CALIFORNIA ENVIRONMENTAL QUALITY ACT
ENVIRONMENTAL INITIAL STUDY CHECKLIST FORM
FIRESTONE SOLAR PHASE II
Public Review Period April 24, 2023 – May 23, 2023

1. PROJECT TITLE:	Firestone Solar Phase II
Entitlements:	**P**lanned Development (PD22-21), Conditional Use Permit 22-21
2. LEAD AGENCY:	City of Paso Robles 1000 Spring Street Paso Robles, CA 93446
Contact Person:	Darcy Delgado, Associate Planner
Phone Number:	(805) 237-3904
Email:	ddelgado@prcity.com
3. PROJECT LOCATION:	Northern end of Ramada Drive / east of US Hwy 101; APN: 009-631-018
4. PROJECT PROPONENT:	REC Solar
Contact Person:	Tony Strader
Phone Number:	(949) 302-5468
Email:	tony.strader@duke-energy.com
5. GENERAL PLAN DESIGNATION:	BP (Business Park)
6. ZONING:	PM (Planned Industrial)

7. PROJECT DESCRIPTION:

REC Solar (applicant) is proposing to design and install a solar system facility for the Firestone Walker Brewery to offset energy usage at the main brewery through PG&E's Net Energy Metering Aggregation (NEMA) program. The NEMA program is designed to allow single customers, such as Firestone Walker Brewery, that have multiple meters on adjacent or contiguous properties to allocate energy to more than one meter.

The project consists of one solar system to be installed in the rear of the Firestone campus (see Attachment 2, Vicinity Map). The system includes a 1.2 megawatt (MW) ground-mounted single axis tracker system on approximately 4.84-acres of a 13.75-acre field located southeast of Firestone's main building operations, adjacent to the existing solar system. The tracker system will be interconnected to the electric utility infrastructure via a line side tap at an existing service located between the water treatment ponds and the railroad tracks.

Once the project is completed, the single axis tracker facility will be unoccupied and require minimal

maintenance during operations. Access to the tracker site will be restricted to qualified personnel and secured by a 6-foot chain link perimeter fence topped with a foot of barbed wire. Typical maintenance activities include 1-2 visits per year for module washing, vegetation management, and any pertinent service calls. Grading for the tracker facility is minimal as no excavation, cut or fill will be required for installation of the solar arrays. The foundations for the single axis trackers will be drive I beam piles. Access roads throughout the site will require areas to be compacted and improved with an all-weather surface material. The total area to be disturbed is 1.08-acres and the amount of earth being moved is 875 cubic yards.

The project requires a Conditional Use Permit (CUP) to operate a renewable energy generation facility. A Development Plan (PD) is also required since the project scope is greater than 10,000 square feet in size.

8. Surrounding Land Uses and Setting: Briefly describe the project's surroundings:

The Firestone campus is accessed from Ramada Drive, a frontage road to US Hwy 101. The site where the ground mount system will be installed is accessed from the northern end of Ramada Drive, on the east side of the railroad tracks. The subject site has a Business Park land use designation and is zoned Planned Industrial.

The approximately 4.84-acre project area for the tracker facility is located within an overall larger 39-acre field that Firestone owns and has used for agricultural purposes in the past. Several years ago in 2019, the project applicant installed a solar tracker facility within a portion of the field that totaled 9.78-acres. There is an existing access road currently used for the treatment ponds and existing solar facility that will also be used for the new solar system, with additional perimeter access roads to be installed throughout the 4.84-acre project area. The 39-acre field is surrounded by additional farmland to the north, the Salinas River to the east, the Union Pacific Railroad and commercial and industrial development to the west, and City property used for water reclamation to the south.

The primary feature of the field is the recently plowed agricultural field where the solar arrays are proposed as well as the existing solar system to the east. The area is generally flat, and unvegetated. Although there is riparian habitat along the bank of the Salinas River to the east of the site, the project area will be substantially setback from this habitat. Additionally, there is no evidence of ponded water within the project area. Several large Valley oak trees surround the project area, with one tree near the project area that will be preserved and protected during construction activities. A portion of the solar system will be within the 0.2 percent annual flood zone with all electrical equipment a minimum of 2-feet above the base flood elevation.

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

A portion of the project is within the 100-year flood zone, and may require a 1602 permit from the California Department of Fish and Wildlife (CDFW) Lake and Streambed Alteration Agreement program.

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

In accordance with AB 52, the City provided formal notification on 03/07/2023 to the designated contact or tribal representative of traditionally and culturally affiliated California Native American tribes that have requested notice. Consultation with the Xolon Salinan Tribe and the Salinan Tribe of Monterey and San Luis Obispo Counties resulted in discussing their recommendations to include mitigation identified by the Cultural Resources Study, information regarding the start date, as well as requiring archaeological and tribal monitoring during ground disturbing activities. At the timing of publishing this report, no additional consultation requests have been received.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact," as indicated by the checklist on the following pages.

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

DETERMINATION (To be completed by the Lead Agency)

On the basis of this initial Discussion:

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

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

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

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Darcy Delgado

Signature

4/21/23

Date

EVALUATION OF ENVIRONMENTAL IMPACTS

1. A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors, as well as general standards (e.g., the project would not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3. Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4. "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level.

5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:

   a) Earlier Analyses Used. Identify and state where they are available for review.
   b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
   c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

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

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

8. This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.

9. The explanation of each issue should identify:

   a) the significance criteria or threshold, if any, used to evaluate each question; and
   b) the mitigation measure identified, if any, to reduce the impact to less than significance

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Source
I. AESTHETICS. Except as provided in Public Resources Code Section 21099, would the project:					
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒	
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒	
Discussion (a-b): The project area is relatively flat, and when viewed from the US Hwy 101 Southbound lanes or the nearest commercial development fronting Ramada Drive, the project area is at similar elevations and is not considered a scenic vista. The project area does not include scenic resources such as rocks or any historic buildings and it is not located in proximity to a state scenic highway. Although there are some oak trees surrounding the project site, they are being protected and will not be disturbed. When the solar installation reaches the end of its lifespan, the equipment can be removed, leaving the trees as they were. Therefore, this project will not have impacts related to scenic vistas or scenic and historic resources.					
c) Substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☒	☐	
Discussion: The height, bulk, pattern, scale and character of the project features would not conflict with the visual character of surrounding area, considering it will be located in proximity to an existing wastewater treatment pond. Additionally, although there is some visibility from US Hwy 101 Southbound lanes, the vantage points are approximately 0.50 miles away from the site and views of the solar arrays would not be fixed for the driver. The nearest commercial/industrial development is over 750-feet away, and none of the businesses are directly facing the direction of the solar facility. Therefore, the project's impact on the visual character or quality of publics views of the site and its surroundings will be less than significant.					
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐	
Discussion: During operation, the primary potential for glare would be from the glass surfaces of the PV panels. The photovoltaic technology proposed uses non-reflective panels to convert solar energy into electricity. The panels have microscopically irregular surfaces and are designed to trap the rays of sunlight and absorb as much light as possible, further reducing reflection and glare. They reflect much less of the sun's energy than normal glass because the panels are not reflective. The project would not create a new source of substantial day time light or glare, therefore this impact would be less than significant. The project proposes no new lighting, nighttime construction, maintenance, or operations, therefore there will be no impact to nighttime views in the area.					

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Source
II. AGRICULTURE AND FORESTRY RESOURCES. In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:					
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒	
Discussion: The project site is zoned Planned Industrial. Although a portion of the site has been used in the past for farming activities associated with the Brewery, it is not designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, therefore the project would result in no impacts on converting prime or other significant soils to urban land uses.					
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒	
Discussion: The project would not conflict with zoning for agricultural use. The Project Site is not zoned for agriculture and is not under a Williamson Act Contract. Therefore, the project would not conflict with existing zoning for agricultural use or a Williamson Act contract and would result in no impact.					
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	☐	☐	☐	☒	
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒	
Discussion (c-d): The project site is not zoned for forest land or timberland resources and only contains a few scattered Oak trees. Therefore, no impacts associated with forest land or timberland would occur with the implementation of the project. Additionally, the project site is an open field and contains no forest land. The project would not result in the removal or conversion of forest land; therefore, no impacts would occur.					
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒	
Discussion: The proposed project would not cause other changes in the environments that could indirectly result in the conversion of farmland to non-agricultural uses. The project site does not conflict with existing zoning either, as the site is not designated as farmland or forest land, nor is it surrounded by those uses. The project area is within a field currently used for solar generation and for Firestone's wastewater treatment ponds. No impacts associated with this issue would occur with the implementation of this project.					

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Source
III. AIR QUALITY. Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:					
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐	**12**
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?	☐	☐	☒	☐	**12**

Discussion (a-b): The San Luis Obispo County area is a non-attainment area for the State standards for ozone and suspended particulate matter. The SLO County Air Pollution Control District (APCD) administers a permit system to ensure that stationary sources do not collectively create emissions which would cause local and state standards to be exceeded. The CEQA thresholds of significance established by the SLOAPCD are designed to meet the objectives of the Clean Air Plan and in doing so achieve attainment status with state standards.

The potential for future project development to create adverse air quality impacts falls generally into two categories: Short term and Long term impacts. Short term impacts are associated with the grading and development portion of a project where earth work generates dust, but the impact ends when construction is complete. Long term impacts are related to the ongoing operational characteristics of a project and are generally related to vehicular trip generation and the level of offensiveness of the onsite activity being developed. In this case, the project is not a manned facility and will not have routine vehicle trips generated as a result of the project's operations. Therefore, it is expected that any ongoing operations would be less than significant.

Construction-generated emissions are of temporary duration, lasting only as long as construction activities occur, but have the potential to represent a significant air quality impact. The construction of the proposed project would result in the temporary generation of emissions associated with site grading and motor vehicle exhaust associated with construction equipment and worker trips, as well as the movement of construction equipment on unpaved surfaces. Short-term construction emissions would result in increased emissions of ozone-precursor pollutants (i.e., ROG and NOX) and emissions of particulate matter (PM). Emissions of ozone-precursors would result from the operation of on- and off-road motorized vehicles and equipment. Emissions of airborne PM are largely dependent on the amount of ground disturbance associated with site preparation activities and can result in increased concentrations of PM that can adversely affect nearby sensitive land uses.

The project proposes minimal grading activities. According to the Civil Engineer who prepared the grading plans, it estimated that the project will disturb approximately 1.08-acres for the purposes of installing access roads around the solar facility. Additionally, they are proposing to move approximately 875 cubic yards of material as part of the road installation efforts. Using Tables 2-1 and 2-2 of the SLO County APCD CEQA Handbook to determine the ROG + NOX (combined), DPM, and PM_{10}, the project will produce 4.28 lbs/day of DPM, 99.57 lbs/day of ROG + NOX, and 0.75 tons of PM_{10}. These are all below the daily thresholds described in the Handbook. Therefore, impacts to air quality as a result of grading for this project are considered less than significant and no mitigation is required to offset emissions. Standard conditions related to dust control can be required with the issuance of a grading permit for this project to ensure the project does not create nuisance dust.

c) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐	**12**

Discussion: There are no hospitals, schools, convalescent homes or other sensitive receptors located proximal to the site. The project is a solar photovoltaic generating facility that would convert solar energy to electric energy without pollutant emissions. During construction, emissions would be controlled to a level that is less than significant as described in Response III.a above, and construction emissions would be short term. Considering these factors, the project would not expose sensitive receptors to substantial pollutant concentrations; therefore, this impact is less than significant.

d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☐	☒	**12**

Discussion: The project would not be a source of odors. The project is a solar photovoltaic generating facility that would convert solar energy to electric energy without odor emissions; therefore there is no impact related to other emissions.

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Source
IV. BIOLOGICAL RESOURCES. 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?	☐	☒	☐	☐	

Discussion: A Biological Resources Consistency Report was prepared by Althouse and Meade, Inc., dated January 20, 2023, to supplement the June 2018 Biological Report that originally studied a 28.4-acre Study Area which was completed for an earlier solar project by the same applicant (Phase 1) located immediately adjacent to the proposed project (Phase 2). Since Phase 2 is within the limits of the original Study Area, a consistency letter was prepared by the Biologist and serves to supplement the original study (see Attachments 4 and 4a). The consistency report includes a site survey from November 23, 2022 and a second survey from December 8, 2022. According to the consistency report, generally the site conditions were consistent with conditions identified in the earlier 2018 study. The following sections summarize the potential impacts that were reviewed in the 2018 study, and how they were addressed as part of the 2023 updated report:

- According to the 2018 study, wetlands and jurisdictional waters occur outside of the proposed project area and within the Salinas River corridor. Areas of potential wetlands within the proposed project footprint were not found. There was no evidence in the Study Area of ponded water, including cracked crusts or wetland vegetation. Thorough surveys of the site were conducted in June 2018, 48 days after the last rainfall of the season in Paso Robles. Examination of historical aerial photographs of the site showed no evidence of ponding water in the proposed project site. Based on the 2023 consistency report, there is no new evidence that would suggest wetlands occur within the project area.
- Additionally, as was determined with the original 2018 study, special status plant and animal species were not detected on the property, however, several could occur, which is consistent with the 2023 updated report. These include American badger, San Joaquin kit fox, and nesting bird.
- American badger has moderate potential to occur in the Study Area. Project activities including grading and other excavation work could result in take of American badger adults or young, or disturbance of natal dens and abandonment by adult badgers. To reduce this potential impact to a less than significant level, mitigation BR-2 (refer to Section 5.4 of the 2018 Biological Study, Attachment 4) recommends preconstruction surveys be conducted.
- San Joaquin kit fox was not detected in the Study Area, as reflected in the 2018 study and reiterated in the 2023 update. The project footprint is within the California Department of Fish and Wildlife (CDFW) designated two to one mitigation area for San Joaquin kit fox however, based on the results of a CDFW-verified San Joaquin Kit Fox Habitat Evaluation Form prepared for Phase 1, no compensatory mitigation was required.
- With regard to nesting birds, there is potential for ground nesting birds to occur within the proposed project area, especially given there are six native oak trees nearby. However, impacts to nesting birds would be mitigated by BR-1 (refer to Section 5.3 of the 2018 Biological Study, Attachment 4) which recommends preconstruction surveys be conducted prior to activities that affect trees and shrubs during the nesting season, March 15 to August 15.
- Unlike Phase 1, the Phase 2 impact area is sited within close proximity to six large valley oaks. While no removal or trimming of the oaks is proposed, portions of the Phase 2 project footprint may impact the critical root zone (CRZ) of one oak tree. Oak trees are a protected resource under the City's Oak Tree Preservation Ordinance (Section 10.01 of the City's Municipal Code) and impacts to the CRZ may require mitigation. Therefore, additional oak tree protection mitigation has been added as BR-14.

In summary, with exception of the potential impacts to oak trees that will be addressed by BR-14, the 2023 updated report found site conditions and potential project impacts to be consistent with those described in the 2018 biological report. Implementation of the 13 recommended Biological Resource (BR) mitigation measures (BR-1 through BR-13) of the 2018 report would remain applicable to the Phase 2 project. While the 2023 updated report expects compensatory mitigation will not be required for San Joaquin kit fox, a Habitat Evaluation Form has been prepared for Phase 2 and is included as part of the 2023 updated report (Attachment 4a). Additionally, BR-3 will require the full 2:1 mitigation ratio at CDFW's discretion. For a full list of mitigation measures BR-1 – BR-14, refer to the Mitigation Monitoring and Reporting Table, Attachment 1.

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

Discussion: Although there is riparian habitat along the bank of the Salinas River to the east of the site, the project area will be substantially setback from this habitat and would result in a less than significant impact to riparian habitats.

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?	☐	☐	☒	☐	
Discussion: Wetlands or waters do not occur within the project area; additionally, construction will not disrupt any nearby riparian habitats. Therefore, this impact is less than significant.					
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?	☐	☒	☐	☐	
Discussion: The project site is located within an area that is considered an important corridor area for the San Joaquin kit fox. The area is within an established 2:1 mitigation area recognized by the County and the California Department of Fish and Wildlife (CDFW). The 2023 update to the 2018 Biological report indicates that compensatory mitigation is not expected to be required for San Joaquin kit fox, since it was not required for Phase 1. However, a Habitat Evaluation Form has been prepared for Phase 2 and is attached within Attachment 4a. Should CDFW determine compensatory mitigation is required, mitigation measure BR-3 is set up to require the mitigation at 2:1 for the 4.84-acre project area, resulting in impacts that are less than significant.					
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☒	☐	
Discussion: Six mature oak trees are located adjacent to the project area. However, preliminary construction drawings indicate the project has been designed to avoid impacts to the oak trees, therefore, impacts to oaks are less than significant.					
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒	
Discussion: There are no Habitat Conservation Plans or other related plans in the City of Paso Robles; therefore, no impact will occur.					

Issues	**Potentially Significant Impact**	**Less Than Significant With Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**	**Source**
V. CULTURAL RESOURCES. Would the project:					
a) Cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5?	☐	☒	☐	☐	
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?	☐	☒	☐	☐	
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	☐	☒	☐	☐	

Discussion (a-c): The project is located in an area that is considered culturally significant. The Cultural Resource Study, prepared by Applied Earth Works, Inc. dated February 2023, includes both a Phase 1 and Extended Phase 1 testing (Attachment 5). The study indicates that one previously recorded cultural resource is located partially within the project area, and two cultural resources are within a 0.25-mile radius of the project area. In addition to records searches, a pedestrian survey was done on November 2, 2022. No cultural resources were collected during the survey; six formal artifacts were observed and recorded.

While the study reports that the investigation did not identify significant archaeological deposits within the Project area, the parcel does fall within an area with heightened sensitivity for prehistoric cultural materials and human burials. There is a possibility of encountering pockets of intact subsurface cultural deposits as well as human remains. Therefore, the study recommends archaeological and Native American monitoring during all ground-disturbing activities for the Project (Mitigation Measure CUL-1).

Additionally, outside of the project, prehistoric human remains were previously found in 2014 during the excavation of water treatment ponds (CA-SLO-2790). Therefore, due to the heightened potential for undocumented subsurface human burials and cultural materials within the area, additional mitigation is recommended including protocol for work to stop upon discovery of human remains and contacting the San Luis Obispo Coroner (Mitigation Measure CUL-1).

The study has provided mitigation measures that when implemented will reduce the impacts of this project on resources to less than significant. See list of all required mitigation measures in the Mitigation Monitoring and Reporting Table, Attachment 1.

AB 52 – The Initial Study will be circulated to the 6 tribes that have requested consultation.

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Source
VI. ENERGY. Would the project:					
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	☒	☐	
Discussion: The proposed project is for renewable energy electricity generation and does not include the construction of any habitable buildings. Non-renewable resources, including fossil fuels, would be used in the construction of the proposed project. The daily vehicle trips during construction would generally include construction worker trips, and truck trips for equipment deliveries and water for dust suppression. Construction of the proposed solar facility would not be unusually wasteful or excessive in terms of constriction materials or fossil fuel use due to the lack of demolition and other waste products generated by typical construction projects. In addition, the construction of these types of facilities is not energy intensive since minimal grading is required for construction. After construction the facilities would be unmanned and would not generate significant vehicle trips, and minimal use of water is required for long-term operations of the solar facility. Therefore, the proposed projects would not involve the inefficient or wasteful use of energy resources and impacts would be less than significant.					
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☒	☐	**5**
Discussion: The proposed project would generate renewable energy, decreasing California's reliance on fossil fuel energy and increasing its reliance on renewable energy sources. Both of these items are identified in Appendix F of the State CEQA Guidelines as ways to accomplish the CEQA energy conversion goal. Additionally, since the project is for renewable electricity generation and does not include the construction of any habitable buildings, Title 24 Green Building standards are not applicable. Therefore, the proposed project would not conflict or obstruct any plan for renewable energy or energy efficiency and impacts would be less than significant.					

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Source
VII. GEOLOGY AND SOILS. Would the project:					
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:	☐	☐	☒	☐	

i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map, issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☒	☐	**1, 2, 3**
Discussion (a-i): The potential for and mitigation of impacts that may result from fault rupture in the project area are identified and addressed in the General Plan EIR, pg. 4.5-8. There are two known fault zones on either side of the Salinas River Valley. The Rinconada Fault system runs on the west side of the valley, and grazes the City on its western boundary. The San Andreas Fault is on the east side of the valley and is situated about 30 miles east of Paso Robles. The City of Paso Robles recognizes these geologic influences in the application of the California Building Code (CBC) to all new development within the City. However, since the project is limited to solar panels and ancillary electrical equipment and is an unoccupied facility, the likelihood of on-site ground rupture resulting in risk to people or structures is considered low. Nonetheless, the design of any structures on-site would incorporate measures to accommodate projected seismic loading, pursuant to existing CBC and local building regulations. There are no Alquist-Priolo Earthquake Fault Zones within City limits; therefore, impacts are less than significant.					
ii) Strong seismic ground shaking?	☐	☐	☒	☐	**1, 2, 3**
Discussion: Future structures within this project will be constructed to current CBC codes. The General Plan EIR identified impacts resulting from ground shaking as less than significant and provided mitigation measures that will be incorporated into the design of this project including adequate structural design and not constructing overactive or potentially active faults. Therefore, impacts that may result from seismic ground shaking are less than significant.					
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐	**1, 2, 3**
Discussion: Per the General Plan EIR, the project site is located in an area with soil conditions that have a high potential for liquefaction or other type of ground failure due to seismic events and soil conditions. To implement the EIR's mitigation measures to reduce this potential impact, the City has a standard condition to require submittal of soils and geotechnical reports, which include site-specific analysis of liquefaction potential for all building permits for new construction, and incorporation of the recommendations of said reports into the design of the project. Since the project is limited to solar panels and ancillary electrical equipment and is an unoccupied facility, the likelihood of seismic-related ground failure including liquefaction resulting in risk to people or structures is considered low. Nonetheless, the design of any structures on-site would incorporate measures to incorporate design measures into the project; therefore impacts for seismic-related ground failure are less than significant.					
iv) Landslides?	☐	☐	☒	☐	**1**
Discussion**:** Per the General Plan Safety Element, the project site is in an area that is designated a low-risk area for landslides. Therefore, potential impacts due to landslides is less than significant.					
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐	**1, 2, 3**
Discussion: Per the General Plan EIR the soil condition is not erosive or otherwise unstable. As such, no significant impacts are anticipated. A geotechnical/ soils analysis will be required prior to issuance of building permits that will evaluate the site-specific soil stability and suitability of the development proposed. This study will determine the necessary grading techniques that will ensure that potential impacts due to soil stability will not occur; therefore, impacts due to soil erosion or loss of topsoil.					
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☒	☐	
Discussion: See response to item VII.a.iii above.					
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	☐	☐	☒	☐	
Discussion: See response to item VII.a.iii above. Additionally, the City has a standard condition to require submittal of soils and geotechnical reports with building permits, which include site-specific analysis of liquefaction potential for all building permits for new construction, and incorporation of the recommendations of the reports into the design of the project. The study's recommended strategies will be required at the time of building permit submittal; therefore impacts are less than significant.					
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒	
Discussion: The project does not propose to use septic tanks or alternative wastewater disposal systems; therefore, no impacts would occur. No further analysis is warranted.					
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☒	☐	

Discussion: There are no known paleontological or unique geologic features identified on-site. However, as discussed in Section V, onsite monitoring will be required during initial earthwork activities. If cultural resources are found during grading activities, appropriate recommendations will be made regarding their treatment and/or disposition. Additionally, the site will be monitored by local tribes during the construction period, therefore, this project will result in less than significant impacts on cultural resources.

