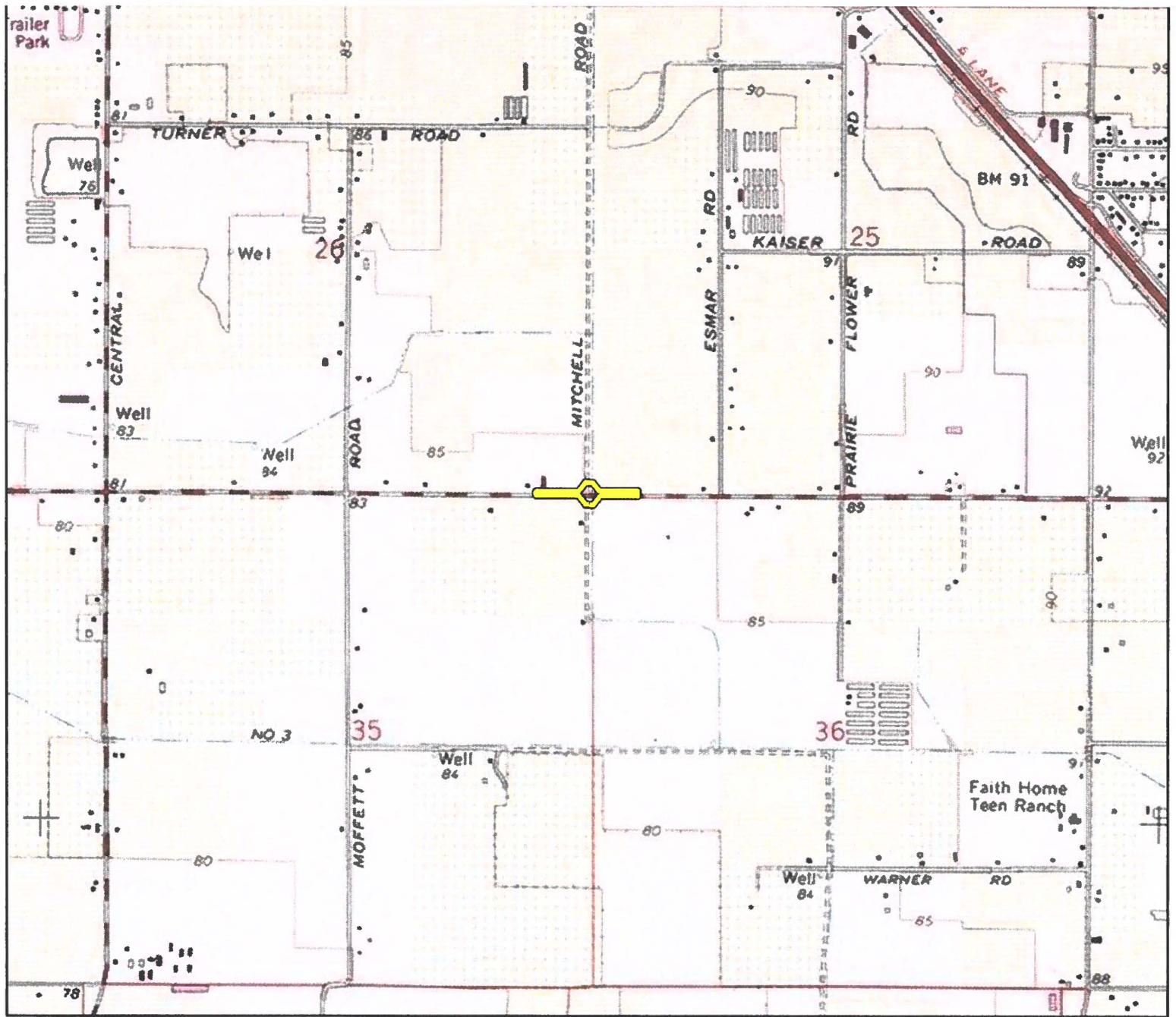
Thank you for your assistance.