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Source
VIII. GREENHOUSE GAS EMISSIONS. Would the project:					
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐	
Discussion: The project is a 1.2-megawatt solar photovoltaic (PV) generating facility that would convert solar energy into electric energy with the primary source of greenhouse gas emissions (GhG) being vehicle and equipment emissions for construction and maintenance activities. Once constructed, the electric energy produced by the project would reduce the dependency on fossil fuel-produced electric energy thereby providing a long-term GhG benefit. Considering that the project would operate as an unmanned facility and would require relatively minimal maintenance vehicle trips and considering that limiting climate change is the focus of California's goals for implementing solar PV and other renewable energy technologies, project GhG emissions would be less than significant both individually and cumulatively.					
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☐	☒	**15**
Discussion: The City of Paso Robles Climate Action Plan (CAP) was adopted by the City Council in November 2013. The CAP is a long-range plan to reduce greenhouse gas (GhG) emissions from City government operations and community activities within Paso Robles and prepare for the anticipated effects of climate change. The CAP will also help achieve multiple community goals such as lowering energy costs, reducing air pollution, supporting local economic development, and improving public health and quality of life (City of Paso Robles, 2013). Since the project consists of the installation of solar PV systems that would reduce GhG emissions from the commercial/industrial energy use sector, the project would be consistent with the CAP; therefore, there this project would result in no impact to an applicable plan, policy, or regulation.					

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Source
IX. HAZARDS AND HAZARDOUS MATERIALS. Would the project:					
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☐	☒	
Discussion: The proposed project does not include the routine transport, use or disposal of hazardous materials. Therefore, the project will not have an impact on this environmental factor.					
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?	☐	☐	☒	☐	
Discussion: The proposed project would not result in impacts from hazards and hazardous materials with respect to creating a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials, nor would it result in impacts from accidental release of materials into the environment. During construction, the proposed project would involve the transport of general construction materials as well as the materials necessary to construct the proposed PV arrays. Construction activities would involve the use of fuels and greases for the construction equipment; however, the use, storage, transport and disposal of these materials will be carried out in accordance with federal, state, and local laws, ordinances and regulations. Once installed, the solar panels would produce no waste during operation and would need to be cleaned approximately twice per year via water trucks with spray nozzles, with no chemical products being used. Therefore, the project would have a less than significant impact on this environmental factor.					
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒	

Discussion: There are no existing or proposed schools located within ¼ mile of the project. Furthermore, the project is a solar photovoltaic generating facility that would convert solar energy into electric energy without hazardous emissions; therefore, there would be no impact of hazardous materials emission on local schools.						
d)	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code § 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒	
Discussion: The project site is not included on a hazardous materials site list; therefore there is no impact from this project.						
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?	☐	☐	☐	☒	
Discussion: The project site over six miles away from the nearest airport, therefore there is no impact.						
f)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒	
Discussion: The City does not have any adopted emergency response plans. As proposed, the development would not interfere with emergency response, therefore there is not impact.						
g)	Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☐	☒	
Discussion: The site is not located in an area that is considered wildland, therefore there is not impact from wildland fires.						

X. HYDROLOGY AND WATER QUALITY. Would the project:						
a)	Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☐	☒	☐	
Discussion: Water use during construction would be limited to dust control measures for grading activities. The project will not result in releasing water or wastewater discharge from the site. Therefore, considering these factors, impacts as result of the development of this project on storm water will be less than significant.						
b)	Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☐	☒	7
Discussion: The project would not deplete groundwater supplies since the project will use minimal water, as discussed in response IX.a above. Additionally, the project requires minimal grading only for the access roads and overall, the project site will be designed to maintain similar drainage conditions as the existing condition. Once complete, the solar panels will have gaps between them that will allow stormwater to infiltrate the surface, therefore groundwater recharge would not be impacted by the project.						
c)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:	☐	☐	☒	☐	
	i) result in a substantial erosion or siltation on- or off-site;	☐	☐	☒	☐	
Discussion (c-i): The project grading and drainage plan is designed to maintain similar drainage conditions as the existing condition. Additionally, in compliance with State and local regulations, during construction erosion and/or stormwater control measures will be implemented during site disturbance; therefore, the project impact is less than significant.						
	ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	☐	☐	☒	☐	

Discussion: Under existing conditions, there is no stormwater runoff from the site. The proposed project requires minimal grading for access roads, and overall the project site will be designed to maintain similar drainage conditions as the existing condition. Once complete, the solar panels have gaps between them that will allow stormwater to infiltrate the surface. Since the project will have a negligible affect to the existing terrain and drainage patterns, there will not be substantially additional sources of runoff that could contribute to flooding. The project would not substantially increase the rate or amount of surface runoff that would result in flooding, therefore the project impact is less than significant.					
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	☐	☐	☒	☐	
Discussion: There are no drainage systems proposed as part of this project. As noted in IX.C.ii. above, The proposed project requires minimal grading for access roads only. Once complete, the solar panels have gaps between them that will allow stormwater to infiltrate the surface. Since the project will have a negligible affect to the existing terrain and drainage patterns, there will not be substantially additional sources of runoff, therefore this impact is less than significant.					
iv) impede or redirect flood flows?	☐	☐	☒	☐	
Discussion: About half of the project is in FEMA Flood Zone X, which is designated as an area of minimal flood hazard of 0.2% annual chance for flood hazard. Since the project proposes minimal grading and is at a low risk for flooding, this impact is less than significant.					
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☒	☐	
Discussion: The project site is located over 15 miles from the nearest coastline and is outside of the tsunami inundation areas along the coast. A portion of the proposed project is in FEMA Flood Zone X, which is designated as an area of minimal flood hazard of 0.2% annual chance for flood hazard. Ther are no enclosed bodies of water located near the project site. Due to the distance of enclosed bodies of water, no seiche-related flooding is anticipated to occur. Impacts related to flood hazard, tsunami, and seiche, are less than significant.					
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☒	☐	
Discussion: See the discussion in X.a for discussion on the stormwater management approach. Measures and BMPs will be installed and implemented to adhere to the City's Stormwater Management Program, therefore impacts would be reduced to less than significant.					

Issues	**Potentially Significant Impact**	**Less Than Significant With Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**	**Source**
XI. LAND USE AND PLANNING. Would the project:					
a) Physically divide an established community?	☐	☐	☐	☒	**1, 2**
Discussion: The project would not physically divide an established community since it is located between the Firestone Brewery wastewater treatment ponds to the west and the Salinas River to the east. No impact will occur from this project.					
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?	☐	☐	☐	☒	**1, 2**
Discussion: The site has Business Park land use designation and is zoned Planned Industrial. The zoning requires a Conditional Use Permit (CUP) to permit operation of a renewable energy generation facility. A Development Plan (PD) is also required since the project scope is greater than 10,000 square feet in size. With the approval of the project, the solar facility would be consistent with land use and zoning designations, and therefore would result in no impact to any land use plan, policy, or regulation.					

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Source
XII. MINERAL RESOURCES. Would the project:					
a) Result in the loss of availability of a known mineral resource that would be a value to the region and the residents of the state?	☐	☐	☐	☒	**1**
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?	☐	☐	☐	☒	**1**
Discussion (a and b): There are no known mineral resources at this project site. No impacts will occur.					

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Source
XIII. NOISE. 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?	☐	☐	☒	☐	**1**
Discussion: Construction would result in a temporary increase in ambient noise levels consistent with typical construction activities. Most construction activity would occur within an approximately four-month period encompassing the site preparation and PV assembly/installation. In general, the grading phase of project construction tends to create the highest noise levels because of the operation of heavy equipment. Short-term construction noise would only occur during daytime hours. Ongoing operations would generate minimal noise, primarily from the fans used to cool electrical equipment and transformers. However, these activities would not be significant since the construction stie is generally withing the interior of the site and setback substantially from commercial/industrial uses to the west. Construction would only occur during daytime hours. The applicant would need to comply with noise standards in the zoning ordinance, and not create nuisance noise between 7:00pm and 7:00am. Construction noise impacts would be short term and, therefore, would not result in a permanent increase of ambient noise. Operation of the facility would generate low noise levels during the daytime. These daytime noise levels would not be substantial due to the low-level noise sources and surrounding environment characteristics. Considering these factors, the project would not result in a substantial temporary or permanent increase of ambient noise levels in the vicinity of the project in excess of local standards establish in the general plan noise ordinance, therefore these impacts are less than significant.					
b) Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐	**1**
Discussion: The levels of groundborne noise and vibration generated by project construction would be low, and noise would only occur during daytime hours of construction and would cease upon completion of the project. Additionally, the project area is located in an open field used for solar generation and for water treatment ponds, and the nearest commercial development to the west is not sensitive to groundborne vibration. Therefore, impacts from groundborne vibrations are considered to be less than significant.					
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒	
Discussion: The project is not located within the geographic boundaries of the Airport Land Use Plan, therefore there is no impact.					

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Source
XIV. POPULATION AND HOUSING. Would the project:					
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☒	☐	**2**
Discussion: The project would not generate any population growth. The project does not propose any housing or commercial development, not the expansion of roads or expansion of infrastructure. Construction jobs would be short term and are expected to be filled by the existing workforce without relocation, therefore there is no impact.					
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒	
Discussion: The project would not displace any housing or people. No housing would occur on the project site or in its vicinity, therefore there is no impact.					

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Source
XV. PUBLIC SERVICES. Would the project:					
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:	☐	☐	☐	☒	**1, 10**
Fire protection?	☐	☐	☐	☒	
Police protection?	☐	☐	☐	☒	
Schools?	☐	☐	☐	☒	
Parks?	☐	☐	☐	☒	
Other public facilities?	☐	☐	☐	☒	

Discussion:

The project would be designed and constructed in accordance with Paso Robles Department of Emergency Services (EMS) requirements for access, fire water supply, and vegetation management. With adherence to these requirements, the project poses a low fire hazard and is not expected to impact capacity or service levels. No new or modified government facilities are needed to provide fire protection for the project. Therefore, there would be no impact to EMS.

The project site is located in the City of Paso Robles, which provides police protection and public safety within the City limits. Construction and operation of the project would not generate a material demand on police services. Specifically, the project would be enclosed with a six-foot-tall chain link fence topped by one-foot of barbed wire to control trespassing. As such, the project is not expected to result in an adverse impact on City of Paso Robles Police Department response times, service ratios, or other performance objectives, nor would the project result in the need for new or modified police facilities to serve the site. No new or modified government facilities are needed to provide police protection for the project, therefore, there would be no impact for Police services.

The project would not generate population growth. Therefore, there would be no impact to schools, parks, or other public facilities.

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Source
XVI. RECREATION.					
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?	☐	☐	☐	☒	**1**
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?	☐	☐	☐	☒	**1**
Discussion (a and b)**:** The project would not encourage new housing demands and use of recreational facilities, therefore the project results in no impacts to recreational facilities.					

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Source
XVII. TRANSPORTATION. Would the project:					
a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	☐	☐	☒	☐	
Discussion: Project-related vehicles typically would access the site by utilizing US Hwy 101 and Ramada Drive, and using the railroad crossing at the northern terminus of Ramada Drive which is where the current access point is for the water treatment ponds. Construction fieldwork for the project would occur over an approximately 2-month period during which the average number of construction workers is expected to be approximately 24 persons. Project construction worker and delivery traffic would incrementally add to existing traffic congestion on both US Hwy 101 and Ramada Drive but would be less than significant because of the relatively small number of trips generated and the short term of construction. Additionally, project operations would typically be unattended, with routine monitoring and maintenance on an as-needed basis. When needed, such site visits would typically require no more than one to two vehicle trips per day, which would add negligible traffic. Overall, the project would be developed in conformance with all applicable plans, policies, programs, and ordinances related to transportation and would have a less than significant impact in regard to the circulation system.					
b) Conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b)?	☐	☐	☒	☐	
Discussion: While trip generation during construction would result in increased Vehicle Miles Traveled (VMT), construction related traffic would be minimal and temporary. During operations, the proposed project would typically be unmanned, apart from periodic on-site personnel visitations for security, maintenance, and system monitoring. These periodic visits would not result in a significant increase in VMT; therefore impacts are anticipated to be less than significant.					
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒	
Discussion: There are no hazardous design features associated with, planned for or will result from this project. No impact will occur.					
d) Result in inadequate emergency access?	☐	☐	☐	☒	
Discussion: The project has been reviewed by the City's Department of Emergency Services. The project will not impede emergency access, and is designed in compliance with all emergency access safety features and City emergency access standards. The project would result in no impact to emergency access.					

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Source
XVIII. TRIBAL CULTURAL RESOURCES.					
a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code § 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:	☐	☒	☐	☐	
i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	☐	☐	☒	☐	
ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code § 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code § 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☒	☐	☐	
Discussion: The project is located in an area that is considered culturally significant, although there are no longer any structures located on the site. The Cultural Resource Study, prepared by Applied Earth Works, Inc. dated February 2023, includes both a Phase 1 and Extended Phase 1 testing (Attachment 5). The study indicates that one previously recorded cultural resource is located partially within the project area, and two cultural resources are within a 0.25-mile radius of the project area. In addition to records searches, a pedestrian survey was done on November 2, 2022. While the study reports that the investigation did not identify significant archaeological deposits within the Project area, the parcel does fall within an area with heightened sensitivity for prehistoric cultural materials and human burials. Therefore, a mitigation measure has been added to the project for there to be archaeological and tribal monitoring for the initial ground disturbance. With the mitigation, project impacts would be reduced to less than significant. Consultation with the Xolon Salinan Tribe and the Salinan Tribe of Monterey and San Luis Obispo Counties resulted in discussing their recommendations to include mitigation identified by the Cultural Resources Study, information regarding the start date, as well as requiring archaeological and tribal monitoring during ground disturbing activities. At the timing of publishing this report, no additional consultation requests have been received.					

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Source
XIX. UTILITIES AND SERVICE SYSTEMS. 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?	☐	☐	☐	☒	
Discussion: During construction, water would be provided through a nearby water service located at the water treatment ponds. Water needed for panel washing during the operating life of the facility would be obtained from a commercial water truck with spray nozzle and would be performed approximately twice per year. No new water or wastewater facilities, electric power, natural gas, or telecommunications will need to be constructed or expanded for this project, therefore there are no impacts.					
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☒	☐	

	Discussion: During construction, water would be provided through a nearby water service located at the water treatment ponds. Water needed for panel washing during the operating life of the facility would be obtained from a commercial water truck with spray nozzle and would be performed approximately twice per year. Since the project's water needs are minimal for both construction and ongoing maintenance, the project's water use is considered less than significant.					
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?	☐	☐	☐	☒	
	Discussion: The proposed project would not discharge wastewater. Therefore, the project would have no impact of the capacity of the wastewater treatment provider.					
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?	☐	☐	☒	☐	
	Discussion: The project is a solar photovoltaic generation facility that would convert solar energy into electric energy without substantial waste generation during operations. During construction, most debris would consist of recyclable materials such as wood pallets, plastic and paper packaging and scrap metal that can be taken to the nearby waste recycling center and all other non-recyclable construction debris being taken to the nearby landfill. The landfill has a maximum permitted capacity of 6,495,000 cubic yards and a maximum permitted throughput of 450 tons of solid waste per day and 75,000 tons per year, through October 1, 2051. As of December 31, 2017, the landfill had a remaining capacity of 4,216,402 cubic yards or approximately 65% of the maximum permitted capacity, therefore the project would result in a less than significant impact from solid waste generation.					
e)	Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☐	☒	
	Discussion: The proposed project will comply with federal, state, and local management and reduction statutes and regulations. No impact will occur.					

Issues		**Potentially Significant Impact**	**Less Than Significant With Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**	**Source**
XX. WILDFIRE. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:						
a)	Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒	
	Discussion: The City of Paso Robles does not have an adopted emergency response plan or evacuation plan. Therefore, the project would not impact an emergency response plan.					
b)	Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☒	☐	
c)	Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☒	☐	
	Discussion (b and c)**:** As previously identified, the site is not considered as being located within the wildland urban interface (WUI) and therefore would not need specific measures for fire-fighting purposes, beyond emergency vehicle access, clearance around structures, and connection to water. The project has been reviewed by the City of Paso Robles Fire Department and designed with Fire Codes in mind. Given these considerations the impacts will be less than significant.					
d)	Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☐	☒	
	Discussion: The project site is relatively flat and not subject to landslide potential or significant drainage changes, therefore there would be no impact.					

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Source
XXI. MANDATORY FINDINGS OF SIGNIFICANCE.					
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?	☐	☐	☒	☐	
Discussion: The project would not result in impacts to fish habitat or impacts to fish and wildlife populations. The site is vacant and shows evidence of being previously disturbed through regular farming practices for several years. Additionally, vegetative and underground cover is generally lacking on the site. Considering the disturbed nature of the site, impacts to fish, wildlife, or plant habitat are expected to be less than significant.					
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.)	☐	☐	☒	☐	
Discussion: Due to the location of the project area being east of the Union Pacific Railroad, which cuts the site off from the rest of Firestone's operations and allows minimal access, there is not the potential for significant additional development in this area of the City. Considering these factors, the project's impacts on this environmental factor would be less than significant.					
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☐	☒	
Discussion: As noted within this environmental document, the project's potential to cause what may be considered substantial, adverse effects on human beings either directly or indirectly is less than significant. As such, there would be no impact on the effects on human beings as a result of the project.					

EARLIER ANALYSIS AND BACKGROUND MATERIALS.

Earlier analyses may be used where, pursuant to tiering, program EIR, or other CEQA process, one or more effects have been adequately analyzed in an earlier EIR or negative declaration. CEQA Guidelines, Section 15152(b), (f).

Earlier Documents Prepared and Utilized in this Analysis and Background / Explanatory Materials

Reference #	Document Title	Available for Review at:
1	City of Paso Robles General Plan	City of Paso Robles Community Development Department 1000 Spring Street Paso Robles, CA 93446
2	City of Paso Robles Zoning Code	Same as above
3	City of Paso Robles Environmental Impact Report for General Plan Update	Same as above
4	2005 Airport Land Use Plan	Same as above
5	City of Paso Robles Municipal Code	Same as above
6	City of Paso Robles Water Master Plan	Same as above
7	City of Paso Robles Urban Water Management Plan 2020	Same as above
8	City of Paso Robles Sewer Master Plan	Same as above
9	City of Paso Robles Housing Element	Same as above
10	City of Paso Robles Standard Conditions of Approval for New Development	Same as above
11	Uptown/Town Centre Specific Plan	Same as above
12	San Luis Obispo County Air Pollution Control District Guidelines for Impact Thresholds	APCD 3433 Roberto Court San Luis Obispo, CA 93401
13	San Luis Obispo County – Land Use Element	San Luis Obispo County Department of Planning County Government Center San Luis Obispo, CA 93408
14	USDA, Soils Conservation Service, Soil Survey of San Luis Obispo County, Paso Robles Area, 1983	Soil Conservation Offices Paso Robles, Ca 93446
15	City of Paso Robles Climate Action Plan 2013	City of Paso Robles Community Development Department 1000 Spring Street Paso Robles, CA 93446

Attachments:

1. Mitigation Monitoring and Reporting Plan
2. Vicinity Map
3. Project Site Plan
4. Biological Report
    a. Biological Consistency Letter and SJKF Habitat Evaluation
5. Cultural Resources Study

DRAFT Mitigation Monitoring and Reporting Plan

Project File No./Name: Firestone Solar Phase II
Approving Resolution No.:____ by: ☒ Planning Commission ☐City Council Date: May 23, 2023
The following environmental mitigation measures were either incorporated into the approved plans or were incorporated into the conditions of approval. Each and every mitigation measure listed below has been found by the approving body indicated above to lessen the level of environmental impact of the project to a level of non-significance. A completed and signed checklist for each mitigation measure indicates that it has been completed.

Explanation of Headings:

Type: .....Project, ongoing, cumulative
Monitoring Department or Agency: .....Department or Agency responsible for monitoring a particular mitigation measure
Shown on Plans: .....When a mitigation measure is shown on the plans, this column will be initialed and dated.
Verified Implementation: .....When a mitigation measure has been implemented, this column will be initialed and dated.
Remarks: .....Area for describing status of ongoing mitigation measure, or for other information.

Mitigation Measure PD22-21, CUP22-21 (Firestone Solar Project)	**Type**	**Monitoring Department or Agency**	**Shown on Plans**	**Verified Implementation**	**Timing/Remarks**
BR-1. Within one week of ground disturbance activities, if work occurs between March 15 and August 15, nesting bird surveys shall be conducted. To avoid impacts to nesting birds, grading and construction activities that affect trees and grasslands shall not be conducted during the breeding season from March 1 to August 15. If construction activities must be conducted during this period, nesting bird surveys shall take place within one week of habitat disturbance. If surveys do not locate nesting birds, construction activities may be conducted. If nesting birds are located, no construction activities shall occur within a distance specified by a qualified biologist, until chicks are fledged or nest fails. This includes nests of all common bird species (under the MBTA), as well as special status birds and raptor nests. Construction activities shall observe the delineated buffer, determined by a qualified biologist, where buffer radius will be specified according to special status rank, intensity of construction activity or impact (i.e. high decibel levels or heavy ground disturbance) and where local, state, and federal regulations apply. A	On-going	Certified Arborist/ Biologist and CDD	Yes	Notes shown on construction documents.	Prior to issuing grading permit.

Mitigation Measure PD22-21, CUP22-21 (Firestone Solar Project)	Type	Monitoring Department or Agency	Shown on Plans	Verified Implementation	Timing/Remarks
preconstruction survey report shall be submitted to the lead agency immediately upon completion of the survey. The report shall detail appropriate fencing or flagging of the buffer zone and make recommendations on additional monitoring requirements. A map of the Project site and nest locations shall be included with the report. The Project biologist conducting the nesting survey shall have the authority to reduce or increase the recommended buffer depending upon site conditions.					
BR-2. A pre-construction survey shall be conducted within thirty days of beginning work on the site to identify if badgers are using the site. If the pre-construction survey finds potential badger dens, they shall be inspected to determine whether they are occupied. The survey shall cover the entire property and shall examine both old and new dens. If potential badger dens are too long to completely inspect from the entrance, a fiber optic scope shall be used to examine the den to the end. Inactive dens may be excavated by hand with a shovel to prevent re-use of dens during construction. If badgers are found in dens on the property between February and July, nursing young may be present. To avoid disturbance and the possibility of direct take of adults and nursing young, and to prevent badgers from becoming trapped in burrows during construction activity, no grading shall occur within 100 feet of active badger dens between February and July. Between July 1st and February 1st all potential badger dens shall be inspected to determine if badgers are present. During the winter badgers do not truly hibernate, but are inactive and asleep in their dens for several days at a time. Because they can be torpid during the winter, they are vulnerable to disturbances that may collapse their dens before they rouse and emerge. Therefore, surveys shall be conducted for badger dens throughout the year. If badger dens are found on the property during the pre-construction survey, the CDFW wildlife biologist for the area shall be contacted to review current allowable management practices.	Project	Project Biologist and CDD	Yes	Notes shown on construction documents.	Prior to issuing Grading Permit.