Sincerely,

A handwritten signature in black ink, appearing to read "Paul Saini", with a stylized flourish at the end.

Paul Saini, Associate Civil Engineer – R.C.E., QSD/P, M.B.A.

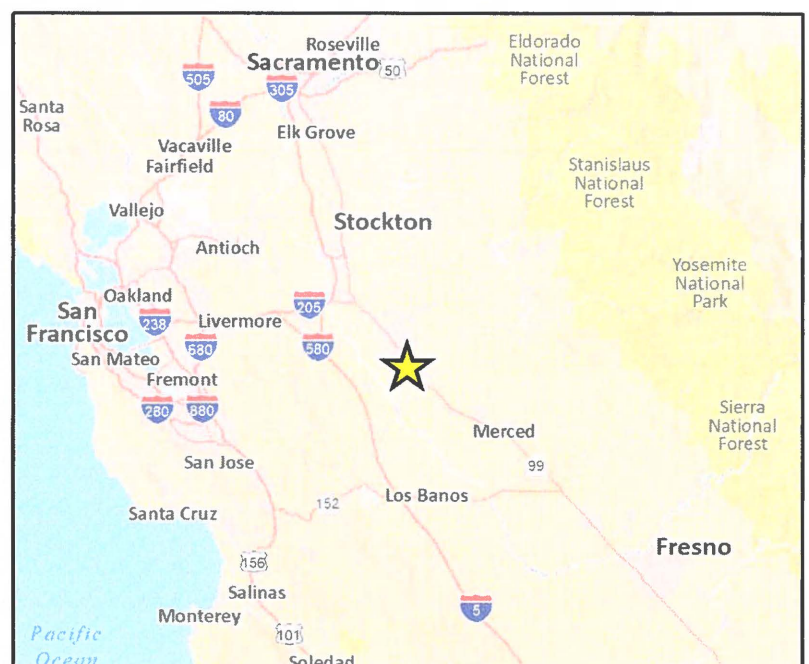
Enclosure: Project Location Map



Imagery provided by National Geographic Society, Esri and its licensors
 © 2019. Ceres Quadrangle. T04S R09E S25,26,35,36. The topographic representation depicted in this map may not portray all of the features currently found in the vicinity today and/or features depicted in this map may have changed since the original topographic map was assembled.

 Project Location

0 1,000 2,000 Feet





DEPARTMENT OF PUBLIC WORKS

David A. Leamon, PE, MPA
Public Works Director

Chris Brady, PE
Deputy Director - Design/Survey/Fleet Maintenance

Frederic Clark, PE, LS
Deputy Director - Development/Traffic

Collin Yerzy, PE, QSD/P
Deputy Director – Construction Administration/Operations

Tracie Madison
Senior Business and Finance Manager

www.stancounty.com/publicworks

June 10, 2019

Tuolumne Band of Me-Wuk Indians
Kevin Day, Chairperson
P.O. Box 699
Tuolumne, California 95379

RE: AB 52 Consultation: Keyes Road over Turlock Irrigation District Ceres Main Canal Bridge
Replacement Project, near the Community of Keyes, Stanislaus County, California

Dear Chairperson Day:

The Stanislaus County Department of Public Works is preparing an Initial Study – Mitigated Negative Declaration for the proposed Keyes Road over Turlock Irrigation District Ceres Main Canal Bridge Replacement Project (Project). The project would reconstruct the existing Keyes Road Bridge (Bridge No. 38C-193) to correct structural damage found during recent inspections. The new bridge will be built in accordance with the latest California Department of Transportation Structure Design standards as well as in conformance with Turlock Irrigation District and County requirements. The project would increase the load limit and permit rating of the bridge, improve safety for motorists and minimize vehicular accidents. The proposed Project is subject to the California Environmental Quality Act.

The proposed Project must comply with California Public Resources Code § 21080.3.1 (Assembly Bill [AB] 52 of 2014), which requires local governments to conduct meaningful consultation with California Native American tribes that have requested to be notified by lead agencies of proposed projects in the geographic area with which the tribe is traditionally and culturally affiliated.

The input of the Tuolumne Band of Me-Wuk Indians is important to the Stanislaus County Department of Public Works' planning process. Under AB 52, you have 30 days from receipt of this letter to respond in writing if you wish you consult on the proposed project. If you require any additional information or have any questions, please contact me at 209-525-4301 or by sending e-mail to paul.saini@stancounty.com

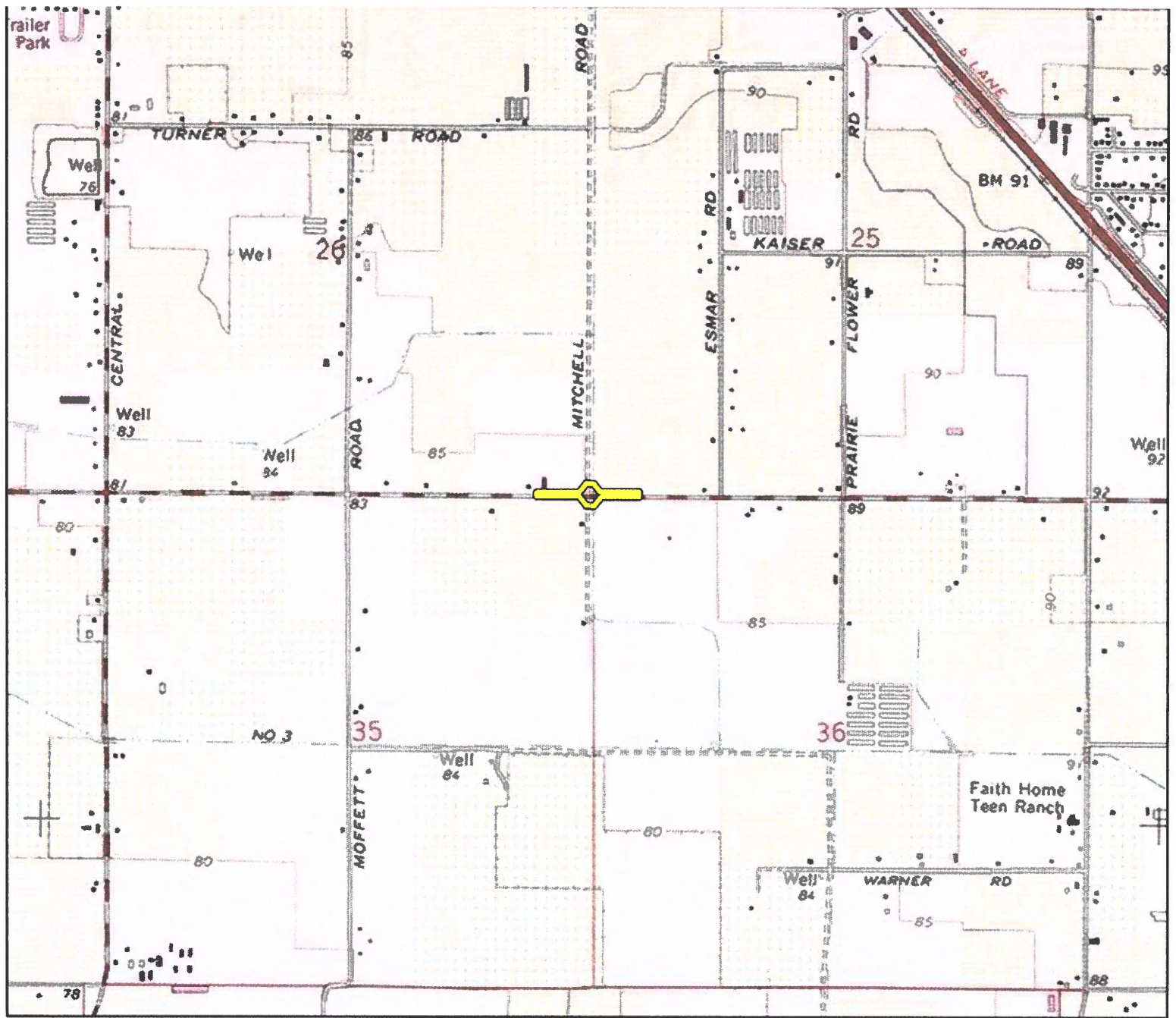
Thank you for your assistance.