Mitigation Measure PD22-21, CUP22-21 (Firestone Solar Project)	Type	Monitoring Department or Agency	Shown on Plans	Verified Implementation	Timing/Remarks
BR-3. Prior to issuance of grading and/or construction permits, the applicant shall submit evidence to the City of Paso Robles, Community Development Department (Planning Division) that states that one or a combination of the following three San Joaquin kit fox mitigation measures has been implemented, upon confirmation from CDFW that compensatory mitigation is required: a. Provide for the protection in perpetuity, through acquisition of fee or a conservation easement of **[Total number of mitigation acres required]** acres of suitable habitat in the kit fox corridor area (e.g. within the San Luis Obispo County kit fox habitat area, in the City of Paso Robles), either on-site or off-site, and provide for a nonwasting endowment to provide for management and monitoring of the property in perpetuity. Lands to be conserved shall be subject to the review and approval of the California Department of Fish and Wildlife (Department) and the City. This mitigation alternative (a.) requires that all aspects if this program must be in place before City permit issuance or initiation of any ground disturbing activities. b. Deposit funds into an approved in-lieu fee program, which would provide for the protection in perpetuity of suitable habitat in the kit fox corridor area within San Luis Obispo County, and provide for a non-wasting endowment for management and monitoring of the property in perpetuity. Mitigation alternative (b) above can be completed by providing funds to The Nature Conservancy (TNC) pursuant to the Voluntary Fee-Based Compensatory Mitigation Program (Program). The Program was established in agreement between the CDFW and TNC to preserve San Joaquin kit fox habitat, and to provide a voluntary mitigation alternative to project proponents who must mitigate the impacts of projects in accordance with the California Environmental Quality Act (CEQA).	Project	CDD	Yes	Notes shown on construction documents.	Prior to issuing Grading Permit.

Mitigation Measure PD22-21, CUP22-21 (Firestone Solar Project)	Type	Monitoring Department or Agency	Shown on Plans	Verified Implementation	Timing/Remarks
The fee, payable to "The Nature Conservancy," would total **$[Amount of fee based on $2500 per acre].** This fee is calculated based on the current cost-per-unit of $2500 per acre of mitigation, which is scheduled to be adjusted to address the increasing cost of property in San Luis Obispo County; your actual cost may increase depending on the timing of payment. This fee must be paid after the CDFW provides written notification about your mitigation options but prior to City permit issuance and initiation of any ground disturbing activities. c. Purchase **[Total number of mitigation acres required]** credits in a CDFW-approved conservation bank, which would provide for the protection in perpetuity of suitable habitat within the kit fox corridor area and provide for a non-wasting endowment for management and monitoring of the property in perpetuity. Mitigation alternative (c) above can be completed by purchasing credits from the Palo Prieto Conservation Bank (see contact information below). The Palo Prieto Conservation Bank was established to preserve San Joaquin kit fox habitat, and to provide a voluntary mitigation alternative to project proponents who must mitigate the impacts of projects in accordance with the California Environmental Quality Act (CEQA). The cost for purchasing credits is payable to the owners of The Palo Prieto Conservation Bank, and would total $**[Amount of mitigation acres required (i.e. credits), currently priced at $2500 per credit].** This fee is calculated based on the current cost-per-credit of $2,500 per acre of mitigation. The fee is established by the conservation bank owner and may change at any time. Your actual cost may increase depending on the timing of payment. Purchase of credits must be completed prior to City permit issuance and initiation of any ground disturbing activities.					
BR-4. Prior to issuance of grading and/or construction permits, the applicant shall provide evidence that they have retained a qualified biologist acceptable to the City. The retained biologist	Project/	Project Biologist and CDD	Yes	Notes shown on construction documents.	Prior to issuing Grading Permit.

Mitigation Measure PD22-21, CUP22-21 (Firestone Solar Project)	Type	Monitoring Department or Agency	Shown on Plans	Verified Implementation	Timing/Remarks
shall perform the following monitoring activities: i. Prior to issuance of grading and/or construction permits and within 30 days prior to initiation of site disturbance and/or construction, the biologist shall conduct a pre-activity (i.e. preconstruction) survey for known or potential kit fox dens and submit a letter to the City reporting the date the survey was conducted, the survey protocol, survey results, and what measures were necessary (and completed), as applicable, to address any kit fox activity within the project limits. ii. The qualified biologist shall conduct weekly site visits during site-disturbance activities (i.e. grading, disking, excavation, stock piling of dirt or gravel, etc.) that proceed longer than 14 days, for the purpose of monitoring compliance with required Mitigation Measures. Site disturbance activities lasting up to 14 days do not require weekly monitoring by the biologist unless observations of kit fox or their dens are made on-site or the qualified biologist recommends monitoring for some other reason. When weekly monitoring is required, the biologist shall submit weekly monitoring reports to the City. iii. Prior to or during project activities, if any observations are made of San Joaquin Kit fox, or any known or potential San Joaquin kit fox dens are discovered within the project limits, the qualified biologist shall re-assess the probability of incidental take (e.g. harm or death) to kit fox. At the time a den is discovered, the qualified biologist shall contact USFWS and the CDFW for guidance on possible additional kit fox protection measures to implement and whether or not a Federal and/or State incidental take permit is needed. If a potential den is encountered during construction, work shall stop until such time the USFWS determines it is appropriate to resume work. If incidental take of kit fox during project activities is possible, **before project activities commence,** the applicant must consult with the USFWS. The results of this consultation may require the applicant to obtain a Federal and/or State permit for incidental take during project activities. The applicant	Ongoing as needed				

Mitigation Measure PD22-21, CUP22-21 (Firestone Solar Project)	Type	Monitoring Department or Agency	Shown on Plans	Verified Implementation	Timing/Remarks
should be aware that the presence of kit foxes or known or potential kit fox dens at the project site could result in further delays of project activities. iv. In addition, the qualified biologist shall implement the following measures: 1. Within 30 days prior to initiation of site disturbance and/or construction, fenced exclusion zones shall be established around all known and potential kit fox dens. Exclusion zone fencing shall consist of either large flagged stakes connected by rope or cord, or survey laths or wooden stakes prominently flagged with survey ribbon. Each exclusion zone shall be roughly circular in configuration with a radius of the following distance measured outward from the den or burrow entrances: Each exclusion zone shall be roughly circular in configuration with a radius of distance measured outward from the den or burrow entrances, dependent on the use and activity of the den (i.e. potential, known, active, or natal den), to be determined by the kit fox biologist. 2. All foot and vehicle traffic, as well as all construction activities, including storage of supplies and equipment, shall remain outside of exclusion zones. Exclusion zones shall be maintained until all project-related disturbances have been terminated, and then shall be removed. 3. If kit foxes or known or potential kit fox dens are found on site, daily monitoring by a qualified biologist shall be required during ground disturbing activities.					
BR-5. Prior to issuance of grading and/or construction permits, the applicant shall clearly delineate the following as a note on the project plans: "Speed signs of 25 mph (or lower) shall be posted for all construction traffic to minimize the probability of road mortality of the San Joaquin kit fox". Speed limit signs shall be installed on the project site within 30 days prior to initiation of	Project	CDD	Yes	Shown on construction documents; Site inspection as needed	Prior to site disturbance, grading permit issued

Mitigation Measure PD22-21, CUP22-21 (Firestone Solar Project)	Type	Monitoring Department or Agency	Shown on Plans	Verified Implementation	Timing/Remarks
site disturbance and/or construction.					
BR-6. During the site disturbance and/or construction phase, grading and construction activities after dusk shall be prohibited unless coordinated through the City, during which additional kit fox mitigation measures may be required.	On-going	CDD	Yes	Shown on construction documents	Prior to issuance of grading permit
BR-7. Prior to issuance of grading and/or construction permit and within 30 days prior to initiation of site disturbance and/or construction, all personnel associated with the project shall attend a worker education training program, conducted by a qualified biologist, to avoid or reduce impacts on sensitive biological resources (i.e. San Joaquin kit fox). At a minimum, as the program relates to the kit fox, the training shall include the kit fox's life history, all mitigation measures specified by the City, as well as any related biological report(s) prepared for the project. The applicant shall notify the City shortly prior to this meeting. A kit fox fact sheet shall also be developed prior to the training program, and distributed at the training program to all contractors, employers and other personnel involved with the construction of the project. The project biologist shall provide the City staff with the sign-in sheet after conducting the meeting.	On-going	CDD and Project Biologist	Yes	Shown on construction documents	Prior to issuance of grading permit
BR-8. During the site-disturbance and/or construction phase, to prevent entrapment of the San Joaquin kit fox, all excavations, steep-walled holes and trenches in excess of two feet in depth shall be covered at the close of each working day by plywood or similar materials, or provided with one or more escape ramps constructed of earth fill or wooden planks. Trenches shall also be inspected for entrapped kit fox each morning prior to onset of field activities and immediately prior to covering with plywood at the end of each working day. Before such holes or trenches are filled, they shall be thoroughly inspected for entrapped kit fox. Any kit fox so discovered shall be allowed to escape before	On-going	Project Biologist	Yes	Shown on construction documents	Prior to issuance of grading permit

Mitigation Measure PD22-21, CUP22-21 (Firestone Solar Project)	Type	Monitoring Department or Agency	Shown on Plans	Verified Implementation	Timing/Remarks
field activities resume, or removed from the trench or hole by a qualified biologist and allowed to escape unimpeded.					
BR-9. During the site-disturbance and/or construction phase, any pipes, culverts, or similar structures with a diameter of four inches or greater, stored overnight at the project site shall be thoroughly inspected for trapped San Joaquin kit foxes before the subject pipe is subsequently buried, capped, or otherwise used or moved in any way. If during the construction phase a kit fox is discovered inside a pipe, that section of pipe will not be moved. If necessary, the pipe may be moved only once to remove it from the path of activity, until the kit fox has escaped.	On-going	Project Biologist	Yes	Shown on construction documents	Prior to issuance of grading permit.
BR-10. During the site-disturbance and/or construction phase, all food-related trash items such as wrappers, cans, bottles, and food scraps shall be disposed of only in closed containers. These containers shall be regularly removed from the site. Food items may attract San Joaquin kit foxes onto the project site, consequently exposing such animals to increased risk of injury or mortality. No deliberate feeding of wildlife shall be allowed.	On-going	Project Biologist	Yes	Shown on construction documents	Prior to issuance of Grading Permit/On-going with project construction.
BR-11. Prior to, during and after the site-disturbance and/or construction phase, use of pesticides or herbicides shall be in compliance with all local, State and Federal regulations. This is necessary to minimize the probability of primary or secondary poisoning of endangered species utilizing adjacent habitats, and the depletion of prey upon which San Joaquin kit foxes depend.	On-going	Project Biologist	Yes	Shown on construction documents	Prior to issuance of a grading permit.
BR-12. During the site-disturbance and/or construction phase, any contractor or employee that inadvertently kills or injures a San Joaquin kit fox or who finds any such animal either dead, injured, or entrapped shall be required to report the incident immediately to the applicant and City. In the event that any observations are made of injured or dead kit fox, the	On-going	Project Biologist	Yes	Shown on construction documents	On Going during construction.

Mitigation Measure PD22-21, CUP22-21 (Firestone Solar Project)	Type	Monitoring Department or Agency	Shown on Plans	Verified Implementation	Timing/Remarks
applicant shall immediately notify the USFWS and CDFW by telephone. In addition, formal notification shall be provided in writing within three working days of the finding of any such animal(s). Notification shall include the date, time, location and circumstances of the incident. Any threatened or endangered species found dead or injured shall be turned over immediately to CDFW for care, analysis, or disposition.					
BR-13. Prior to final inspection, or occupancy, whichever comes first, should any long internal or perimeter fencing be proposed or installed, the applicant shall do the following to provide for kit fox passage: i. If a wire strand/pole design is used, the lowest strand shall be no closer to the ground than 12 inches. ii. If a more solid wire mesh fence is used, 8 by 12 inch openings near the ground shall be provided every 100 yards iii. Upon fence installation, the applicant shall notify the City to verify proper installation. Any fencing constructed after issuance of a final permit shall follow the above guidelines.	Project	CDD and Project Biologist	Yes	Shown on construction documents; Final inspection	Prior to issuance of a grading permit.
BR-14. Oak Tree Protection: 1. Fencing. Prior to any site disturbance, tree protection fencing shall be installed as close to the outer limit of the CRZ as practicable for construction operations. The fencing shall be in place throughout the duration of project construction and removed only under the direction of the project's Certified Arborist. The Applicant shall be responsible for maintaining intact tree protection fencing throughout the construction period. The arborist(s), upon notification, will inspect the fence placement once it is erected. Weatherproof signs shall be permanently posted on the fences with the following information: Tree Protection Zone: No personnel, equipment, materials, or vehicles allowed.	Project	CDD and Project Arborist	Yes	Shown on construction documents; Final inspection	Prior to issuance of a grading permit.

Mitigation Measure PD22-21, CUP22-21 (Firestone Solar Project)	Type	Monitoring Department or Agency	Shown on Plans	Verified Implementation	Timing/Remarks
2. Soil Aeration Methods. Soils within the CRZ that have been compacted by heavy equipment and/or construction activities must be returned to their original state before all work is completed. Methods include water jetting, adding organic matter, and boring small holes with an auger (18 inches deep, 2-3 feet apart with a 2- to 4-inch auger) and the application of moderate amounts of nitrogen fertilizer. The arborist(s) shall advise if soil aeration is required and methods for completion. 3. Chip Mulch. All areas within the CRZ of the trees that are fenced shall receive a 4-6 inch layer of chip mulch to retain moisture, soil structure and reduce the effects of soil compaction. 4. Trenching within CRZ. Trenching within the CRZ must be approved by the project's Certified Arborist and shall be done by hand or with an air spade. All major roots shall be avoided whenever possible. All exposed roots larger than 1 inch in diameter shall be clean cut with sharp pruning tools and not left ragged. Any roots exposed during construction shall be evaluated and treated by the Arborist. 5. Grading within the Critical Root Zone. Grading should not encroach within the CRZ unless authorized. Grading should not disrupt the normal drainage pattern around the trees. Fills should not create a ponding condition and excavations should not leave the tree on a rapidly draining mound. Any exposed roots shall be covered the same day they are exposed if possible. If they cannot, they must be covered with burlap or another suitable material and wetted down 2 times per day until reburied. 6. Equipment Operation. Vehicles and heavy equipment shall not be driven under oak trees, as this will contribute to soil compaction. Additionally, there is to be no parking of equipment or personal vehicles in these areas.					

Mitigation Measure PD22-21, CUP22-21 (Firestone Solar Project)	Type	Monitoring Department or Agency	Shown on Plans	Verified Implementation	Timing/Remarks
7. Existing Surfaces. The existing ground surface within the critical root zone of all oak trees shall not be cut, filled, compacted or pared, unless shown on the grading plans and approved by the arborist. 8. Construction Materials and Waste. No liquid or solid construction waste shall be dumped on the ground within the critical root zone of any native tree. The critical root zone areas are not for storage of materials. 9. Arborist Monitoring. An arborist shall be present for soil disturbance work within the CRZ of oak trees. Monitoring does not necessarily have to be continuous but observational at times during these activities. 10. Impacted Root Treatment. Roots impacted during construction (e.g., trenching or grading operations) shall be treated by the arborist on a case-by-case basis using best practices such as clean cuts accompanied by application of appropriate fungicides and insecticides by a licensed pest control applicator. 11. Pruning. A certified arborist shall direct all pruning. No pruning shall take more than 25 percent of the live crown of any native tree. 12. Landscape. All landscape within the CRZ shall consist of drought tolerant or native varieties. Lawns shall be avoided. All irrigation trenching shall be routed around critical root zones, otherwise above ground drip-irrigation shall be used. It is the owner's responsibility to notify the landscape contractor regarding this mitigation. 13. Fertilization. As the project moves toward completion, the Arborist may suggest either fertilization and/or mycorrhizal inoculation applications that will benefit tree health. Application of mycorrhizal inoculum offers several benefits to the host plant, including faster growth, improved nutrition, greater drought resistance, and protection from pathogens.					

Mitigation Measure PD22-21, CUP22-21 (Firestone Solar Project)	Type	Monitoring Department or Agency	Shown on Plans	Verified Implementation	Timing/Remarks
CR-1: A qualified archaeological monitor and a Native American observer shall be present for all ground-disturbing work for the proposed Project. This includes but is not limited to brushing, grubbing, vegetation removal with machinery other than hand equipment (weed whackers, hand cutters, etc.), fence removal/installation, utility removal/installation potholing, boring, grading, trenching, excavation, and demolition activities. Archaeological monitoring should be conducted by a qualified professional archaeologist familiar with the types of historical and prehistoric resources that could be encountered within the Project area. Cultural resource sensitivity training should be provided by the archaeologist to construction staff prior to beginning construction. A final report should be completed once all construction activities are complete and submitted to the lead agency, the project proponent, the Native American monitoring tribe(s), and the CCIC.. . • **Inadvertent Finds:** If intact cultural resources are encountered at any time during construction or ground-disturbing activities within the Project area, all work in the vicinity of the find should be halted until a qualified archaeologist can be retained to assess the discovery. Such finds include intact midden soils, house floors, hearths, grinding implements, stone tools, soapstone bowls, ornaments (e.g., beads, pendants), or any intact feature or archaeological resources. Other finds could include intact building foundations and high concentrations of historical artifacts. If the find(s) is considered a cultural resource or a potential resource, the archaeologist shall make appropriate recommendations to the lead agency. The lead agency shall make the final determination as to treatment and disposition of the resource(s). • **Human Remains:** If human remains are uncovered, or in any other case when human remains are discovered, all work within 50 feet of the find shall stop and the San Luis Obispo Coroner is to be notified immediately. If the remains are identified—based on archaeological	Project	CDD/Project Archaeologist	Yes	Shown on construction documents	Prior to issuance of a grading permit.

Mitigation Measure PD22-21, CUP22-21 (Firestone Solar Project)	Type	Monitoring Department or Agency	Shown on Plans	Verified Implementation	Timing/Remarks
context, age, cultural associations, or biological traits—as those of a Native American, California Health and Safety Code 7050.5 and PRC 5097.98 require that the coroner notify the NAHC within 24 hours of discovery. The NAHC will then identify the Most Likely Descendent who will provide recommendations for treatment and management of the remains based on tribal traditions and customs.					

(add additional measures as necessary)

Explanation of Headings:

Type: ..... Project, ongoing, cumulative
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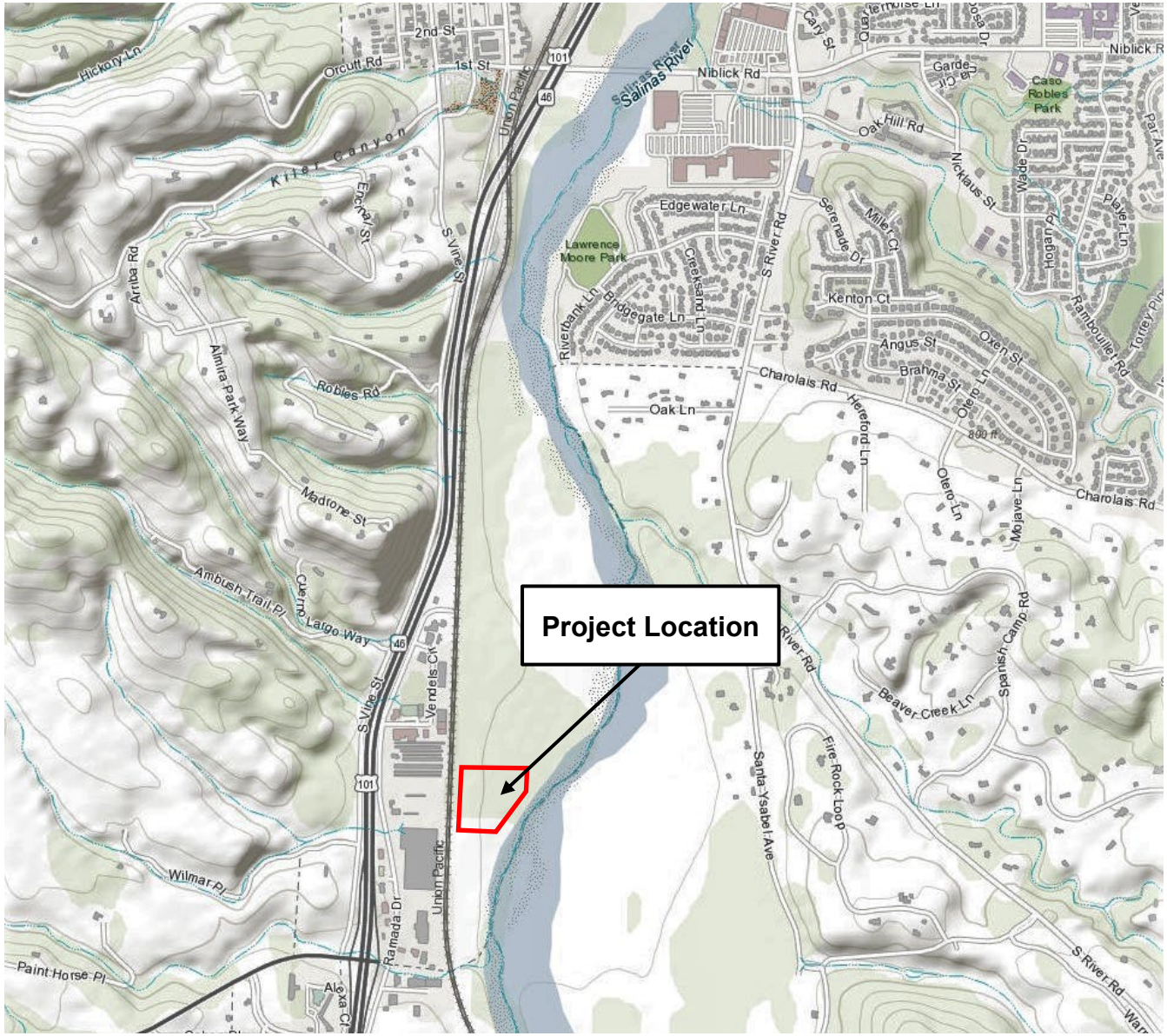
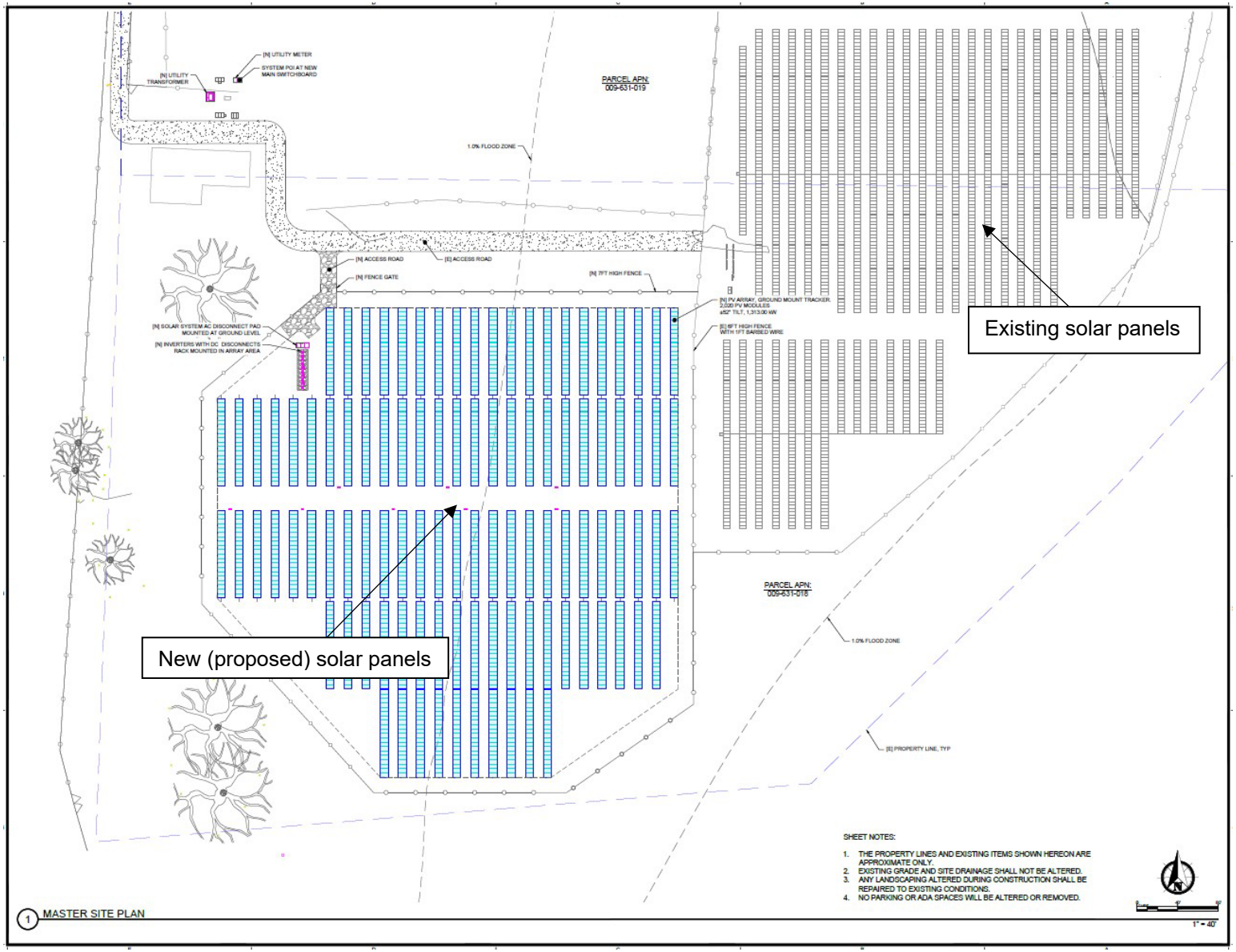
Remarks: ..... Area for describing status of ongoing mitigation measure, or for other information.

Vicinity Map



Site Plan


[N] UTILITY METER
[N] UTILITY TRANSFORMER
SYSTEM POI AT NEW MAIN SWITCHBOARD
PARCEL APN: 009-631-019
1.0% FLOOD ZONE
[N] ACCESS ROAD
[E] ACCESS ROAD
[N] FENCE GATE
[N] 7FT HIGH FENCE
[N] PV ARRAY, GROUND MOUNT TRACKER. 2,020 PV MODULES ±52° TILT, 1,313.00 kW
[E] 6FT HIGH FENCE WITH 1FT BARBED WIRE
[N] SOLAR SYSTEM AC DISCONNECT PAD MOUNTED AT GROUND LEVEL
[N] INVERTERS WITH DC DISCONNECTS RACK MOUNTED IN ARRAY AREA
Existing solar panels
New (proposed) solar panels
PARCEL APN: 009-631-018
1.0% FLOOD ZONE
[E] PROPERTY LINE, TYP
SHEET NOTES:
1. THE PROPERTY LINES AND EXISTING ITEMS SHOWN HEREON ARE APPROXIMATE ONLY.
2. EXISTING GRADE AND SITE DRAINAGE SHALL NOT BE ALTERED.
3. ANY LANDSCAPING ALTERED DURING CONSTRUCTION SHALL BE REPAIRED TO EXISTING CONDITIONS.
4. NO PARKING OR ADA SPACES WILL BE ALTERED OR REMOVED.
1 MASTER SITE PLAN
1" = 40'

Preliminary Biological Report

for

Firestone Solar Plant
City of Paso Robles CUP 18-06

Paso Robles, San Luis Obispo County

Prepared for

REC Solar
3450 Broad Street
San Luis Obispo, CA 93401

by

ALTHOUSE AND MEADE, INC.
BIOLOGICAL AND ENVIRONMENTAL SERVICES
1602 Spring Street
Paso Robles, CA 93446
(805) 237-9626

June 29, 2018

1138.01

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Cover Page: Project site, view west. June 8, 2018

SYNOPSIS

- This preliminary biological report examines a 28.4-acre Study Area located in the City of Paso Robles, San Luis Obispo County, California. The Study Area includes portions of (APN 009-631 -019 and –018). Approximately 9 acres would be directly impacted by the proposed project.
- The proposed project is construction of a 2.1 megawatt photovoltaic solar plant for the Firestone Brewery (CUP 18-06).
- Habitat types identified in the Study Area consist of agricultural and riparian habitats. The proposed project would only impact agricultural habitat.
- Botanical surveys conducted in May and June 2018 identified 40 species, subspecies, and varieties of vascular plants in the Study Area. There is no potential for special status plants to occur in the Study Area. Special status plants were not observed in the Study Area.
- Wildlife species detected in the Study Area include 2 reptiles, 22 birds, and 4 mammals. There is low potential for 2 special status animals to occur in the Study Area. No state or federally listed animals have been detected in the Study Area.
- Mitigation recommendations are provided to reduce potential impacts to nesting birds, American badger, and San Joaquin kit fox.

1 INTRODUCTION

1.1 Purpose

This report provides information regarding biological resources associated with an approximately 28.4-acre site (Study Area) in the City of Paso Robles, San Luis Obispo County, California. Results are reported for botanical and wildlife surveys of the Study Area conducted from May to June 2018. A habitat inventory and results of database and literature searches of special status species reports within a nine 7.5-minute quadrangle search area of the Study Area are also included. Special status species that could occur in the Study Area or be affected by the proposed project are discussed and lists of plant and animal species that were identified or are expected in the Study Area are provided. An evaluation of the effect of the proposed project on biological resources is included, and mitigation recommendations are outlined.

1.2 Location

The proposed solar plant would be built on an approximately 9-acre site located 850 feet east of Vendels Circle adjacent to existing water treatment ponds, on assessor's parcel numbers 009-631-018 and -019, (Figures 1 and 2). Approximate coordinates for the center of the Study Area are 120.689° W, 35.596° N (WGS84) in the United States Geological Survey (USGS) 7.5-minute topographic quadrangle Templeton. Elevation is approximately 715 feet above mean sea level. The Study Area is located in the City of Paso Robles in San Luis Obispo County. Our Study Area includes a larger area than the proposed project area to account for any sensitive biological resources that could be affected by the project but were not in the project footprint. In this document we refer to both a Study Area and a proposed project area to distinguish locations of biological resources and potential project impacts.

1.3 Project Description

The proposed project is a 2.1 megawatt photovoltaic power plant on approximately 9-acres for Firestone Brewery located at the northern terminus of Ramada Drive, east of the Union Pacific rail road line. The major components of the project consist of a security fence enclosing the 9-acre site, rows of photovoltaic solar modules mounted on single axis trackers, a distribution switchboard unit, and power interconnection line.

1.4 Regulatory Framework

1.4.1 Federal Law and Regulations

Endangered Species Act. The federal Endangered Species Act (ESA) provides the legal framework for the listing and protection of species (and their habitats) identified as being endangered or threatened with extinction. Actions that jeopardize endangered or threatened species and the habitats upon which they rely are considered a 'take' under the Endangered Species Act. Take of a federally listed threatened or endangered species is prohibited without a special permit. The Endangered Species Act allows for take of a threatened or endangered species incidental to development activities once a habitat conservation plan has been prepared to the satisfaction of the USFWS and an incidental take permit has been issued. The Endangered Species Act also allows

for the take of threatened or endangered species after consultation has deemed that development activities will not jeopardize the continued existence of the species. The federal Endangered Species Act also provides for a Section 7 Consultation when a federal permit is required, such as a Clean Water Act Section 404 permit.

"Critical Habitat" is a term within the federal Endangered Species Act designed to guide actions by federal agencies (as opposed to state, local, or other agency actions) and defined as "an area occupied by a species listed as threatened or endangered within which are found physical or geographical features essential to the conservation of the species, or an area not currently occupied by the species which is itself essential to the conservation of the species."

Section 404 Clean Water Act Regulations. The Clean Water Act provides wetland regulation at the federal level and is administered by the USACE. The purpose of the Clean Water Act is to restore and maintain the chemical, physical, and biological integrity of all waters of the U.S. Permitting is required for filling waters of the U.S. (including wetlands). Permits may be issued on an individual basis or may be covered under approved nationwide permits.

Migratory Bird Treaty Act. All migratory bird species that are native to the U.S. or its territories are protected under the federal Migratory Bird Treaty Act, as amended under the Migratory Bird Treaty Reform Act of 2004. The Migratory Bird Treaty Act is generally protective of migratory birds.

1.4.2 State Law and Regulations

California Environmental Quality Act (CEQA). CEQA requires that biological resources be considered when assessing the environmental impacts that are the result of proposed actions. The lead agencies determine the scope of what is considered an impact and what constitutes an "adverse effect" on a biological resource.

California Fish and Game Code. The California Fish and Game Code regulates the taking or possession of birds, mammals, fish, amphibians, and reptiles, as well as natural resources such as wetlands and waters of the state. It includes but is not limited to the California Endangered Species Act, Lake and Streambed Alteration Agreements, and the California Native Plant Protection Act.

Nesting Birds. Fish and Game Code, Section 3503, states that it is "unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto," and "unlawful to take, possess, or destroy any birds of prey or to take, possess, or destroy the nest or eggs of any such bird" unless authorized.

California Endangered Species Act. The California Endangered Species Act (CESA), similar to the federal Endangered Species Act, contains a process for listing of species and regulating potential impacts to listed species. State threatened and endangered species include both plants and wildlife, but do not include invertebrates. The designation "rare species" applies only to California native plants. State threatened and endangered plant species are regulated largely under the Native Plant Preservation Act in conjunction with the California Endangered Species Act. State threatened and endangered animal species are legally protected against "take." The CESA authorizes CDFW to enter into a memorandum of agreement for take of listed species to issue an incidental take permit for a state-listed threatened and endangered species only if specific criteria

are met. Section 2080 of the CESA prohibits the take of species listed as threatened or endangered pursuant to the Act. Section 2081 allows CDFW to authorize take prohibited under Section 2080 provided that: 1) the taking is incidental to an otherwise lawful activity; 2) the taking will be minimized and fully mitigated; 3) the applicant ensures adequate funding for minimization and mitigation; and 4) the authorization will not jeopardize the continued existence of the listed species.

Lake and Streambed Alteration. Section 1602 of the Fish & Game Code requires any person, state, or local governmental agency to provide advance written notification to CDFW prior to initiating any activity that would: 1) divert or obstruct the natural flow of, or substantially change or remove material from the bed, channel, or bank of any river, stream, or lake; or 2) result in the disposal or deposition of debris, waste, or other material into any river, stream, or lake. The state definition of "lakes, rivers, and streams" includes all rivers or streams that flow at least periodically or permanently through a well-defined bed or channel with banks that support fish or other aquatic life, and watercourses with surface or subsurface flows that support or have supported riparian vegetation.

California Native Plant Protection Act. Section 1900-1913 of the California Fish and Game Code contains the regulations of the Native Plant Protection Act of 1977. The intent of this act is to help conserve and protect rare and endangered plants in the state.

Regional Water Quality Control Board. The RWQCB not only regulates impacts to water quality in federal waters of the U.S. under Section 401 of the Clean Water Act, but they also regulate any isolated waters that are impacted under the state Porter Cologne Act utilizing a Waste Discharge Requirement. Discharge of fill material into waters of the State not subject to the jurisdiction of the USACE pursuant to Section 401 of the Clean Water Act may require authorization pursuant to the Porter Cologne Act through application for waste discharge requirements or through waiver of waste discharge requirements.

2 METHODS

2.1 Literature Review

Relevant literature, including relevant plans, policies, and biological information, was reviewed to determine what biological resources may occur near or in the project area. Research included:

- Review of agency plans pertaining to sensitive and special-status species;
- Queries of special-status species occurrence records;
- Review of literature on sensitive species and biological resources in the project area and region;

We conducted a search of the California Natural Diversity Database (CNDDB June 2018 data) and the California Native Plant Society (CNPS) On-line Inventory of Rare and Endangered Plants of California for special status species known to occur in the 9 USGS 7.5-minute quadrangles surrounding the Study Area: Templeton, Adelaida, Paso Robles, Estrella, York Mtn, Creston, Morro Bay North, Atascadero, Santa Margarita.

Additional special status species research consisted of reviewing previous biological reports for the area and searching online museum and herbarium specimen records for locality data within San Luis Obispo County. We reviewed online databases of specimen records maintained by the Museum of Vertebrate Zoology at the University of California, Berkeley, the California Academy of Sciences, and the Consortium of California Herbaria. Additional special status species with potential to occur on or near the Study Area were added to our special status species list (refer to Appendix A and Appendix B.

Special status species lists produced by database and literature searches were cross-referenced with the described habitat types in the Study Area to identify all potential special status species that could occur on or near the Study Area. Each special status species that could occur on or near the Study Area is individually discussed (refer to Section 4.4).

After review of the literature, the following criteria were used to determine the potential for special-status species to occur within the project area:

- ***Present:*** The species was observed in the project area during field surveys.
- ***High Potential:*** High habitat quality combined with CNDDB occurrences or other records indicate the species is likely to occur on the project site. Individuals may not have been observed in the project area during field surveys; however, the species likely occurs in the project vicinity and could move into the project site in the future.
- ***Moderate Potential:*** CNDDB occurrences or surveys have recorded the species within 10 miles of the project area and suitable habitat is present. The species could be present, at least seasonally or as a transient.
- ***Low Potential:*** Marginally suitable habitat may occur in the project area, but individuals were not observed during surveys and are not expected to be present.
- ***No Potential:*** Species, sign, or habitat were not observed on the site during surveys and suitable habitat is not present.

2.2 Mapping

Mapping efforts utilized Samsung Galaxy Tab 4 tablets equipped with Garmin GLO GPS Receivers and a third-party mapping application. Biological resource constraints were mapped in the field on site. Hand notation of habitats on high resolution aerials were digitized into polygon layers. Maps were created using aerial photo interpretation, field notation, and spatial data imported to Esri ArcGIS, a Geographic Information System (GIS) software program. Data were overlaid on a 2016 National Agriculture Imagery Program (NAIP) aerial of San Luis Obispo County (USDA 2016).

2.3 Surveys

The Study Area was surveyed for botanical resources on June 7, 2018 and for birds and other wildlife on June 6, 2018. Reconnaissance habitat survey was conducted on May 10, 2018. Surveys were conducted by Althouse and Meade, Inc. biologists Dan Meade, Kyle Nessen, and Will Knowlton (Table 1). Surveys were conducted on foot to compile species lists, search for special status plants and animals, map habitats, and to photograph the Study Area. The entire Study Area was surveyed.

TABLE 1. BIOLOGICAL SURVEYS.

Survey Date	Biologist(s)	Weather Observations	Activities
May 10, 2018 June 18, 2018	Daniel Meade	Clear, 60°F Clear, 80°F	Habitat survey Bio resources
June 6, 2018	Will Knowlton	Clouds, 70°F	Wildlife & nesting bird survey
June 7, 2018	Kyle Nessen	Clear, 65°F	Habitat assessment Botanical survey

2.3.1 Botanical

Each habitat type occurring in the Study Area was inspected, described, and catalogued (Section 3). All plant species observed in the Study Area were identified and recorded (Section 3.9 and Table 4). Reconnaissance transects were meandering with an emphasis on locating habitat appropriate for special status plants. Transects were utilized to map boundaries of different vegetation types, describe general conditions and dominant species, compile species lists, and evaluate potential habitat for special status species. Identification of botanical resources included field observations and laboratory analysis of collected material. Botanical surveys were conducted in date according to agency guidelines (USFWS 2000, CDFG [CDFW] 2009, and CNPS 2001). Botanical surveys were appropriately timed to identify all special status plant species known from the region (refer to Appendix A and Section 3.6) that have potential to occur in the Study Area. Although an early season botanical survey was not conducted, there are no special status plants expected to occur in the proposed project area that would be added by an early spring survey. Botanical nomenclature used in this document follows the Jepson Manual, Second Edition

(Baldwin et al. 2012). We also provide Jepson Manual First Edition names in brackets where nomenclature has recently changed.

2.3.2 Wildlife

Wildlife documentation included observations of animal presence and wildlife sign such as nests, tracks, and scat. Observations of wildlife were recorded during field surveys in all areas of the Study Area (Section 3.10 and Table 5). Birds were identified by sight, using 10-power binoculars, or by vocalizations. Reptiles and amphibians were identified by sight, often using binoculars, and by hand-captures; traps were not used. Mammals recorded in the Study Area were identified by sight and tracks.

2.4 Soils

The soil map unit in the proposed project area is Mocho clay loam, 0 to 2 percent slopes. Mocho clay loam (173) occurs on alluvial fans and alluvial flats on sedimentary rock as the parent material. The surface horizon is 19 inches with a claypan at 8 inches. Soil horizons quickly transition to undeveloped clay loam and loam to 44 inches, then gravelly loam and silt loam to a depth of 64 inches. The depth to restrictive feature is more than 80 inches. This map unit is well drained with no flooding or ponding. This characterization is confirmed on the project site by no evidence of ponding. It has a hydric soil rating of "No". The land capability classification for irrigated crops is 1. Class I (1) soils have slight limitations that restrict their use. Mocho clay loam is prime farmland.

Three other soil map units occur in the Study Area but not in the project area. These soils are Metz-Tujunga complex, occasionally flooded, 0 to 5 percent slopes, that is confined to the bank of the terrace at the Salinas River flood channel; Lockwood shaly loam (158) that occurs west of the proposed project site along the railroad, and Corducci-Typic Xerofluvents that occurs in the Salinas River channel. These soil types do not occur within the proposed project area.

A custom soil report for the Study Area can be found as Appendix C.

3 RESULTS

3.1 Regional Context

The Study Area is located in San Luis Obispo County, within in the city of Paso Robles. The Study Area borders the Salinas River and commercial developments. The surrounding area to the east is sparsely populated or undeveloped. Industrial and commercial development occurs to the east along the U.S. Highway 101 corridor.

3.2 Existing Conditions

A large, recently plowed agricultural field is the primary feature of the Study Area, which is predominately unvegetated except for a few scattered stands of perennial weeds such as field bindweed (*Convolvulus arvensis*) and Russian thistle (*Salsola tragus*). Several mature valley oaks (*Quercus lobata*) are scattered within the agricultural field. Areas that have not been plowed, such as the borders of the field and service roads, are highly disturbed and heavily invaded with ruderal weeds. In the center of the agricultural field is a water treatment facility associated with Firestone Walker Brewery. A narrow riparian zone separates the Study Area from the sand and gravel wash habitat in the Salinas River.

3.3 Habitat Types

Two habitat types are described and mapped within the 28.4 acre Study Area (Table 2 and see Figure 6 in Section 7). Most of the Study Area, approximately 25.3 acres, is agricultural farmland. The remaining area consists of approximately 3.1 acres of riparian habitat along a bank of the Salinas River. The proposed project would be on approximately 10.0 acres defined by a chain link security fence that would enclose the solar plant within the agricultural habitat type. The actual area of solar panels would be less than the project area, and some habitat value would remain within the solar arrays depending on management practices.

TABLE 2. HABITAT TYPES.

Habitat Type	Location	Approximate Acreage
Agricultural	Center of the Study Area	25.3
Riparian	Southern and eastern borders of the Study Area	3.1

3.3.1 Agricultural

The agricultural field is predominately unvegetated except for two large stands of the agrestal perennial weeds, Russian thistle (*Salsola tragus*) and field bindweed (*Convolvulus arvensis*). Other less common forbs can be found as individuals or in small numbers, such as lamb's quarters (*Chenopodium album*), jimsonweed (*Datura wrightii*), and wild mustard (*Hirschfeldia incana*).

Large valley oaks (*Quercus lobata*) can be found within the field, are farmed around, and likely predate any farming activity in the Study Area.

3.3.2 Ruderal

Ruderal habitats are dominated by nonnative invasive plants such as wild mustard (*Hirschfeldia incana*), red brome (*Bromus madritensis ssp. rubens*), and ripgut brome (*Bromus diandrus*) and occur where human disturbance is common. Native forbs often associated with disturbance can be found in this habitat as well, such as jimsonweed (*Datura wrightii*), coyote brush (*Baccharis pilularis*), and common fiddleneck (*Amsinckia intermidea*). This habitat type is on the edges of the Study Area along sides of roads, fences, and other human created boundaries, and would not be part of the proposed project area.

3.3.3 Riparian

Plants that associate with mesic conditions such as Fremont cottonwood (*Populus fremontii*), box elder (*Acer negundo*), and red willow (*Salix laevigata*) define riparian habitats. The understory can be heavily invaded with nonnative grasses and forbs such as Italian rye grass (*Festuca pernnis*), and milk thistle (*Silybum marianum*), making it difficult to differentiate from ruderal habitats.

3.4 Potential Wetlands and Jurisdictional Waters

Wetlands and jurisdictional waters occur outside of the proposed project area and within the Salinas River corridor. Areas of potential wetlands within the proposed project footprint were not found. There was no evidence in the Study Area of ponded water, including cracked crusts or wetland vegetation. Thorough surveys of the site were conducted in June, 48 days after the last rainfall of the season in Paso Robles. Examination of historical aerial photographs of the site showed no evidence of ponding water in the proposed project site. This soil map unit is well drained with no flooding or ponding (Section 2.4). The project is not expected to affect wetlands or waters.

3.5 Habitat Connectivity and Wildlife Movement

The proposed project is adjacent to the Salinas River corridor in an agricultural field. It would not affect aquatic species in the Salinas River during periods of water flow. The project would be fenced for safety reasons and would exclude large mammals such as deer. Mid-size mammals such as bobcat and coyote are adept and either jumping or climbing over (bobcat, racoon) or digging under fences (coyote, red fox, badger). East of the project site the Salina River corridor is open sandy flats and grassland with sparse cottonwoods and willows. Distance between the proposed project fence and the nearest fenced land to the east is approximately 1,000 feet. Wildlife movement would occur through the Salinas River corridor, but is restricted on the east by residential properties and on the west by commercial development and US Highway 101.

3.6 Special Status Plant Species

Research on special status plant occurrences conducted within the designated search area (see Methods) determined 62 special status plant species are known to occur in the region (refer to

Appendix A). Appropriate habitat and soil conditions are present in the Study Area for none of the special status plants in the region. Figures 3 and 5 in Section 7 depict the current GIS data for special status plant species and critical habitat mapped near the Study Area by the CNDDB and the United States Fish and Wildlife Service (USFWS).

3.6.1 Introduction to California Rare Plant Ranks

Plant species are considered rare when their distribution is confined to localized areas, when there is a threat to their habitat, when they are declining in abundance, or are threatened in a portion of their range. The California Rare Plant Rank (CRPR) categories range from species with a low threat (CRPR 4) to species that are presumed extinct (CRPR 1A). The plants of CRPR 1B are rare throughout their range. All but a few species are endemic to California. All of them are judged to be vulnerable under present circumstances, or to have a high potential for becoming vulnerable.

3.6.2 Introduction to CNDDB Definitions

"Special Plants" is a broad term used to refer to all the plant taxa inventoried by the CNDDB, regardless of their legal or protection status (CDFW April 2018). Special plants include vascular plants, high priority bryophytes (mosses, liverworts, and hornworts), and lichens. The CNDDB uses a ranking methodology that includes a Global rank (G rank) that describes a taxon over its entire distribution and a State rank (S rank) that describes the rank for the taxon over its California distribution. Subspecies and varieties are ranked with a "T" rank for their Global status. Global and State ranks are represented by a letter-number score that reflects a combination of rarity, threat and trend factors, with weighting being heavier of rarity. A Global rank of G1 or a State rank of S1 indicates a taxon that is critically imperiled, while a G5 or S5 rating indicates the taxon is common and widespread.

3.6.3 Potential Special Status Plant List

A comprehensive list of special status plant species reviewed is included as Appendix A. Federal and California State status, global and State rank, and CNPS rank status for each species are given. Also included are typical blooming periods, habitat preference, potential to occur on site, whether the species was detected in the Study Area, and effect of proposed activity.