Sincerely,

A handwritten signature in black ink, appearing to read "Paul Saini", written over a horizontal line.

Paul Saini, Associate Civil Engineer – R.C.E., QSD/P, M.B.A.

Enclosure: Project Location Map



Imagery provided by National Geographic Society, Esri and its licensors
 © 2019. Ceres Quadrangle. T04S R09E S25,26,35,36. The topographic representation depicted in this map may not portray all of the features currently found in the vicinity today and/or features depicted in this map may have changed since the original topographic map was assembled.



Project Location

0 1,000 2,000 Feet





DEPARTMENT OF PUBLIC WORKS

David A. Leamon, PE, MPA
Public Works Director

Chris Brady, PE
Deputy Director - Design/Survey/Fleet Maintenance

Frederic Clark, PE, LS
Deputy Director - Development/Traffic

Collin Yerzy, PE, QSD/P
Deputy Director – Construction Administration/Operations

Tracie Madison
Senior Business and Finance Manager

www.stancounty.com/publicworks

June 10, 2019

Southern Sierra Miwuk Nation
William Leonard, Chairperson
P.O. Box 186
Mariposa, California 95338

RE: AB 52 Consultation: Keyes Road over Turlock Irrigation District Ceres Main Canal Bridge Replacement Project, near the Community of Keyes, Stanislaus County, California

Dear Chairperson Leonard:

The Stanislaus County Department of Public Works is preparing an Initial Study – Mitigated Negative Declaration for the proposed Keyes Road over Turlock Irrigation District Ceres Main Canal Bridge Replacement Project (Project). The project would reconstruct the existing Keyes Road Bridge (Bridge No. 38C-193) to correct structural damage found during recent inspections. The new bridge will be built in accordance with the latest California Department of Transportation Structure Design standards as well as in conformance with Turlock Irrigation District and County requirements. The project would increase the load limit and permit rating of the bridge, improve safety for motorists and minimize vehicular accidents. The proposed Project is subject to the California Environmental Quality Act.

The proposed Project must comply with California Public Resources Code § 21080.3.1 (Assembly Bill [AB] 52 of 2014), which requires local governments to conduct meaningful consultation with California Native American tribes that have requested to be notified by lead agencies of proposed projects in the geographic area with which the tribe is traditionally and culturally affiliated.

The input of the Southern Sierra Miwuk Nation is important to the Stanislaus County Department of Public Works' planning process. Under AB 52, you have 30 days from receipt of this letter to respond in writing if you wish you consult on the proposed project. If you require any additional information or have any questions, please contact me at 209-525-4301 or by sending e-mail to paul.saini@stancounty.com