3.6.4 Discussion

Based on an analysis of known ecological requirements for the special status plant species reported from the region (Appendix A), and the habitat conditions that were observed in the Study Area, it was determined that no special status plant species have a potential to occur in the Study Area.

3.7 Special Status Animal Species

Research on special status animal occurrences conducted within the designated search area (see Methods) determined 37 special status animal species are known to occur in the region (refer to Appendix B). Appropriate habitat conditions are present in the proposed project area for two special status animals (Table 3). Figures 4 and 5 in Section 7 depict the current GIS data for special status species and critical habitat mapped in the vicinity of the Property by the CNDDB and the United States Fish and Wildlife Service (USFWS).

3.7.1 Introduction to CNDDB Definitions

"Special Animals" is a general term that refers to all of the animal taxa inventoried by the CNDDB, regardless of their legal or protection status (CDFW October 2017). The Special Animals list is also referred to by the California Department of Fish and Wildlife (CDFW) as the list of "species at risk" or "special status species." These taxa may be listed or proposed for listing under the California and/or Federal Endangered Species Acts, but they may also be species deemed biologically rare, restricted in range, declining in abundance, or otherwise vulnerable.

Animals listed as California Species of Special Concern (SSC) may or may not be listed under California or Federal Endangered Species Acts. They are considered rare or declining in abundance in California. The Special Concern designation is intended to provide the California Department of Fish and Wildlife, biologists, land planners and managers with lists of species that require special consideration during the planning process to avert continued population declines and potential costly listing under federal and state endangered species laws. For many species of birds, the primary emphasis is on the breeding population in California. For some species that do not breed in California but winter here, emphasis is on wintering range. The SSC designation thus may include a comment regarding the specific protection provided such as nesting or wintering.

Animals listed as Fully Protected are those species considered by CDFW as rare or faced with possible extinction. Most, but not all, have subsequently been listed under the California Endangered Species Act (CESA) or the Federal Endangered Species Act (FESA). Fully Protected species may not be taken or possessed at any time and no provision of the California Fish and Game code authorizes the issuance of permits or licenses to take any Fully Protected species.

3.7.2 Potential Special Status Animals List

Two special status animal species reported from the region have potential to occur on the proposed project site (Table 3). Federal and California State status, global and State rank, and CDFW listing status for each species are given. Typical breeding period, habitat preference, potential habitat on site, whether the species was detected in the Study Area, and effect of proposed activity are also provided. A comprehensive list of the 37 special status animal species reviewed is included as Appendix B.

TABLE 3. SPECIAL STATUS ANIMAL LIST. List of species with potential to occur within the proposed project area. A complete list of species reviewed is included as Appendix B.

	Common Name *Scientific Name*	Fed/State Status Global/State Rank CDFW Rank	Nesting-Breeding Period	Habitat Preference	Potential to Occur	Detected Within Study Area?	Effect of Proposed Activity
1.	**American Badger** *Taxidea taxus*	None/None G5/S3 SSC	February – May	Needs friable soils in open ground with abundant food source such as California ground squirrels.	Low. Friable soils and open ground present within Study Area.	No.	No Effect with mitigation.
2.	**San Joaquin Kit Fox** *Vulpes macrotis mutica*	Endangered/ Threatened Special Animal	December – July	Annual grasslands or grassy open stages with scattered shrubby vegetation. Needs loose textured sandy soil and prey base.	Low. Heavily tilled open sandy soil is present within the Study Area.	No.	No Effect with standard mitigation.
3.							

Habitat characteristics are from the Jepson Manual and the CDNNB.
*not listed in the CNDDB or CNPS for the search area, but possibly for the location.

Abbreviations:

FE: Federally Endangered
FT: Federally Threatened
PE: Proposed Federally Endangered
PT: Proposed Federally Threatened

CE: California Endangered
CT: California Threatened
Cand. CE: Candidate for California Endangered
Cand. CT: Candidate for California Threatened

SSC: CDFW Species of Special Concern
FP: CDFW Fully-Protected

3.7.3 Discussion

Based on an analysis of known ecological requirements for the 37 special-status wildlife species reported or known from the region, and the habitat conditions that were observed in the Study Area and the proposed project site, it was determined that two species have a low potential to occur (American badger, San Joaquin kit fox). We discuss these two species below and describe habitat, range restrictions, known occurrences, and survey results for the Study Area.

A. American Badger (*Taxidea taxus*) is a California Species of Special Concern known from open grassland habitats throughout San Luis Obispo County and elsewhere in California. Badgers are highly mobile and hunt ground squirrels and other small and medium-sized prey. They are generally uncommon in the Paso Robles area, and although suitable open habitat is found in the Study Area, proximity to the urban edge of the City and the sandy wash habitat in the adjacent Salinas River corridor reduces the likelihood of badger presence. Badgers typically inhabit grasslands but do occasionally forage in cropland where California ground squirrels are abundant. Ground squirrels are found in the Study Area. No badgers or badger sign were observed in the Study Area during our surveys in 2018.

B. San Joaquin Kit Fox (*Vulpes macrotis mutica*) is a federally listed endangered species and a state listed threatened species. The CNDDB reports two occurrences approximately four miles northeast of the Study Area on Chandler Ranch from 1990 and 1991 (CNDDB 945 and 941). The cropland in the Study Area provides poor quality habitat for San Joaquin kit fox due to regular disturbance, low prey availability, lack of connection to appropriate foraging territory, barriers to extant populations, and agricultural management. San Joaquin kit fox was not observed in the Study Area during the spring 2018 wildlife surveys. The proposed project is within the CDFW designated two to one mitigation area for San Joaquin kit fox (San Luis Obispo County 2018). A San Joaquin Kit Fox Habitat Evaluation Form will be completed specific to this property and project once site design is complete.

The remaining 35 special status animal species that were evaluated were determined to have no potential to occur in the proposed project area due to lack of suitable habitat. However, four of these species either are listed or are candidates for listing as threatened or endangered under the Federal Endangered Species Act (FESA) and/or California Endangered Species Act (CESA). Therefore, although they are not expected to be affected by the proposed project, these species warrant further discussion:

A. Tricolored Blackbird (*Agelaius tricolor*) is a Candidate federal endangered and State listed endangered species. It requires open water and protected nesting substrate such as tules or cattails and foraging area with insect prey near to its colonial nesting site. This type of habitat is not present on the project site, in the Study Area, or nearby in the Salinas River corridor.

B. Vernal Pool Fairy Shrimp (*Branchinecta lynchi*) is a federally listed Threatened species. It is found in ephemeral and seasonal clear water sandstone depression pools, earth slump or basalt flow depression pools, and locally in grass swales and vernal pools. This habitat type is not found in the Study Area and does not appear in the aerial photographic record of the site. Soils in the Study Area are well-drained and do not pond. Site surveys found no evidence of standing water such as dried crusts or wetland vegetation indicators in the project area. A

protocol level survey was not conducted for the site due to timing constraints, however the potential for this species to occur in the Study Area is extremely low.

C. California Red-legged Frog (*Rana draytonii*) is a federally listed Threatened species that occurs in lowlands and foothills in or near sources of deep water with dense, shrubby, or emergent riparian vegetation. The closest report of CRLF to the Study Area is from Graves Creek near the confluence with the Salinas River approximately 4.6 miles south of the Study Area. There are no reports of CRLF from the Salinas River in Paso Robles, probably due to the seasonal extremes in flow patterns that include high rapid flows and summer time drying of the channel. Protected breeding pools are not found in the Salinas River channel in the vicinity of the Study Area, and habitat on the project site would not support CRLF. This species seeks refuge in areas of perennial water, or in dense protective vegetative cover during dry periods. This type of aquatic or protective habitat does not occur on the proposed project site.

D. Least Bell's Vireo (*Vireo bellii pusillus*) it a federally and state listed Endangered species that utilizes riparian habitat near water or dry streambeds. It nests in extensive willow, mesquite, Arundo, or mule fat thickets. The nearest report of this species to the project site is from 1924 when birds were found nesting in wild rose bushes 50 feet from running water in the "Salinas River bottom, Paso Robles". Another report was made in 2005 of a breeding pair observed in the Salinas River about 4.8 miles north of the Study Area in willow, cottonwood, mule fat riparian habitat. Flowing water was present in a 10 to 20-foot wide channel and beaver dams created pools. Habitat in the Salinas River near the Study Area is rather sparse, with no dense riparian cover suitable for nesting Least Bell's vireo. The proposed project site has no vegetation that would support nesting Least Bell's vireos-

3.9 Botanical Survey Results

Botanical surveys conducted in June 7, 2018 identified 40 species or subspecies of vascular plant taxa in the Study Area (Table 4). The Study Area included locations outside of the proposed project area, such as the riparian edge. The list includes 12 species native to California and 28 introduced (naturalized or planted) species. Native plant species account for approximately 43 percent of the Study Area flora; introduced species account for approximately 57 percent. Special status plants were not identified in the Study Area.

TABLE 4. VASCULAR PLANT LIST.

Common Name	Scientific Name	Special Status	Origin
Trees – 6 Species			
Box elder	*Acer negundo*	None	Native
California coffee berry	*Frangula californica*	None	Native
Fremont cottonwood	*Populus fremontii*	None	Native
Coast live oak	*Quercus agrifolia*	None	Native
Valley oak	*Quercus lobata*	None	Native
Red willow	*Salix laevigata*	None	Native
Shrubs – 3 Species			
Coyote brush	*Baccharis pilularis*	None	Native
Blue elderberry	*Sambucus nigra* ssp. *Caerulea*	None	Native
Western poison oak	*Toxicodendron diversilobum*	None	Native
Forbs – 24 Species			
Tumbleweed	*Amaranthus albus*	None	Introduced
Common fiddleneck	*Amsinckia intermedia*	None	Native
Mayweed	*Anthemis cotula*	None	Introduced
Narrow-leaf milkweed	*Asclepias fascicularis*	None	Native
Black mustard	*Brassica nigra*	None	Introduced
Tocalote	*Centaurea melitensis*	None	Introduced
Lamb's quarters	*Chenopodium album*	None	Introduced
Poison hemlock	*Conium maculatum*	None	Introduced
Bindweed	*Convolvulus arvensis*	None	Introduced
Jimsonweed	*Datura wrightii*	None	Native
Flax-leaved horseweed	*Erigeron bonariensis*	None	Introduced
Redstem filaree	*Erodium cicutarium*	None	Introduced

Common Name	Scientific Name	Special Status	Origin
Spotted spurge	*Euphorbia maculata*	None	Introduced
Wild mustard	*Hirschfeldia incana*	None	Introduced
Horehound	*Marrubium vulgare*	None	Introduced
Sourclover	*Melilotus indicus*	None	Introduced
Manyflower tobacco	*Nicotiana cuminata* var. *multiflora*	None	Introduced
Common devil's claw	*Proboscidea louisianica* ssp. *louisianica*	None	Introduced
Curly dock	*Rumex crispus*	None	Introduced
Russian thistle	*Salsola tragus*	None	Introduced
Milk thistle	*Silybum marianum*	None	Introduced
Oriental hedge mustard	*Sisymbrium orientale*	None	Introduced
Dwarf nettle	*Urtica urens*	None	Introduced
Hairy vetch	*Vicia villosa*	None	Introduced
Grasses – 7 Species			
Wild oat	*Avena fatua*	None	Introduced
Ripgut grass	*Bromus diandrus*	None	Introduced
Red brome	*Bromus madritensis* ssp. *rubens*	None	Introduced
Bermuda grass	*Cynodon dactylon*	None	Introduced
Italian rye grass	*Festuca perennis*	None	Introduced
Wall barley	*Hordeum murinum*	None	Introduced
common barley	*Hordeum vulgare*	None	Introduced

3.10 Wildlife Survey Results

At least 92 animal species could occur in the Study Area (Table 5). These include at least 2 amphibians, 9 reptiles, 65 birds, and 16 mammals. Small mammal trapping studies were beyond the scope of this report, although several additional common rodent species are likely to occur. We provide this list as a guide to the wildlife observed in the Study Area and to the species that could potentially be present at least seasonally. Other species could occur as transients, particularly avian fauna.

Wildlife species *detected* in the Study Area include, 2 reptiles, 22 birds, and 4 mammals.

TABLE 5. WILDLIFE LIST.

Common Name	Scientific Name	Special Status	Found On-site	Habitat Type
Amphibians – 2 Species				
California (Western) Toad	*Anaxyrus [=Bufo] boreas halophilus*	None		Grassland, woodland
Sierran Treefrog [=Pacific Chorus Frog]	*Pseudacris sierra* [formerly *P. regilla*]	None		Many habitats near water
Reptiles – 9 Species				
Western pond turtle	*Actinemys pallida*	SSC		Ponds, lakes, rivers, streams, creeks, marshes, prefers pools with basking places
Northern California [=Silvery] Legless Lizard	*Anniella pulchra*	SSC		Sandy soils in dunes, woodlands, coastal scrub
Northern Pacific Rattlesnake	*Crotalus oreganus oreganus*	None		Dry, rocky habitats
California Alligator Lizard	*Elgaria multicarinata multicarinata*	None		Open grassland, woodland, chaparral
California kingsnake	*Lampropeltis califoniae*	None	✓	Many habitats from sea level to 7,100 feet
Pacific Gopher Snake	*Pituophis catenifer catenifer*	None		Woodland, grassland, rural
Western Red-tailed [=Gilbert's] Skink	*Plestiodon [=Eumeces] gilberti rubricaudatus*	None		Woodland, grassland, chaparral; inland areas
Skilton's [=Western] Skink	*Plestiodon [=Eumeces] skiltonianus skiltonianus*	None		Woodland, grassland, chaparral, inland and coastal
Coast Range [=Western] Fence Lizard	*Sceloporus occidentalis bocourtii*	None	✓	Wide range; variety of habitats
Birds – 65 Species				
White-throated Swift	*Aeronautes saxatalis*	None		Scrub
Red-winged Blackbird	*Agelaius phoeniceus*	None		Marshes, fields
Mallard	*Anas platyrhynchos*	None	✓	Marshes, grain fields, ponds, rivers, lakes, parks
Western Scrub Jay	*Aphelocoma californica*	None	✓	Oak, riparian woodlands
Oak Titmouse	*Baeolophus inornatus*	SA (Nesting)		Oak woodland
Great Horned Owl	*Bubo virginianus*	None		Woodland, grassland
Red-tailed Hawk	*Buteo jamaicensis*	None		Open, semi-open country

Common Name	Scientific Name	Special Status	Found On-site	Habitat Type
California Quail	*Callipepla californica*	None		Coastal sagebrush, chaparral, foothills, high desert
Anna's Hummingbird	*Calypte anna*	None		Many habitats
Wilson's Warbler	*Cardellina pusilla*	None		Scrub, forest edges, forest openings
Lawrence's Goldfinch	*Carduelis lawrencei*	SA (Nesting)		Oak woodlands, savanna
Lesser Goldfinch	*Carduelis psaltria*	None		Riparian, oak woodlands
American Goldfinch	*Carduelis tristis*	None		Weedy fields, woodlands
House Finch	*Carpodacus mexicanus*	None	✓	Riparian, grasslands, chaparral, and woodlands
Turkey Vulture	*Cathartes aura*	None	✓	Open country
Hermit Thrush	*Catharus guttatus*	None		Woodland and brush
Killdeer	*Charadrius vociferus*	None	✓	Fields, pastures, plowed fields
Lark Sparrow	*Chondestes grammacus*	SA (Nesting)		Woodland edges
Northern Flicker	*Colaptes auratus*	None		Woodlands
American Crow	*Corvus brachyrhynchos*	None		Many habitats, esp. urban
Yellow-rumped Warbler	*Dendroica coronata*	None		Woodlands, brush, open country
Brewer's Blackbird	*Euphagus cyanocephalus*	None		Open habitats
American Kestrel	*Falco sparverius*	None		Open, semi-open country
Bullock's Oriole	*Icterus bullockii*	None	✓	Oak, riparian woodlands
Hooded Oriole	*Icterus cucullatus*	None		Urban, mixed woodland
Dark-eyed Junco	*Junco hyemalis*	None		Oak woodland
Acorn Woodpecker	*Melanerpes formicivorus*	None		Oak woodland
Song Sparrow	*Melospiza melodia*	None		Oak, riparian woodland
California Towhee	*Melozone crissalis*	None	✓	Brushy areas, chaparral, coastal scrub, gardens
Northern Mockingbird	*Mimus polyglottos*	None	✓	Riparian, chaparral and woodlands, urban
Ash-throated Flycatcher	*Myiarchus cinerascens*	None	✓	Deserts, brush, open woods
House Sparrow	*Passer domesticus*	None		Rural and developed areas, agricultural, urban areas
Savannah Sparrow	*Passerculus sandwichensis*	None		Open habitats, marshes, grasslands
Band-tailed pigeon	*Patagioenas fasciata*	None	✓	Oak canyons, foothills, chaparral, mountain forests

Common Name	Scientific Name	Special Status	Found On-site	Habitat Type
Cliff Swallow	*Petrochelidon pyrrhonota*	None	✓	Near and over water, nest on vertical faces
Phainopepla	*Phainopepla nitens*	None	✓	Desert scrub, mesquites, oak foothills, mistletoe clumps
Yellow-billed Magpie	*Pica nuttalli*	SA (Nesting)		Oak savanna
Nuttall's Woodpecker	*Picoides nuttallii*	SA (Nesting)		Oak, riparian woodlands
Downy Woodpecker	*Picoides pubescens*	None		Oak, riparian woodlands
Hairy Woodpecker	*Picoides villosus*	None		Oak, riparian woodlands
Western Tanager	*Piranga ludoviciana*	None		Open coniferous and mixed coniferous-deciduous woodlands
Bushtit	*Psaltriparus minimus*	None	✓	Woodlands, chaparral
Great-tailed Grackle	*Quiscalus mexicanus*	None		Rural and developed areas, agricultural, urban areas
Black Phoebe	*Sayornis nigricans*	None	✓	Near water
Say's Phoebe	*Sayornis saya*	None		Open country, grassland
Yellow Warbler	*Setophaga petechia*	None		Open woodlands
Western Bluebird	*Sialia mexicana*	None	✓	Woodland near open areas
White-breasted Nuthatch	*Sitta carolinensis*	None	✓	Oak savannah, woodland
Lawrence's Goldfinch	*Spinus lawrencei*	None	✓	Open woodlands chaparral, weedy fields
Lesser goldfinch	*Spinus psaltria*	None	✓	Thickets, weedy fields, woodlands, clearings, scrub
Northern Rough-winged Swallow	*Stelgidopteryx serripennis*	None		Open areas, often near water
Eurasian Collared-Dove	*Streptopelia decaocto*	None	✓	Urban, agricultural areas
Western Meadowlark	*Sturnella neglecta*	None		Open habitats, grasslands
European Starling	*Sturnus vulgaris*	None	✓	Agricultural, livestock areas
Tree Swallow*	*Tachycineta bicolor*	None	✓	Forage over water, open areas,
Violet-green Swallow	*Tachycineta thalassina*	None		Oak, riparian woodlands, open areas near water
Bewick's Wren	*Thryomanes bewickii*	None		Riparian woodland, scrub
House Wren	*Troglodytes aedon*	None	✓	Open forests, savanna, backyards,
American Robin	*Turdus migratorius*	None		Open woodlands

Common Name	Scientific Name	Special Status	Found On-site	Habitat Type
Western Kingbird	*Tyrannus verticalis*	None		Grasslands, savanna
Cassin's Kingbird	*Tyrannus vociferans*	None		Open and semi-open areas
Warbling Vireo	*Vireo gilvus*	None		Mature deciduous woodlands, especially near water
Mourning Dove	*Zenaida macroura*	None		Open and semi-open habitats
White-crowned Sparrow	*Zonotrichia leucophrys*	None		Oak, riparian woodlands
California Thrasher	*Toxostoma redivivum*	None		Lowland and coastal chaparral, riparian woodland thickets, urban parks
Mammals – 16 Species				
Coyote	*Canis latrans*	None	✓	Open woodlands, brushy areas, wide ranging.
California Pocket Mouse	*Chaetodipus californicus*	None		Chaparral, brush habitats
Virginia Opossum	*Didelphis virginiana*	None		Woodlands, forests, urban
Domestic Cat	*Felis catus*	None		Urban areas
Hoary Bat	*Lasiurus cinereus*	None		Variety of habitats, roosts in foliage
Long-tailed Weasel	*Mustela frenata*	None		Grasslands
California Myotis	*Myotis californicus*	None		Tunnels, hollow trees, buildings, bridges.
Mule Deer	*Odocoileus hemionus*	None		Many habitats
Raccoon	*Procyon lotor*	None		Mixed forests, ponds, rivers, urban
California Ground Squirrel	*Spermophilus beecheyi*	None	✓	Grasslands
Wild Boar	*Sus scrofa*	None		Woodlands
Desert Cottontail	*Sylvilagus audubonii*	None	✓	Brushy habitats
Brush Rabbit	*Sylvilagus bachmani*	None		Brushy habitats
Valley Pocket Gopher	*Thomomys bottae*	None	✓	Variety of habitats
Gray Fox	*Urocyon cinereoargenteus*	None		Chaparral, dry woodlands
Red Fox	*Vulpes vulpes*	None		Forest and open country

4 POTENTIAL IMPACTS

4.1 Habitats

The project would be built on agricultural land that has a history of dry-land farming for at least the past twenty-five years. Crops grown on the site are dry farmed grains and safflower. The project footprint is 9 acres that would be within a security fence on agricultural habitat type. Access to the project area would be by existing disturbed farm roads adjacent to the water treatment facility. After project completion, areas within the solar plant could still provide some habitat value for birds and small mammals depending on management practices. The project would not affect riparian habitat along the Salinas River.

4.1.1 Agricultural habitat

Agricultural habitat is the only habitat type that will be impacted by the proposed project through removal of approximately 10.0 acres of dry-farmed cropland. This habitat type can be utilized by foraging raptors, and mammals, and poses risk for other animals that may not be mobile enough to survive agricultural activities such as harvest and plowing. The loss of agricultural habitat is considered in the City of Paso Robles Zoning Code where the subject property is zoned as Planned Industrial (Map A4, 05.03.2011,City of El Paso de Robles, Zoning Designations).

4.2 Potential Wetlands and Jurisdictional Waters

Wetlands and jurisdictional waters occur outside of the proposed project area and within the Salinas River corridor. The project is not expected to affect wetlands or waters.

4.3 Nesting Birds

Red-tailed hawks have nested in a valley oak tree at the southern end of the Study Area within 500 feet of the proposed solar plant. There is potential for ground nesting birds to occur within the proposed project area. Nesting raptors in oaks within 500 feet of the project and ground nesting birds within the project site area of ground disturbance could be affected by construction of the solar plant.

4.4 Special Status Species

4.4.1 Plants

Special status plants were not found in the Study Area, and due to the long history of agricultural use, and the site soil, aspect, and ecological context, there are no special status plant species expect to occur in the proposed project area.

4.4.2 Amphibians and Reptiles

Special status amphibians or reptiles were not found within the Study Area and are not expected to occur within the proposed project site.

4.4.3 Mammals

Two special status mammals, American Badger and San Joaquin kit fox have a low probability of utilizing habitat in the proposed project site. American badger was found in 2003 as roadkill within two miles of the Study Area. Since habitat in the proposed project area could be utilized by American badger protective measures to mitigate impacts to this species are provided (see Section 5.4.4).

San Joaquin kit fox was last observed in the Paso Robles area in 1991 at what is now Barney Schwartz Park approximately four miles northwest of the Study Area. Although San Joaquin kit fox has not been observed in the vicinity for many years, the historic and potential habitat suitable for kit fox as defined by CDFW and the County of San Luis Obispo (2018) could be utilized by the species if range recovery of the species extends into the Paso Robles area. Therefore, mitigation is required for San Joaquin kit fox (see Section 5.4.5).