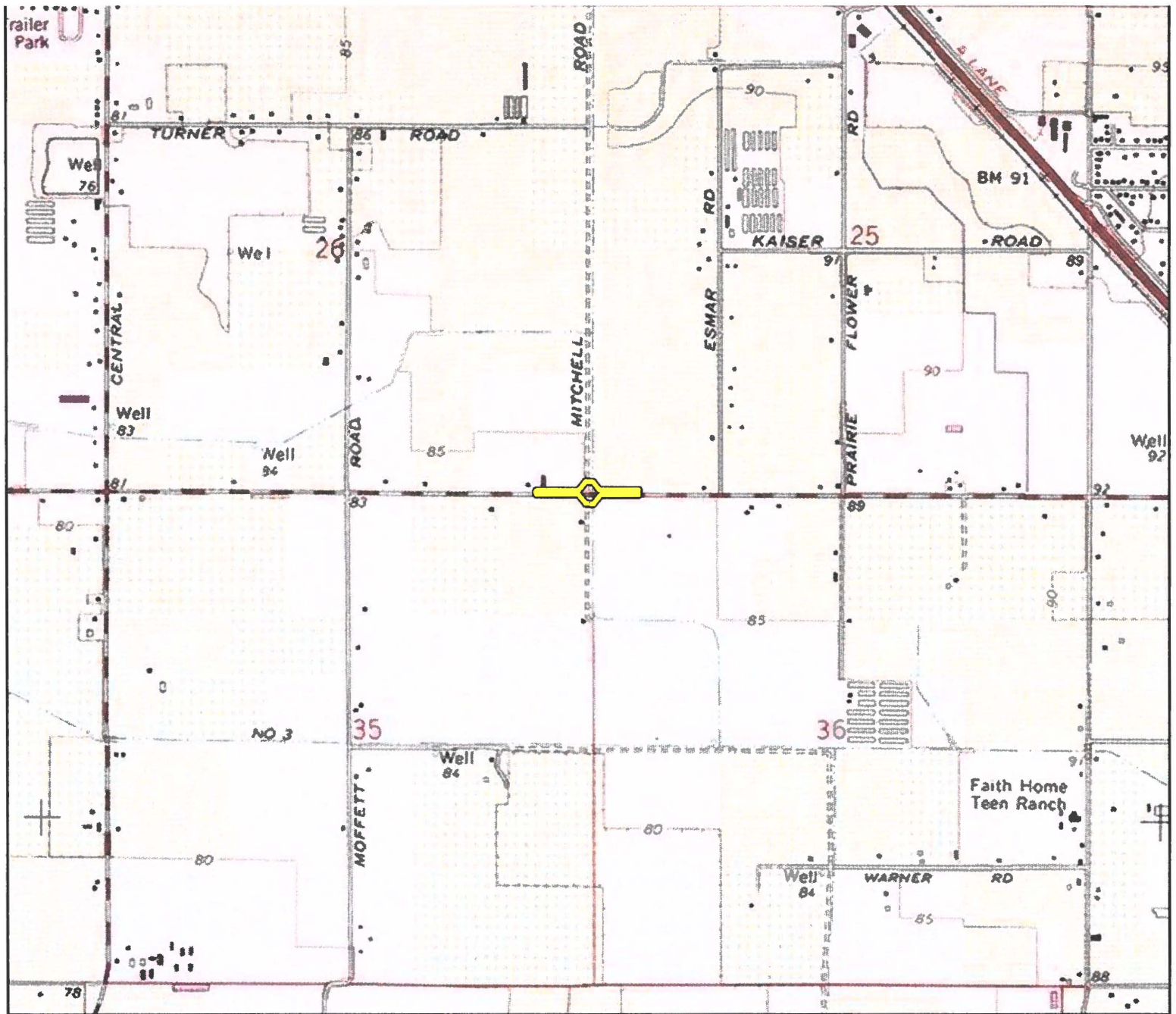
Thank you for your assistance.

Sincerely,

A handwritten signature in black ink, appearing to read "Paul Saini", with a stylized flourish at the end.

Paul Saini, Associate Civil Engineer – R.C.E., QSD/P, M.B.A.

Enclosure: Project Location Map



Imagery provided by National Geographic Society, Esri and its licensors
 © 2019. Ceres Quadrangle. T04S R09E S25,26,35,36. The topographic
 representation depicted in this map may not portray all of the features
 currently found in the vicinity today and/or features depicted in this map
 may have changed since the original topographic map was assembled.

 Project Location

0 1,000 2,000 Feet