4.5 Habitat Connectivity and Wildlife Movement

The proposed project will reduce open ground accessible for north and south movement of wildlife along the Salinas River corridor by approximately 500 feet. This will leave approximately 1,000 feet between the solar plant fence and the nearest fence to the east, which is across the Salinas River channel at the property line of a parcel on Santa Ysabel Road. The eastern fence is barbed wire, which allows movement of terrestrial wildlife through an additional 500-foot wide area of rural residence open space. Aquatic species, such as steelhead would not be affected. Habitat remaining in the Salinas River movement corridor would consist of a portion of agricultural field, a narrow riparian edge, sandy wash and shrubs, the low flow channel, another riparian bank edge, and annual grassland on the eastern bank of the river. Wildlife will continue to move through the remaining corridor. North of the Study Area the Salinas River corridor is constrained to approximately 800 feet between the railroad track and residential urban development. Although this project is not likely to significantly restrict wildlife movement along the Salinas River corridor, cumulative reduction in the width of the corridor removes habitat and could eventually affect the ability of terrestrial wildlife to move safely along the Salinas River corridor.

5 MITIGATION RECOMMENDATIONS

5.1 Habitats

5.1.1 Agricultural Habitat

Biological resources in the agricultural habitat area consist of weeds and disturbance following plants, common wildlife, and possibly nesting birds. Impacts to nesting birds would be mitigated by BR-1 (Section 5.3). Dry-farmed grain crop, fallow ground, or other dry-farmed croplands can be utilized by San Joaquin kit fox. Mitigation for impacts to San Joaquin kit fox habitat can be accomplished by implementation of the standard mitigation program (see Section 5.4.5).

5.1.2 Riparian Habitat

The project area does not include riparian habitat. The project would not result in any impacts to riparian habitat.

5.2 Potential Wetlands and Jurisdictional Waters

Wetlands or waters do not occur within the project area, therefore no mitigations are necessary for project impacts. A portion of the project is within the 100-year flood zone, and will require a 1602 permit from the CDFW Lake and Streambed Alteration Agreement program. That permit may require additional measures for impacts to the flood zone as specified by CDFW in the agreement.

5.3 Nesting Birds

Migratory non-game native bird species are protected by international treaty under the Federal Migratory Bird Treaty Act (MBTA) of 1918 (50 C.F.R. Section 10.13). Sections 3503, 3503.5 and 3513 of the California Fish and Game Code prohibit take (as defined therein) of all native birds and their active nests, including raptors and other migratory non-game birds (as listed under the Federal MBTA). Ground nesting birds could occur in the project area.

BR-1. Within one week of ground disturbance or tree removal/trimming activities, if work occurs between March 15 and August 15, nesting bird surveys shall be conducted. To avoid impacts to nesting birds, grading and construction activities that affect trees and grasslands shall not be conducted during the breeding season from March 1 to August 15. If construction activities must be conducted during this period, nesting bird surveys shall take place within one week of habitat disturbance. If surveys do not locate nesting birds, construction activities may be conducted. If nesting birds are located, no construction activities shall occur within a distance specified by a qualified biologist, until chicks are fledged or nest fails. This includes nests of all common bird species (under the MBTA), as well as special status birds and raptor nests. Construction activities shall observe the delineated buffer, determined by a qualified biologist, where buffer radius will be specified according to special status rank, intensity of construction activity or impact (i.e. high decibel levels or heavy ground disturbance) and where local, state, and federal regulations apply. A preconstruction survey report shall be submitted to the lead agency immediately upon completion of the survey. The report shall detail appropriate fencing

or flagging of the buffer zone and make recommendations on additional monitoring requirements**.** A map of the Project site and nest locations shall be included with the report. The qualified biologist conducting the nesting survey shall have the authority to reduce or increase the recommended buffer depending upon site conditions.

5.4 Special Status Species

5.4.1 Plants

Special status plant species were not found in the Study Area, and are not expected on the project site. No impacts to special status plants would occur from the proposed project.

5.4.2 Invertebrates

No special status invertebrates are expected to be impacted by the project.

5.4.3 Amphibians and Reptiles

The proposed project is not expected to impact special status amphibians or reptiles.

5.4.4 American badger

American badger has moderate potential to occur in the Study Area. Project activities including grading and other excavation work could result in take of American badger adults or young, or disturbance of natal dens and abandonment by adult badgers. To reduce this potential impact to a less than significant level the following measure is recommended.

BR-2. A pre-construction survey shall be conducted within thirty days of beginning work on the sit**e** to identify if badgers are using the site. The results of the survey shall be sent to the project manager and the County of San Luis Obispo. If the pre-construction survey finds potential badger dens, they shall be inspected to determine whether they are occupied. The survey shall cover the entire property and shall examine both old and new dens. If potential badger dens are too long to completely inspect from the entrance, a fiber optic scope shall be used to examine the den to the end. Inactive dens may be excavated by hand with a shovel to prevent re-use of dens during construction. If badgers are found in dens on the property between February and July, nursing young may be present. To avoid disturbance and the possibility of direct take of adults and nursing young, and to prevent badgers from becoming trapped in burrows during construction activity, no grading shall occur within 100 feet of active badger dens between February and July. Between July 1st and February 1st all potential badger dens shall be inspected to determine if badgers are present. During the winter badgers do not truly hibernate but are inactive and asleep in their dens for several days at a time. Because they can be torpid during the winter, they are vulnerable to disturbances that may collapse their dens before they rouse and emerge. Therefore, surveys shall be conducted for badger dens throughout the year. If badger dens are found on the property during the pre-construction survey, the CDFG wildlife biologist for the area shall be contacted to review current allowable management practices

5.4.5 San Joaquin kit fox

The cropland found throughout most of the Study Area is considered potential habitat for San Joaquin kit fox. The California Department of Fish and Wildlife has designated the project area as within the two to one mitigation area for San Joaquin kit fox. A San Joaquin Habitat Evaluation Form will be completed when the actual acreage of the project footprint is determined and provided by the project Engineer. Impacts to San Joaquin kit fox by loss of habitat would be offset by implementation of BR-3, and mitigation of construction activities would be accomplished by applying BR-4 through BR- 13.

BR-3. Prior to issuance of grading and/or construction permits, the applicant shall submit evidence to the City of Paso Robles, Department of Community Development, Planning Division that states that one or a combination of the following three San Joaquin kit fox mitigation measures has been implemented:

a. Provide for the protection in perpetuity, through acquisition of fee or a conservation easement of **[Total number of mitigation acres required]** acres of suitable habitat in the kit fox corridor area (e.g. within the San Luis Obispo County kit fox habitat area, in the City of Paso Robles), either on-site or off-site, and provide for a non-wasting endowment to provide for management and monitoring of the property in perpetuity. Lands to be conserved shall be subject to the review and approval of the California Department of Fish and Wildlife (Department) and the City.

   This mitigation alternative (a.) requires that all aspects if this program must be in place before City permit issuance or initiation of any ground disturbing activities.

b. Deposit funds into an approved in-lieu fee program, which would provide for the protection in perpetuity of suitable habitat in the kit fox corridor area within San Luis Obispo County, and provide for a non-wasting endowment for management and monitoring of the property in perpetuity.

   Mitigation alternative (b) above, can be completed by providing funds to The Nature Conservancy (TNC) pursuant to the Voluntary Fee-Based Compensatory Mitigation Program (Program). The Program was established in agreement between the Department and TNC to preserve San Joaquin kit fox habitat, and to provide a voluntary mitigation alternative to project proponents who must mitigate the impacts of projects in accordance with the California Environmental Quality Act (CEQA). The fee, payable to "The Nature Conservancy", would total $**[Amount of fee based on $2500 per acre].** This fee is calculated based on the current cost-per-unit of $2500 per acre of mitigation, which is scheduled to be adjusted to address the increasing cost of property in San Luis Obispo County; your actual cost may increase depending on the timing of payment. This fee must be paid after the Department provides written notification about your mitigation options but prior to City permit issuance and initiation of any ground disturbing activities.

c. Purchase **[Total number of mitigation acres required]** credits in a Department-approved conservation bank, which would provide for the protection in perpetuity of suitable habitat within the kit fox corridor area and provide for a non-wasting endowment for management and monitoring of the property in perpetuity.

Mitigation alternative (c) above, can be completed by purchasing credits from the Palo Prieto Conservation Bank (see contact information below). The Palo Prieto Conservation Bank was established to preserve San Joaquin kit fox habitat, and to provide a voluntary mitigation alternative to project proponents who must mitigate the impacts of projects in accordance with the California Environmental Quality Act (CEQA). The cost for purchasing credits is payable to the owners of The Palo Prieto Conservation Bank and would total $**[Amount of mitigation acres required (i.e. credits), currently priced at $2500 per credit]**. This fee is calculated based on the current cost-per-credit of $2500 per acre of mitigation. The fee is established by the conservation bank owner and may change at any time. Your actual cost may increase depending on the timing of payment. Purchase of credits must be completed prior to City permit issuance and initiation of any ground disturbing activities.

BR-4. Prior to issuance of grading and/or construction permits, the applicant shall provide evidence that they have retained a qualified biologist acceptable to the City. The retained biologist shall perform the following monitoring activities:

i. **Prior to issuance of grading and/or construction permits and within 30 days prior to initiation of site disturbance and/or construction,** the biologist shall conduct a pre-activity (i.e. preconstruction) survey for known or potential kit fox dens and submit a letter to the City reporting the date the survey was conducted, the survey protocol, survey results, and what measures were necessary (and completed), as applicable, to address any kit fox activity within the project limits.

ii. **The qualified biologist shall conduct weekly site visits during site-disturbance activities** (i.e. grading, disking, excavation, stock piling of dirt or gravel, etc.) that proceed longer than 14 days, for the purpose of monitoring compliance with required Mitigation Measures BR-18 through BR-28. Site disturbance activities lasting up to 14 days do not require weekly monitoring by the biologist unless observations of kit fox or their dens are made on-site or the qualified biologist recommends monitoring for some other reason (see BR-19iii). When weekly monitoring is required, the biologist shall submit weekly monitoring reports to the City.

iii. Prior to or during project activities, if any observations are made of San Joaquin Kit fox, or any known or potential San Joaquin kit fox dens are discovered within the project limits, the qualified biologist shall re-assess the probability of incidental take (e.g. harm or death) to kit fox. At the time a den is discovered, the qualified biologist shall contact USFWS and the CDFW for guidance on possible additional kit fox protection measures to implement and whether or not a Federal and/or State incidental take permit is needed. If a potential den is encountered during construction, work shall stop until such time the USFWS determines it is appropriate to resume work.

If incidental take of kit fox during project activities is possible, **before project activities commence,** the applicant must consult with the USFWS. The results of this consultation may require the applicant to obtain a Federal and/or State permit for incidental take during project activities. The applicant should be aware that the presence of kit foxes or known or potential kit fox dens at the project site could result in further delays of project activities.

iv. In addition, the qualified biologist shall implement the following measures:

1. Within 30 days prior to initiation of site disturbance and/or construction, fenced exclusion zones shall be established around all known and potential kit fox dens. Exclusion zone fencing shall consist of either large flagged stakes connected by rope or cord, or survey laths or wooden stakes prominently flagged with survey ribbon. Each exclusion zone shall be roughly circular in configuration with a radius of distance measured outward from the den or burrow entrances, dependent on the use and activity of the den (i.e. potential, known, active, or natal den), to be determined by the kit fox biologist.
2. All foot and vehicle traffic, as well as all construction activities, including storage of supplies and equipment, shall remain outside of exclusion zones. Exclusion zones shall be maintained until all project-related disturbances have been terminated, and then shall be removed.
3. If kit foxes or known or potential kit fox dens are found on site, daily monitoring by a qualified biologist shall be required during ground disturbing activities.

BR-5. Prior to issuance of grading and/or construction permits, the applicant shall clearly delineate the following as a note on the project plans: "*Speed signs of 25 mph (or lower) shall be posted for all construction traffic to minimize the probability of road mortality of the San Joaquin kit fox".* Speed limit signs shall be installed on the project site within 30 days prior to initiation of site disturbance and/or construction.

BR-6. During the site disturbance and/or construction phase, grading and construction activities after dusk shall be prohibited unless coordinated through the City, during which additional kit fox mitigation measures may be required.

BR-7. Prior to issuance of grading and/or construction permit and within 30 days prior to initiation of site disturbance and/or construction, all personnel associated with the project shall attend a worker education training program, conducted by a qualified biologist, to avoid or reduce impacts on sensitive biological resources (i.e. San Joaquin kit fox). At a minimum, as the program relates to the kit fox, the training shall include the kit fox's life history, all mitigation measures specified by the City, as well as any related biological report(s) prepared for the project. The applicant shall notify the City shortly prior to this meeting. A kit fox fact sheet shall also be developed prior to the training program, and distributed at the training program to all contractors, employers and other personnel involved with the construction of the project.

BR-8. During the site-disturbance and/or construction phase, to prevent entrapment of the San Joaquin kit fox, all excavations, steep-walled holes and trenches in excess of two feet in depth shall be covered at the close of each working day by plywood or similar materials, or provided with one or more escape ramps constructed of earth fill or wooden planks. Trenches shall also be inspected for entrapped kit fox each morning prior to onset of field activities and immediately prior to covering with plywood at the end of each working day. Before such holes or trenches are filled, they shall be thoroughly inspected for entrapped kit fox. Any kit fox so discovered shall be allowed to escape before field

activities resume, or removed from the trench or hole by a qualified biologist and allowed to escape unimpeded.

BR-9. During the site-disturbance and/or construction phase, any pipes, culverts, or similar structures with a diameter of four inches or greater, stored overnight at the project site shall be thoroughly inspected for trapped San Joaquin kit foxes before the subject pipe is subsequently buried, capped, or otherwise used or moved in any way. If during the construction phase a kit fox is discovered inside a pipe, that section of pipe will not be moved. If necessary, the pipe may be moved only once to remove it from the path of activity, until the kit fox has escaped.

BR-10. During the site-disturbance and/or construction phase, all food-related trash items such as wrappers, cans, bottles, and food scraps shall be disposed of only in closed containers. These containers shall be regularly removed from the site. Food items may attract San Joaquin kit foxes onto the project site, consequently exposing such animals to increased risk of injury or mortality. No deliberate feeding of wildlife shall be allowed.

BR-11. Prior to, during and after the site-disturbance and/or construction phase, use of pesticides or herbicides shall be in compliance with all local, State and Federal regulations. This is necessary to minimize the probability of primary or secondary poisoning of endangered species utilizing adjacent habitats, and the depletion of prey upon which San Joaquin kit foxes depend.

BR-12. During the site-disturbance and/or construction phase, any contractor or employee that inadvertently kills or injures a San Joaquin kit fox or who finds any such animal either dead, injured, or entrapped shall be required to report the incident immediately to the applicant and City. In the event that any observations are made of injured or dead kit fox, the applicant shall immediately notify the USFWS and CDFW by telephone. In addition, formal notification shall be provided in writing within three working days of the finding of any such animal(s). Notification shall include the date, time, location and circumstances of the incident. Any threatened or endangered species found dead or injured shall be turned over immediately to CDFW for care, analysis, or disposition.

BR-13. Prior to final inspection, or occupancy, whichever comes first, should any long internal or perimeter fencing be proposed or installed, the applicant shall do the following to provide for kit fox passage:

i. If a wire strand/pole design is used, the lowest strand shall be no closer to the ground than 12 inches.
ii. If a more solid wire mesh fence is used, 8" x 12" openings near the ground shall be provided every 100 yards
iii. Upon fence installation, the applicant shall notify the City to verify proper installation. Any fencing constructed after issuance of a final permit shall follow the above guidelines.

6 PHOTOGRAPHS

Photo 1. Study Area overview from the northeast corner looking southwest. Plowed agricutlural habitat is in the background with ruderal habitat dominated by wild mustard in the foreground. June 7, 2018.

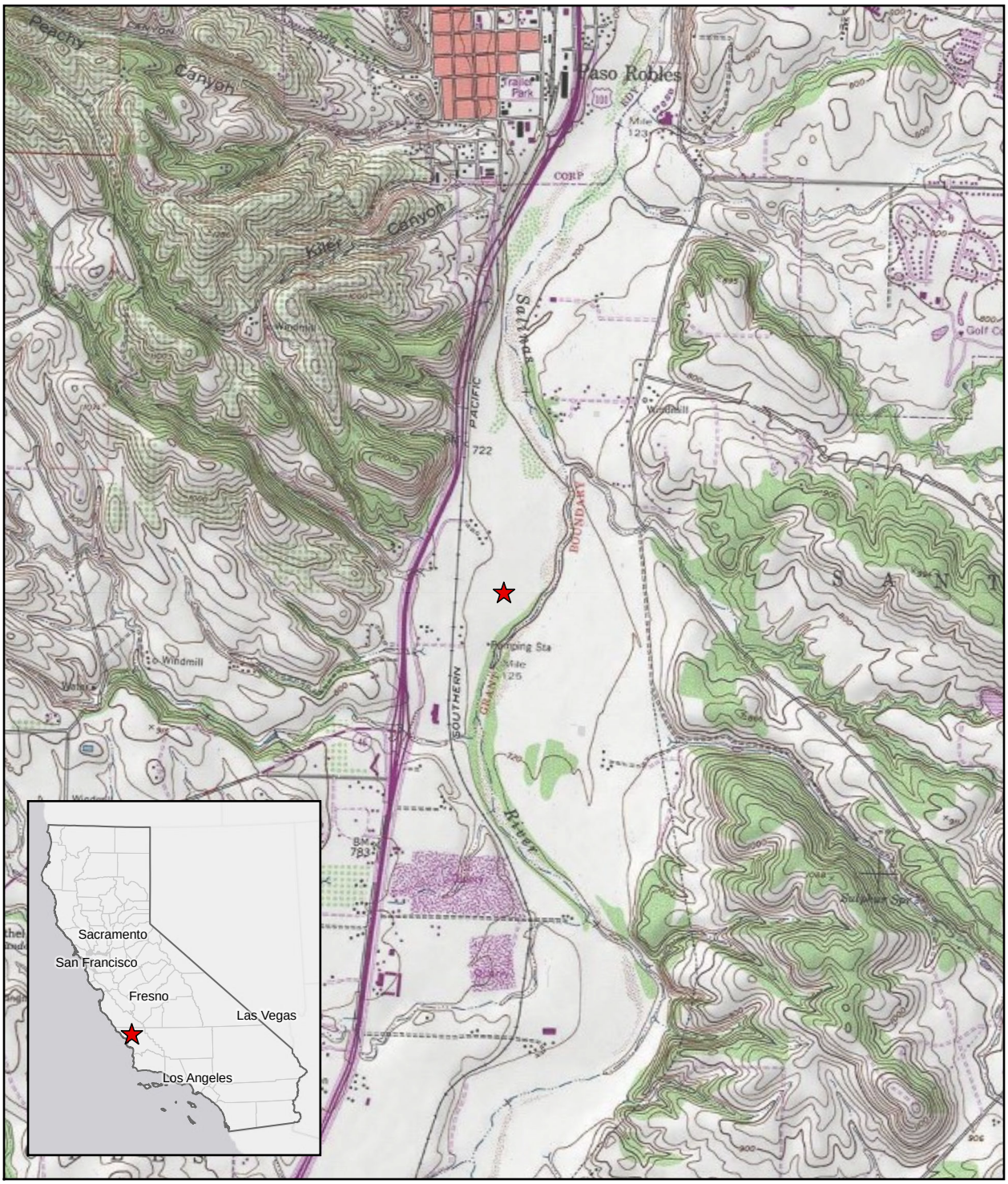
Photo 2. Agricultural habitat within the proposed project site looking from the southwest toward the northeast. The green vegetation is bindweed, a non-native plant. June 7, 2018.

Photo 3. Agricultural habitat within the proposed project site looking from the east toward the west. The solar plant would be adjacent to the Firestone water treatmnet facility fence on the left in the background. June 7, 2018.

7 FIGURES

- **Figure 1. USGS Topographic Map**
- **Figure 2. Aerial Photograph**
- **Figure 3. Special Status Plants Reported from the Region**
- **Figure 4. Special Status Animals Reported from the Region**
- **Figure 5. USFWS Critical Habitat**
- **Figure 6. Biological Resource Map**

Figure 1. United States Geological Survey Topographic Map



Legend

★ Project Location

0 1,000 2,000 4,000 Feet

REC Solar
Map Center: 120.68961°W 35.59602°N
Paso Robles, San Luis Obispo County

USGS Quadrangle: Templeton

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Map Updated:
June 19, 2018 02:25 PM by JBB

Figure 2. Aerial Photograph

Legend

- Study Area (35.9 acres)
- Project Area (8.9 acres)
- Proposed Arrays

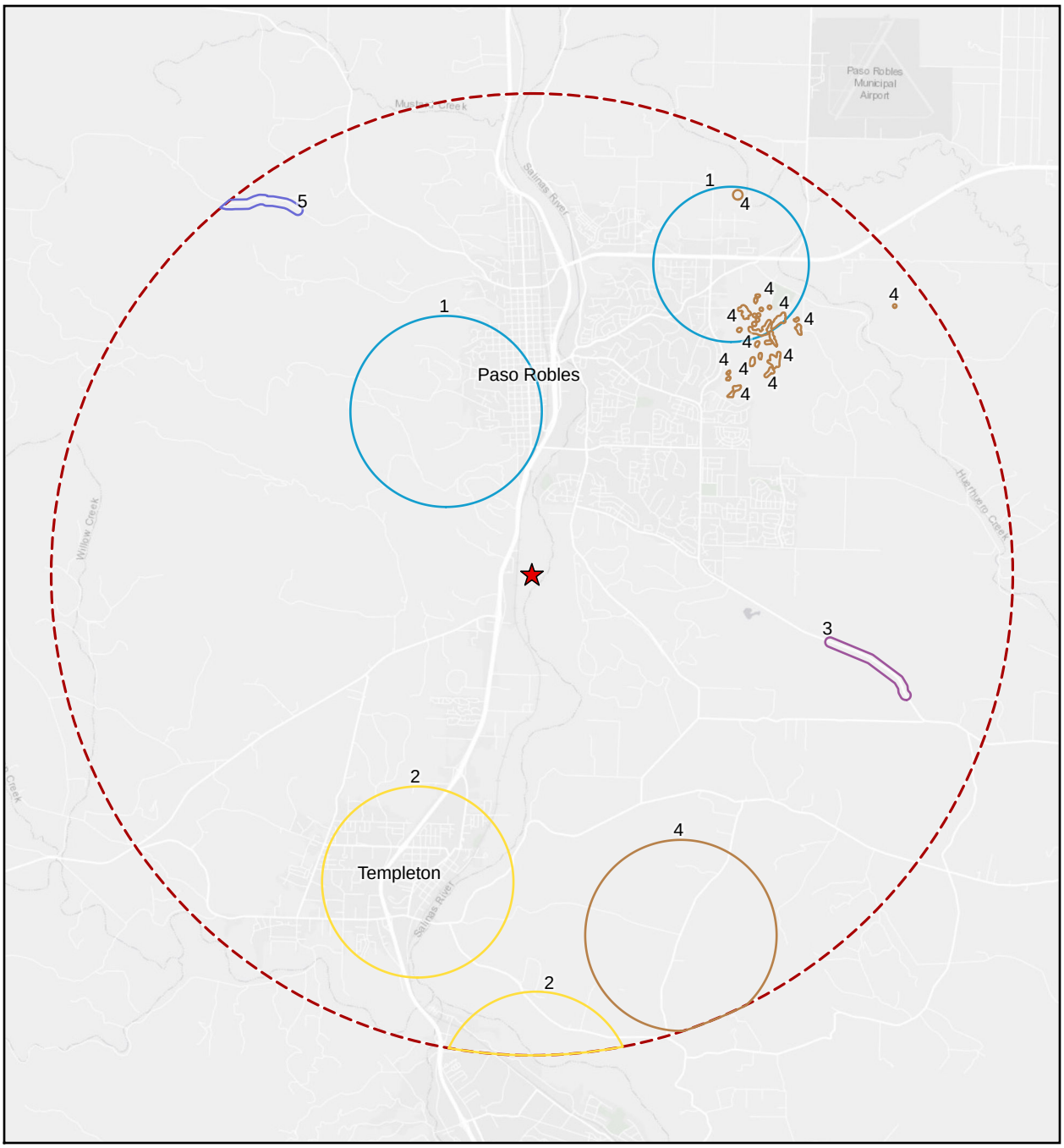
N

0 200 400 600 Feet

REC Solar
Map Center: 120.68955°W 35.59615°N
Paso Robles, San Luis Obispo County

Imagery Date: 06/14/2017

Figure 3. California Natural Diversity Database Plant Records



Label	Common Name
1	Lemmon's jewelflower
2	Mesa horkelia
3	Santa Lucia dwarf rush
4	Shining navarretia
5	Woodland woollythreads

Legend

Project Location

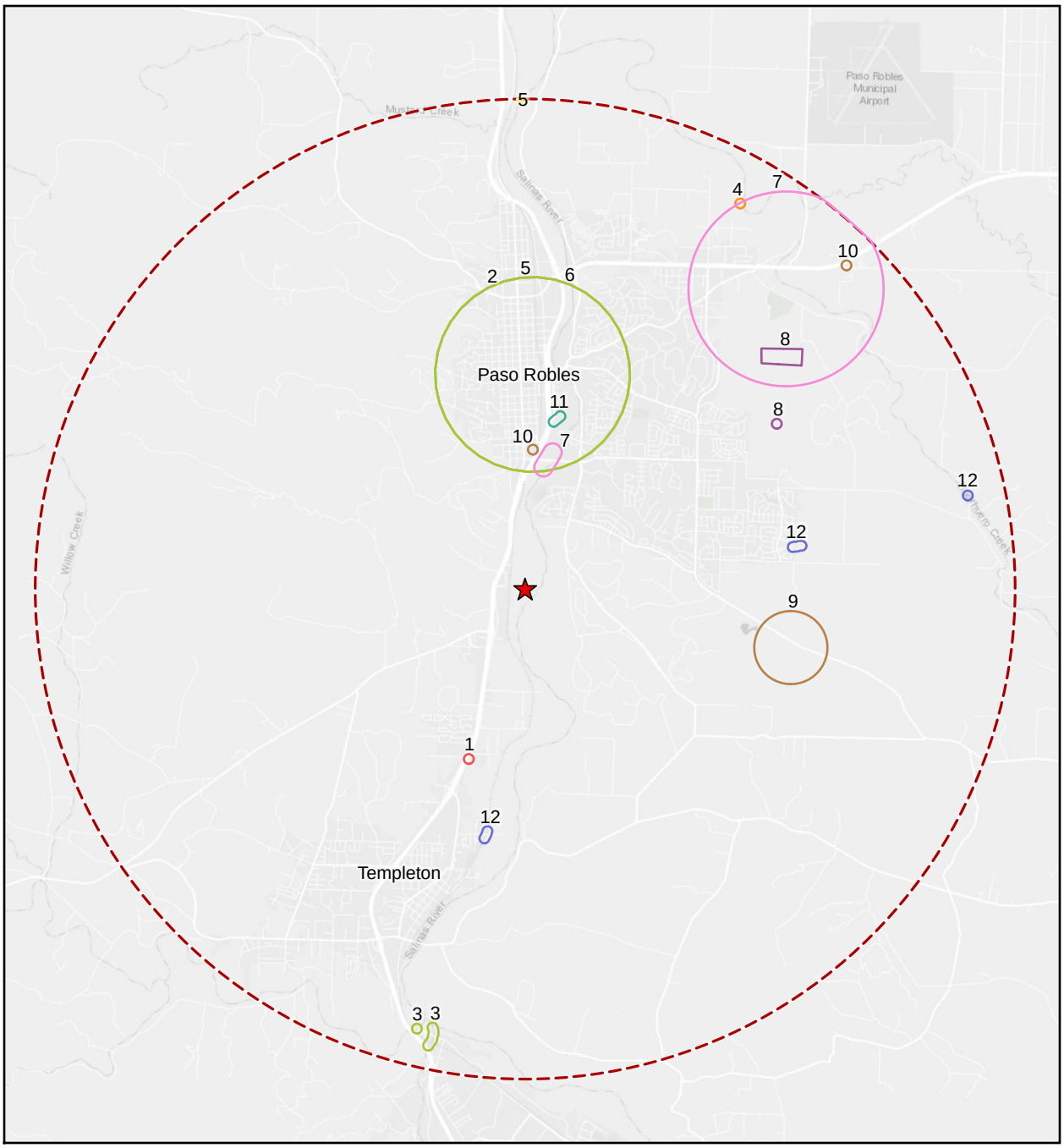
5-Mile Radius

0 0.5 1 2 Miles

REC Solar
Map Center: 120.68961°W 35.59602°N
Paso Robles, San Luis Obispo County

CNDDB GIS Data Last Updated: June 2018

Figure 4. California Natural Diversity Database Animal Records



Label	Common Name
1	American badger
2	Atascadero June beetle
3	California red-legged frog
4	Lompoc grasshopper
5	San Joaquin kit fox
6	Golden eagle
7	Least Bell's vireo
8	Northern California legless lizard
9	Tricolored blackbird
10	Vernal pool fairy shrimp
11	Western pond turtle
12	Western spadefoot

Legend

Project Location

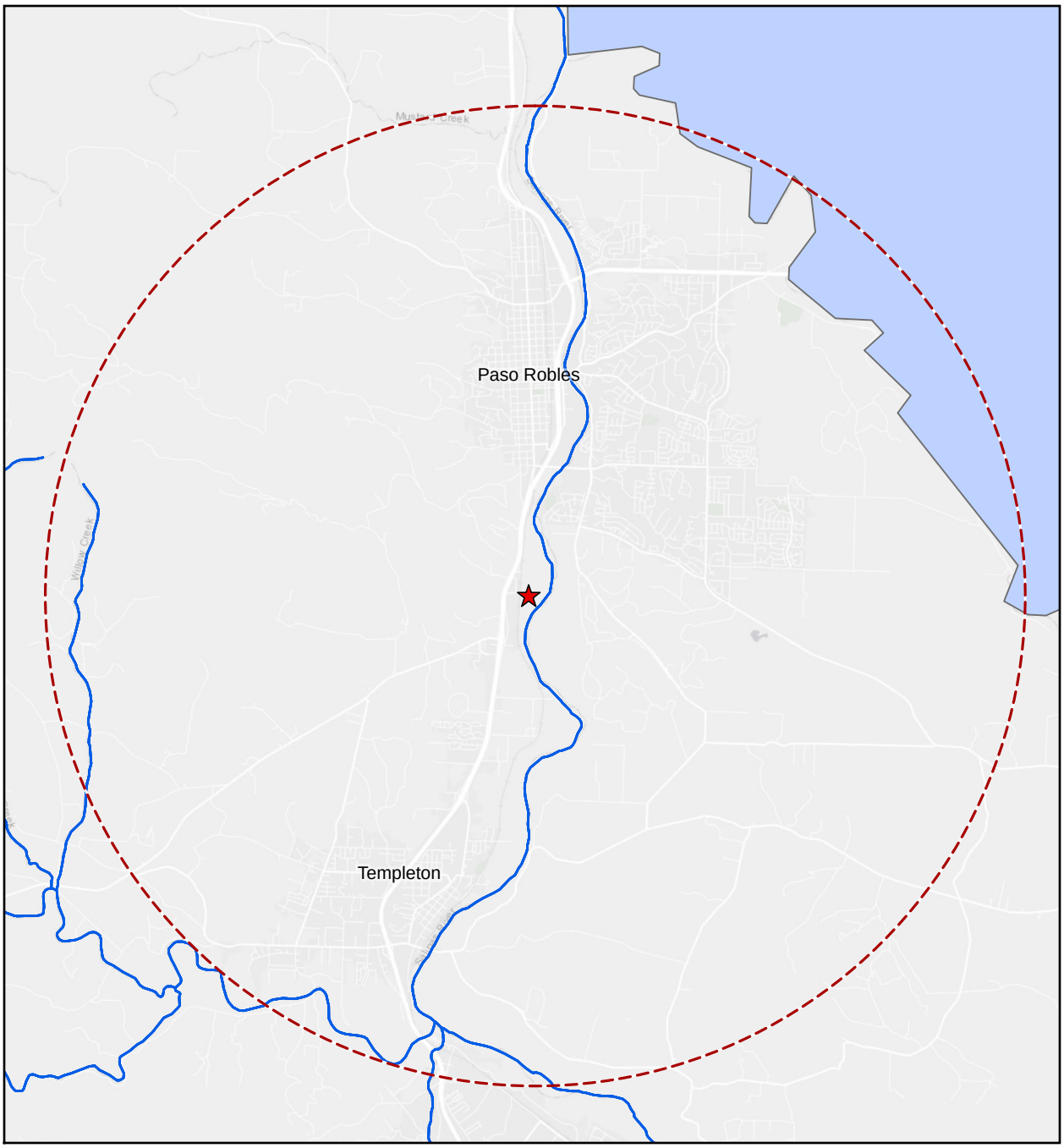
5-Mile Radius

0 0.5 1 2 Miles

REC Solar
Map Center: 120.68844°W 35.59821°N
Paso Robles, San Luis Obispo County

CNDDB GIS Data Last Updated: June 2018

Figure 5. United States Fish and Wildlife Service Critical Habitat



Legend

Project Location

5-Mile Radius

Critical Habitat

Vernal pool fairy shrimp

Steelhead

0 0.5 1 2 Miles

REC Solar
Map Center: 120.69031°W 35.59919°N
Paso Robles, San Luis Obispo County

Critical Habitat GIS Data Last Updated: June 2018

Figure 6. Biological Resources

Legend

- Study Area
- Project Area Fence Line

Habitat Type

- Agricultural (32.8 acres)
- Riparian (3.1 acres)

N

0 100 200 300 400 500 Feet

REC Solar
Map Center: 120.68987°W 35.59616°N
Paso Robles, San Luis Obispo County

Biological Survey Date: 06/06/2018

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Map Updated:
June 29, 2018 03:29 PM by MMP

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9 APPENDICES

- Appendix A. California Natural Diversity Database and California Native Plant Society Plant Records (Full)
- Appendix B. California Natural Diversity Database Animal Records (Full)
- Appendix C. USDA Custom Soil Resource Report

APPENDIX A. SPECIAL STATUS PLANTS REPORTED FROM THE REGION

	Common Name *Scientific Name*	**Fed/State Status Global/State Rank Rare Plant Rank**	**Blooming Period**	**Habitat Preference**	**Potential to Occur**	**Detected within Study Area?**	**Effect of Proposed Activity**
1.	**Bristlecone Fir** *Abies bracteata*	None/None 1B.3	May - June	Lower montane coniferous forest. Rocky sites in Monterey and SLO Counties. 210-1600 m.	None. Suitable habitat not present within Study Area.	No.	No Effect.
2.	**Red Sand-Verbena** *Abronia maritima*	None/None G4/S3? 4.2	February - November	Coastal dunes; <100m sCCo, Sco, ChI; Baja CA	None. Suitable habitat not present within Study Area.	No.	No Effect.
3.	**Hoover's Bent Grass** *Agrostis hooveri*	None/None G2/S2 1B.2	April - July	Sandy soil in oak woodland habitat; <600 m. Endemic to SLO & SB Counties.	None. Suitable habitat not present within Study Area.	No.	No Effect.
4.	**Douglas's Fiddleneck** *Amsinckia douglasiana*	None/None G4/S4 4.2	March - May	Unstable shaly sedimentary slopes; (100) 150–1600 m. SCoR, w WTR	None. Suitable habitat not present within Study Area.	No.	No Effect.
5.	**Oval-Leaved Snapdragon** *Antirrhinum ovatum*	None/None 4.2	May - November	Heavy, adobe-clay soils on gentle, open slopes, also disturbed areas; 200-1000 m. s San Joaquin Valley, s SCoRI	No. Suitable habitat is not present within the Study Area.	No.	No Effect.
6.	**Santa Lucia Manzanita** *Arctostaphylos luciana*	None/None 1B.2	December - March	Shale outcrops, slopes, chaparral, 500-700 m. Cuesta Pass, SLO County.	None. Suitable habitat not present within Study Area.	No.	No Effect.
7.	**Bishop Manzanita** *Arctostaphylos obispoensis*	None/None 4.3	February - June	Rocky, gen serpentine soils, chaparral, open close-cone forest near coast; 60-950 m; SCoRO	None. Suitable habitat not present within Study Area.	No.	No Effect.

	Common Name *Scientific Name*	**Fed/State Status Global/State Rank Rare Plant Rank**	**Blooming Period**	**Habitat Preference**	**Potential to Occur**	**Detected within Study Area?**	**Effect of Proposed Activity**
8.	**Santa Margarita Manzanita** *Arctostaphylos pilosula*	None/None 1B.2	December - May	Shale outcrops, slopes, chaparral; 300-1100 m. s SCoRO Endemic to SLO County	None. Suitable habitat not present within Study Area.	No.	No Effect.
9.	**Miles' Milk-Vetch** *Astragalus didymocarpus* var. *milesianus*	None/None G5T2/S2 1B.2	March - June	Clay or serpentine soils in coastal scrub, grassy areas near coast. 0-90 m. Endemic to SLO County	None. Suitable habitat not present within Study Area.	No.	No Effect.
10.	**Salinas Milk-Vetch** *Astragalus macrodon*	None/None 4.3	April - July	Eroded pale shales or sandstone, or serpentine alluvium; 300-950 m. SCoR	None. Suitable habitat not present within Study Area.	No.	No Effect.
11.	**San Luis Mariposa-lily** *Calochortus obispoensis*	None/None 1B.2	May - July	Chaparral, coastal scrub, valley and foothill grassland, often on serpentine but also sandstone; 100-500 m. SCoRO Endemic to SLO County	None. Suitable habitat not present within Study Area.	No.	No Effect.
12.	**La Panza Mariposa-lily** *Calochortus simulans*	None/None 1B.3	April - June	Grassland, oak woodland & pine forest, on sand, granite, or serpentine; <1100 m. Endemic to SLO County	None. Suitable habitat not present within Study Area.	No.	No Effect.
13.	**Dwarf Calycadenia** *Calycadenia villosa*	None/None 1B.1	May - October	Dry, rocky hills, ridges, in chaparral, woodland, meadows and seeps; <1100 m. c&s SCoRO	None. Suitable habitat not present within Study Area.	No.	No Effect.
14.	**Cambria Morning-Glory** *Calystegia subacaulis* ssp. *episcopalis*	None/None 4.2	(March) April – June (July)	Dry, open scrub, woodland, or grassland; <500 m. c SCoRO Endemic to SLO County	None. Suitable habitat not present within Study Area.	No.	No Effect.

	Common Name *Scientific Name*	Fed/State Status Global/State Rank Rare Plant Rank	Blooming Period	Habitat Preference	Potential to Occur	Detected within Study Area?	Effect of Proposed Activity
15.	**Hardham's Evening-primrose** *Camissoniopsis hardhamiae*	None/None 1B.2	March - May	Decomposed carbonate soils, in chaparral, cismontane woodland. Monterey, SLO Counties	None. Suitable habitat not present within Study Area.	No.	No Effect.
16.	**San Luis Obispo Sedge** *Carex obispoensis*	None/None 1B.2	April - June	Serpentine springs, stream sides; <600 m. Endemic to SLO County	None. Suitable habitat not present within Study Area.	No.	No Effect.
17.	**San Luis Obispo Owl's-clover** *Castilleja densiflora* var. *obispoensis*	None/None 1B.2	March - May	Coastal grassland, <100 m. Endemic to SLO County.	None. Suitable habitat not present within Study Area.	No.	No Effect.
18.	**Lemmon's Jewelflower** *Caulanthus lemmonii*	None/None 1B.2	February - May	Dry, exposed slopes, grassland, chaparral, scrub; 80-1100 m. sw San Joaquin Valley, se SnFrb, e SCoRO, SCoRI	None. Suitable habitat not present within Study Area.	No.	No Effect.
19.	**Lompoc Ceanothus** *Ceanothus cuneatus* var. *fascicularis*	None/None G5T4/S4 4.2	February - April	Chaparral on coastal sandy mesas; <400 m. s Cco	None. Suitable habitat not present within Study Area.	No.	No Effect.
20.	**Brewer's Spineflower** *Chorizanthe breweri*	None/None 1B.3	April - August	Chaparral, foothill woodland on serpentine; <800 m. Endemic to SLO County	None. Suitable habitat not present within Study Area.	No.	No Effect.
21.	**Douglas' Spineflower** *Chorizanthe douglasii*	None/None 4.3	April - July	Foothill woodland, pine forest, chaparral, sandy or gravelly soils; 200-1600 m. e SCoRO, SCoRI	None. Suitable habitat not present within Study Area.	No.	No Effect.
22.	**Palmer's Spineflower** *Chorizanthe palmeri*	None/None 4.2	April - August	Serpentine; 60-700m. SCoRO (w Monterey, w San Luis Obispo cos.)	None. Suitable habitat not present within Study Area.	No.	No Effect.

	Common Name *Scientific Name*	**Fed/State Status Global/State Rank Rare Plant Rank**	**Blooming Period**	**Habitat Preference**	**Potential to Occur**	**Detected within Study Area?**	**Effect of Proposed Activity**
23.	**Straight-awned Spineflower** *Chorizanthe rectispina*	None/None G2/S2 1B.3	April - July	Chaparral, dry woodland in sandy soil; 200-600 m. SCoRO	None. Suitable habitat not present within Study Area.	No.	No Effect.
24.	**San Luis Obispo Fountain Thistle** *Cirsium fontinale* var. *obispoense*	FE/CE 1B.2	February – July (August - September)	Serpentine seeps and streams; <300 m. Endemic to SLO County	None. Suitable habitat not present within Study Area.	No.	No Effect.
25.	**Cuesta Ridge Thistle** *Cirsium occidentale* var. *lucianum*	None/None 1B.2	April - June	Chaparral, woodland or forest openings, often on serpentine; 500-750m. s SCoRO (s Santa Lucia Range, San Luis Obispo, CA)	None. Suitable habitat not present within Study Area.	No.	No Effect.
26.	**Slender Clarkia** *Clarkia exilis*	None/None 4.3	April - May	Woodland; <1000 m.; s SNF, The.	None. Suitable habitat not present within Study Area.	No.	No Effect.
27.	**Small-flowered Morning-glory** *Convolvulus simulans*	None/None 4.2	March - July	Clay substrates, occ serpentine, ann grassland, coastal-sage scrub, chaparral; 30-875 m.; s SNF, SnFrB, s SCoRO, Sco, ChI, WTR, PR; AZ, Baja CA.	None. Suitable habitat not present within Study Area.	No.	No Effect.
28.	**Paniculate Tarplant** *Deinandra paniculata*	None/None G4/S4 4.2	(March) April - November	Foothill woodland; 300-500 m. SCoRI (Monterey, SLO counties).	None. Suitable habitat not present within Study Area.	No.	No Effect.
29.	**Small-Flowered Gypsum-Loving Larkspur** *Delphinium gypsophilum* ssp. *parviflorum*	None/None 3.2	(March)April - June	Clay soil in cismontane woodland; 200-350 m.	None. Will not grow in disturbed ground. Suitable soil not present.	No.	No Effect.

	Common Name *Scientific Name*	**Fed/State Status Global/State Rank Rare Plant Rank**	**Blooming Period**	**Habitat Preference**	**Potential to Occur**	**Detected within Study Area?**	**Effect of Proposed Activity**
30.	**Dune Larkspur** *Delphinium parryi* ssp. *blochmaniae*	None/None G4/T2 1B.2	April - June	Coastal chaparral, sand. 0-200 m. s CCo	None. Suitable habitat not present within Study Area.	No.	No Effect.
31.	**Eastwood's Larkspur** *Delphinium parryi* ssp. *eastwoodiae*	None/None 1B.2	(February) March - March	Coastal chaparral, grassland, on serpentine; 100-500m sCCo, SCoRO (San Luis Obispo County)	None. Suitable habitat not present within Study Area.	No.	No Effect.
32.	**Umbrella Larkspur** *Delphinium umbraculorum*	None/None G3/S3 1B.3	April - June	Moist oak forest; 400-1600 m. SCoRO, WTR.	None. Suitable habitat not present within Study Area.	No.	No Effect.
33.	**Betty's Dudleya** *Dudleya abramsii* ssp. *bettinae*	None/None 1B.2	May - July	Rocky outcrops in serpentine grassland; <50-180 m. Endemic to SLO County	None. Suitable habitat not present within Study Area.	No.	No Effect.
34.	**Mouse-Gray Dudleya** *Dudleya abramsii* ssp. *murina*	None/None 1B.3	May - June	Serpentine outcrops; 120-300 m. Endemic to SLO County	None. Suitable habitat not present within Study Area.	No.	No Effect.
35.	**Blochman's Dudleya** *Dudleya blochmaniae* ssp. *blochmaniae*	None/None 1B.1	April - June	Open, rocky slopes, often serpentine or clay soils; <450 m. s CCo, SCo	None. Suitable habitat not present within Study Area.	No.	No Effect.
36.	**Small Spikerush** *Eleocharis parvula*	None/None 4.3	(April) June – August (September)	Brackish, wet soil, coastal; <50 m. NCo, SnFrB, SCo; to BC; KS to NL, FL, LA; Mex, C.Am, Eurasia	None. Suitable habitat not present within Study Area.	No.	No Effect.
37.	**Yellow-flowered Eriastrum** *Eriastrum luteum*	None/None 1B.2	May - June	Bare sandy decomposed granite slopes in cismontane woodland, chaparral, forest; 360-1000 m. SCoR, Monterey, SLO Counties	None. Suitable habitat not present within Study Area.	No.	No Effect.

	Common Name *Scientific Name*	**Fed/State Status Global/State Rank Rare Plant Rank**	**Blooming Period**	**Habitat Preference**	**Potential to Occur**	**Detected within Study Area?**	**Effect of Proposed Activity**
38.	**Blochman's Leafy Daisy** *Erigeron blochmaniae*	None/None G2/S2 1B.2	June - August	Sand dunes and hills; <30 m. s CCo	None. Suitable habitat not present within Study Area.	No.	No Effect.
39.	**San Joaquin Spearscale** *Extriplex joaquinana*	None/None 1B.2	April - October	Alkaline soils; < 350(840) m. NCoRI, San Joaquin Valley, CCo, SnFrB, SCoRI	None. Suitable habitat not present within Study Area.	No.	No Effect.
40.	**Ojai Fritillary** *Fritillaria ojaiensis*	None/None G2?/S2? 1B.2	February - May	Rocky slopes, river basins; 300-500 m. SCoRO, WTR	None. Suitable habitat not present within Study Area.	No.	No Effect.
41.	**San Benito Fritillary** *Fritillaria viridea*	None/None 1B.2	March - May	Serpentine slopes; 200-1500 m. SCoR (San Benito, SLO Counties)	None. Suitable habitat not present within Study Area.	No.	No Effect.
42.	**Hogwallow Starfish** *Hesperevax caulescens*	None/None 4.2	March - June	Clay soils, mesic sites in valley and foothill grassland; 0-505 m.	None. Suitable habitat not present within Study Area.	No.	No Effect.
43.	**Mesa Horkelia** *Horkelia cuneata* var. *puberula*	None/None G4T1/S1 1B.1	February – July (September)	Dry, sandy coastal chaparral; gen 70-700 m. SCoRO, SCo.	None. Suitable habitat not present within Study Area.	No.	No Effect.
44.	**Kellogg's Horkelia** *Horkelia cuneata* var. *sericea*	None/None G4T1?/S1? 1B.1	April - September	Old dunes, coastal sand hills; <200 m. CCo	None. Suitable habitat not present within Study Area.	No.	No Effect.
45.	**Santa Lucia Dwarf Rush** *Juncus luciensis*	None/None 1B.2	April - July	Vernal pools, ephemeral drainages, wet meadow habitats, and streams; 300-1900 m. CaRH, n SNH, SCoRO, TR, PR, MP.	None. Suitable habitat not present within Study Area.	No.	No Effect.

	Common Name *Scientific Name*	Fed/State Status Global/State Rank Rare Plant Rank	Blooming Period	Habitat Preference	Potential to Occur	Detected within Study Area?	Effect of Proposed Activity
46.	**Jones's Layia** *Layia jonesii*	None/None 1B.2	March - May	Open serpentine or clay slopes; <400 m. Endemic to SLO County	None. Suitable habitat not present within Study Area.	No.	No Effect.
47.	**Jared's Pepper-grass** *Lepidium jaredii* ssp. *jaredii*	None/None 1B.2	March - May	Alkali bottoms, slopes, washes, <500 m. SCoRI, San Joaquin Valley	None. Suitable habitat not present within Study Area.	No.	No Effect.
48.	**Jones' Bush Mallow** *Malacothamnus jonesii*	None/None 4.3	(March) April - October	Open chaparral in foothill woodland; 250-830 m. SCoRO (Monterey, SLO Counties).	None. Suitable habitat not present within Study Area.	No.	No Effect.
49.	**Carmel Valley Bush-mallow** *Malacothamnus palmeri* var. *involucratus*	None/None 1B.2	April - October	Chaparral, cismontane woodland, coastal scrub; 30-1100 m. s CCo, SCoRO	None. Suitable habitat not present within Study Area.	No.	No Effect.
50.	**Santa Lucia Bush-mallow** *Malacothamnus palmeri* var. *palmeri*	None/None 1B.2	May - July	Chaparral, cismontane woodland, coastal scrub; 30-1100 m. s CCo, SCoRO	None. Suitable habitat not present within Study Area.	No.	No Effect.
51.	**Oregon meconella** *Meconella oregana*	None/None G2G3/S2 1B.1	Mar- May	Shaded canyons; <1000m; CCo, SnFrB	None. Suitable habitat not present within Study Area.	No.	No Effect.
52.	**Palmer's Monardella** *Monardella palmeri*	None/None 1B.2	June - August	Serpentine soils in chaparral, forest; 200-800 m. SCoRO	None. Suitable habitat not present within Study Area.	No.	No Effect.
53.	**Woodland Woollythreads** *Monolopia gracilens*	None/None 1B.2	(February) March - July	Chaparral, serpentine grassland, cismontane woodland, sandy to rocky soils; SnFrB, SCoR	None. Suitable habitat not present within Study Area.	No.	No Effect.

	Common Name *Scientific Name*	**Fed/State Status Global/State Rank Rare Plant Rank**	**Blooming Period**	**Habitat Preference**	**Potential to Occur**	**Detected within Study Area?**	**Effect of Proposed Activity**
54.	**Spreading Navarretia** *Navarretia fossalis*	FT/None/ 1B.1	April - June	Chenopod scrub, marshes and swamps, playas, and vernal pools; 30-1300m. SCoRO, SCo, to Baja Cal.	None. Suitable habitat not present within Study Area.	No.	No Effect.
55.	**Shining Navarretia** *Navarretia nigelliformis* ssp. *radians*	None/None 1B.2	(March) April - July	Vernal pools, clay depressions, dry grasslands; 150-1000 m. SCoR	None. Suitable habitat not present within Study Area.	No.	No Effect.
56.	**Large-Flowered Nemacladus** *Nemacladus secundiflorus* var. *secundiflorus*	None/None 4.3	April - June	Dry, gravelly slopes; 200-2000m. s SNH, SCoR	None. Suitable habitat not present within Study Area.	No.	No Effect.
57.	**Hooked Popcorn Flower** *Plagiobothrys uncinatus*	None/None 1B.2	April - May	Canyon sides, chaparral; on sandstone 300-600 m. n SCoR (Gabilan Range, Santa Lucia Mountains)	None. Suitable habitat not present within Study Area.	No.	No Effect.
58.	**Chaparral Ragwort** *Senecio aphanactis*	None/None G3/S2 2B.2	January - April(May)	Drying alkaline flats, chaparral, cismontane woodland, coastal scrub; <400 m. CW, SCo, ChI	None. Suitable habitat not present within Study Area.	No.	No Effect.
59.	**San Gabriel Ragwort** *Senecio astephanus*	None/None 4.3	May - July	Drying alkaline flats, chaparral, cismontane woodland, coastal scrub; <400 m. CW, SCo, ChI	None. Suitable habitat not present within Study Area.	No.	No Effect.
60.	**Cuesta Pass Checkerbloom** *Sidalcea hickmanii* ssp. *anomala*	None/CR 1B.2	May - June	Closed-cone-conifer forest, gen serpentine; 600-800 m. Endemic to SLO County	None. Suitable habitat not present within Study Area.	No.	No Effect.

	Common Name *Scientific Name*	Fed/State Status Global/State Rank Rare Plant Rank	Blooming Period	Habitat Preference	Potential to Occur	Detected within Study Area?	Effect of Proposed Activity
61.	**Most Beautiful Jewel-flower** *Streptanthus albidus* ssp. *peramoenus*	None/None 1B.2	(March) April – September (October)	Open, grassy or ±barren slopes, often serpentine; ±150-800 m. c SCoRO	None. Suitable habitat not present within Study Area.	No.	No Effect.
62.	**California Seablite** *Suaeda californica*	FE/None 1B.1	July - October	Margins of coastal salt marshes; <5 m. CCo	None. Suitable habitat not present within Study Area.	No.	No Effect.

California Geographic Subregion Abbreviations:

CCo: Central Coast
SCo: South Coast
SCoR: South Coast Ranges
SCoRO: Outer South Coast Ranges
SCoRI: Inner South Coast Ranges
SnFrB: San Francisco Bay
TR: Transverse Ranges
WTR: Western Transverse Ranges
SnJV: San Joaquin Valley
ScV: Sacramento Valley
SLO: San Luis Obispo
SN: Sierra Nevada
SnJt: San Jacinto Mtns
SnBr: San Bernardino
Teh: Tehachapi Mtn Area
CW: Central West
SW: South West
DMoj: Mojave Desert
PR: Peninsular Range

State/Rank Abbreviations:

FE: Federally Endangered
FT: Federally Threatened
PE: Proposed Federally Endangered
PT: Proposed Federally Threatened
CE: California Endangered
CR: California Rare
CT: California Threatened
Cand. CE: Candidate for California Endangered
Cand. CT: Candidate for California Threatened

California Rare Plant Ranks:

CRPR 1A: Plants presumed extirpated in California and either rare or extinct elsewhere
CRPR 1B: Plants rare, threatened, or endangered in California and elsewhere
CRPR 2A: Plants presumed extirpated in California, but common elsewhere
CRPR 2B: Plants rare, threatened, or endangered in California, but more common elsewhere
CRPR 4: Plants of limited distribution - a watch list

CRPR Threat Ranks:

0.1 - Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat)
0.2 - Moderately threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat)
0.3 - Not very threatened in California (less than 20% of occurrences threatened / low degree and immediacy of threat or no current threats known)

APPENDIX B. SPECIAL STATUS ANIMALS REPORTED FROM THE REGION

	Common Name *Scientific Name*	Fed/State Status Global/State Rank CDFW Rank	Nesting- Breeding Period	Habitat Preference	Potential to Occur	Detected Within Study Area?	Effect of Proposed Activity
1.	**Tricolored Blackbird** *Agelaius tricolor*	None/Candidate Endangered G2G3/S1S2 SSC (Nesting)	March 15 through August 15	Requires open water, protected nesting substrate, & foraging area with insect prey near nesting colony.	None. Suitable habitat not present within Study Area.	No.	No Effect.
2.	**Grasshopper Sparrow** *Ammodramus savannarum*	None/None G5/S3 SSC (Nesting)	March 15 through August 15	Nests in grassland habitats on mountain slopes, foothills, and valleys. May nest colonially.	None. No suitable nesting habitat occurs within Study Area.	No.	No Effect.
3.	**Northern California Legless Lizard** *Anniella pulchra*	None/None G3/S3 SSC	Breeds early spring and July; live young born September through November.	Warm moist loose soil with plant cover. Sandy washes, stream terraces with sycamores, cottonwoods, or oaks. Leaf litter under trees and bushes.	Low. Suitable habitat is present within the Study Area around oaks, not in the highly disturbed soils in the project area.	No.	No Effect.
4.	**Pallid Bat** *Antrozous pallidus*	None/None G5/S3 SSC	Spring - Summer	Rock crevices, caves, tree hollows, mines, old buildings, and bridges.	Low. Tree hollows and cavities are present within Study Area, not within project area.	No.	No Effect.
5.	**Golden Eagle*** *Aquila chrysaetos*	None/None G5/S3 WL/Fully Protected	March 15 through August 15	Nests in large, prominent trees in valley and foothill woodland. Requires adjacent food source.	None. No suitable stick nests found within Study Area.	No.	No Effect.

	Common Name *Scientific Name*	**Fed/State Status** **Global/State Rank** **CDFW Rank**	**Nesting-Breeding Period**	**Habitat Preference**	**Potential to Occur**	**Detected Within Study Area?**	**Effect of Proposed Activity**
6.	**Great Blue Heron** *Ardea herodias*	Special Animal (Rookery only)	March 15 through August 15	Rookeries located in tall trees near foraging areas.	None. No rookeries are present within Study Area.	No.	No Effect.
7.	**Lesser Slender Salamander** *Batrachoseps minor*	None/None G1/S1 SSC	Unknown.	Moist locations in mixed oak, tanbark oak, sycamore and laurel forests.	None. Suitable habitat not present within Study Area..	No.	No Effect.
8.	**Obcure Bumble Bee** *Bombus caliginosus*	None/None G4?/S1S2 Special Animal	Spring	Open coastal grasslands and meadows.	None. No suitable habitat present within the project area. Last record from area in 1959.	No.	No Effect.
9.	**Crotch Bumble Bee** *Bombus crotchii*	None/None G3G4/S1S2 Special Animal	Spring	Open grasslands and scrub	Low. No suitable habitat present in the project area. Most recent record is in 1968.	No	No Effect
10.	**Vernal Pool Fairy Shrimp** *Branchinecta lynchi*	Threatened/None Special Animal	Rainy Season	Clear water sandstone depression pools, grassed swale, earth slump, or basalt flow depression pools.	None. Suitable habitat not present within Study Area..	No.	No Effect.
11.	**Ferruginous Hawk*** *Buteo regalis*	None/None G4/S3S4 WL (Wintering)	October - April (Wintering)	Winters locally in open grassland or savannah habitats. More common in interior SLO County than coast.	Low. Low quality foraging habitat exists within Study Area. Will not nest in Study Area.	No.	No Effect.

	Common Name *Scientific Name*	**Fed/State Status** **Global/State Rank** **CDFW Rank**	**Nesting-Breeding Period**	**Habitat Preference**	**Potential to Occur**	**Detected Within Study Area?**	**Effect of Proposed Activity**
12.	**Western Snowy Plover** *Charadrius alexandrinus nivosus*	Threatened/None G3T3/S2S3 SSC	March 15 through August 15	Sandy beaches, salt pond levees, & shorelines of large alkali lakes. Needs friable soils for nesting.	None. Suitable habitat not present within Study Area..	No.	No Effect.
13.	**Sandy Beach Tiger Beetle** *Cicindela hirticollis gravida*	None/None G5T2/S2 Special Animal	n/a	Adjacent to non-brackish water near the coast from San Francisco to N. Mexico. Clean, dry, light-colored sand in the upper zone.	None. Suitable habitat not present within Study Area..	No.	No Effect.
14.	**Globose Dune Beetle** *Coelus globosus*	None/None G1G2/S1S2 Special Animal	n/a	Coastal sand dune habitat. Inhabits foredunes and sand hummocks.	None. Suitable habitat not present within Study Area..	No.	No Effect.
15.	**Townsend's Big-eared Bat** *Corynorhinus townsendii*	None/None G3G4/S2 SSC	Spring - Summer	Caves, buildings, and mine tunnels. Cave like attics as day roosts. On coast roosts are normally within 100 m. of creeks.	None. Suitable habitat not present within Study Area..	No.	No Effect.
16.	**Monarch Butterfly** *Danaus plexippus*	None/None G4T2T3/S2S3 Special Animal	September - March (aggregations)	Roosts located in wind-protected tree groves with nectar and water nearby.	None. No suitable roosting habitat present within Study Area.	No.	No Effect.

	Common Name *Scientific Name*	**Fed/State Status** **Global/State Rank** **CDFW Rank**	**Nesting-Breeding Period**	**Habitat Preference**	**Potential to Occur**	**Detected Within Study Area?**	**Effect of Proposed Activity**
17.	**White-tailed Kite** *Elanus leucurus*	None/None G5/S3S4 Fully Protected	March 15 through August 15	Nests in dense tree canopy near open foraging areas	Low. No suitable nesting sites within Study Area.	No.	No Effect.
18.	**Western Pond Turtle** *Emys marmorata*	None/None G3G4/S3 SSC	April through August	Lakes, rivers, ponds, streams, creeks,	No. Wastewater treatment ponds chain-link fenced. Nearest known occurrence 1.7 miles north.	No.	No Effect.
19.	**Tidewater Goby** *Eucyclogobius newberryi*	Endangered/None G3/S3 SSC	n/a	Found in shallow lagoons and lower stream reaches, need fairly still but not stagnant water and high oxygen levels.	None. Suitable habitat not present within Study Area..	No.	No Effect.
20.	**Morro Shoulderband Snail** *Helminthoglypta walkeriana*	Endangered/None Special Animal	n/a	Restricted to the coastal strand and sage scrub habitats in immediate vicinity of Morro Bay.	None. Suitable habitat not present within Study Area..	No.	No Effect.
21.	**California Linderiella** *Linderiella occidentalis*	None/None Special Animal	Rainy season	Seasonal pools in unplowed grasslands with alluvial soils.	None. Suitable habitat not present within Study Area..	No.	No Effect.
22.	**Monterey Dusky-footed Woodrat** *Neotoma macrotis luciana*	None/None SSC	n/a	Variety of habitats with moderate to dense understory vegetation	None. No woodrat middens were found within, or adjacent to Study Area.	No.	No Effect.
23.	**Steelhead - South/Central California Coast DPS**	Threatened/None SSC	February - April	Fed listing refers to runs in coastal basins from Pajaro River	None. Suitable habitat not present within Study Area..	No.	No Effect.

	Common Name *Scientific Name*	**Fed/State Status** **Global/State Rank** **CDFW Rank**	**Nesting-** **Breeding Period**	**Habitat Preference**	**Potential to Occur**	**Detected Within Study Area?**	**Effect of Proposed Activity**
	Oncorhynchus mykiss irideus			south to, but not including, the Santa Maria River.			
24.	**Salinas Pocket Mouse** *Perognathus inornatus psammophilus*	None/None SSC	n/a	Annual grassland and desert shrub in Salinas Valley, with friable soils	None. Suitable habitat not present within Study Area.	No.	No Effect
25.	**Coast Horned Lizard** *Phrynosoma blainvillii*	None/None G3G4/S3S4 SSC	May - September	Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes.	No. Sandy washes and scattered low bushes occur adjacent to Study Area, not in the project areas.	No.	No Effect
26.	**Morro Bay Blue Butterfly** *Plebejus icarioides moroensis*	None/None Special Animal	n/a	Inhabits stabilized dunes and surrounding areas in coastal SLO County (Morro Bay) and nw SB County.	None. Suitable habitat not present within Study Area..	No.	No Effect.
27.	**Atascadero June Beetle** *Polyphylla nubila*	None/None Special Animal	n/a	Known only from sand dunes in Atascadero and San Luis Obispo, San Luis Obispo County.	None. Suitable habitat not present within Study Area..	No.	No Effect.
28.	**Purple Martin** *Progne subis*	None/None G5/S3 SSC (Nesting)	March 15 through August 15	In San Luis Obispo County prefers nesting in Sycamore trees along riparian corridors.	Low. Sycamores with cavities are located adjacent to Study Area.	No.	No Effect.

	Common Name *Scientific Name*	Fed/State Status Global/State Rank CDFW Rank	Nesting- Breeding Period	Habitat Preference	Potential to Occur	Detected Within Study Area?	Effect of Proposed Activity
29.	**San Luis Obispo Pyrg** *Pyrgulopsis taylori*	None/None Special Animal	n/a	Freshwater habitats in San Luis Obispo County.	None. Suitable habitat not present within Study Area..	No.	No Effect.
30.	**Foothill Yellow-legged Frog** *Rana boylii*	None/Candidate Threatened G3/S3 SSC	March - September	Partly shaded, shallow streams and riffles with rocky substrate. Min. 15 weeks for larval development.	None. Suitable habitat not present within Study Area..	No.	No Effect.
31.	**California Red-legged Frog** *Rana draytonii*	Threatened/None G2G3/S2S3 SSC	January - September	Lowlands and foothills in or near sources of deep water with dense, shrubby or emergent riparian vegetation. Requires 11-20 weeks for larval development.	None. No suitable habitat present within the Study Area.	No.	No Effect.
32.	**Western Spadefoot Toad** *Spea hammondii*	None/None SSC	January – August	Vernal pools in grassland and woodland habitats	None. Suitable habitat not present within Study Area..	No.	No Effect.
33.	**Coast Range Newt** *Taricha torosa*	None/None G4/S4 SSC	December - May	Slow moving streams, ponds, and lakes with surrounding evergreen/oak forests along coast.	None. Suitable habitat not present within Study Area..	No.	No Effect.
34.	**American Badger** *Taxidea taxus*	None/None G5/S3 SSC	February – May	Needs friable soils in open ground with abundant food source	Low. Friable soils and open ground present within Study Area.	No.	No Effect.

	Common Name *Scientific Name*	**Fed/State Status** **Global/State Rank** **CDFW Rank**	**Nesting-** **Breeding Period**	**Habitat Preference**	**Potential to Occur**	**Detected Within Study Area?**	**Effect of Proposed Activity**
				such as California ground squirrels.			
35.	**Lompoc Grasshopper** *Trimerotropis occulens*	None/None Special Animal	n/a	Unknown. Known only from Santa Barbara and San Luis Obispo Counties	Low. Suitable habitat not present within Study Area.. Last report 1909.	No	No Effect
36.	**Least Bell's Vireo** *Vireo bellii pusillus*	Endangered/ Endangered G5T5/S2 Special Animal	March 15 through August 15	Riparian habitat, near water or dry streambed, <2000 ft. Nests in willows, mesquite, Baccharis.	None. Suitable habitat not present within Study Area.	No.	No Effect.
37.	**San Joaquin Kit Fox** *Vulpes macrotis mutica*	Endangered/ Threatened Special Animal	December – July	Annual grasslands or grassy areas with scattered shrubby vegetation. Needs loose textured sandy soil and prey base.	Low. Heavily tilled open sandy soil is present within the Study Area.	No.	No Effect with standard mitigation.

Habitat characteristics are from the Jepson Manual and the CDNNB.
*not listed in the CNDDB or CNPS for the search area, but possibly for the location.

Abbreviations:

FE: Federally Endangered
FT: Federally Threatened
PE: Proposed Federally Endangered
PT: Proposed Federally Threatened
CE: California Endangered
CT: California Threatened
Cand. CE: Candidate for California Endangered
Cand. CT: Candidate for California Threatened
SSC: CDFW Species of Special Concern
FP: CDFW Fully-Protected

APPENDIX C – SOILS REPORT

United States Department of Agriculture

NRCS

Natural Resources Conservation Service

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

Custom Soil Resource Report for San Luis Obispo County, California, Paso Robles Area

REC Solar - Firestone Brewing

June 20, 2018

Preface

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

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

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

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

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

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

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require

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Contents

Soil Map

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

ATTACHMENT 4

Map Scale: 1:3,140 if printed on A portrait (8.5" x 11") sheet.

N

Meters
0 45 90 180 270

Feet
0 150 300 600 900

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

ATTACHMENT 4

MAP LEGEND

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

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

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

Water Features
- Streams and Canals

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

Background
- Aerial Photography

MAP INFORMATION

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

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

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

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

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

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

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

Soil Survey Area: San Luis Obispo County, California, Paso Robles Area
Survey Area Data: Version 11, Sep 13, 2017

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

Date(s) aerial images were photographed: Mar 16, 2016—Feb 23, 2017

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background

MAP LEGEND	MAP INFORMATION
	imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
158	Lockwood shaly loam, 2 to 9 percent slopes	3.7	13.1%
167	Metz-Tujunga complex, occasionally flooded, 0 to 5 percent slopes	0.9	3.0%
173	Mocho clay loam, 0 to 2 percent slopes, MLRA 14	22.5	79.1%
300	Corducci-Typic Xerofluvents, 0 to 5 percent slopes, occasionally flooded, MLRA 14	1.4	4.8%
Totals for Area of Interest		**28.4**	**100.0%**

Map Unit Descriptions

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

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

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

was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

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

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

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

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

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

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

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

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

San Luis Obispo County, California, Paso Robles Area

158—Lockwood shaly loam, 2 to 9 percent slopes

Map Unit Setting

National map unit symbol: hbtc
Elevation: 600 to 1,500 feet
Mean annual precipitation: 12 to 20 inches
Mean annual air temperature: 60 degrees F
Frost-free period: 200 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Lockwood and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Lockwood

Setting

Landform: Terraces
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from sedimentary rock

Typical profile

H1 - 0 to 26 inches: channery loam
H2 - 26 to 62 inches: channery clay loam

Properties and qualities

Slope: 2 to 9 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water storage in profile: Moderate (about 8.5 inches)

Interpretive groups

Land capability classification (irrigated): 2e
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: C
Hydric soil rating: No

Minor Components

Unnamed, similar to lockwood soil

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

Elder, loam
Percent of map unit: 2 percent
Hydric soil rating: No

Still, gravelly loam
Percent of map unit: 1 percent
Hydric soil rating: No

Unnamed, areas with cobbles on the surface
Percent of map unit: 1 percent
Hydric soil rating: No

Unnamed
Percent of map unit: 1 percent
Landform: Drainageways
Hydric soil rating: Yes

167—Metz-Tujunga complex, occasionally flooded, 0 to 5 percent slopes

Map Unit Setting
National map unit symbol: hbtn
Elevation: 600 to 1,500 feet
Mean annual precipitation: 12 to 20 inches
Mean annual air temperature: 60 degrees F
Frost-free period: 200 days
Farmland classification: Not prime farmland

Map Unit Composition
Metz and similar soils: 35 percent
Tujunga and similar soils: 30 percent
Minor components: 25 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Metz

Setting
Landform: Flood plains
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from mixed rock sources

Typical profile
H1 - 0 to 9 inches: loamy sand
H2 - 9 to 60 inches: stratified sand to very fine sandy loam

Properties and qualities
Slope: 0 to 5 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Somewhat excessively drained

Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): High (1.98 to 5.95 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: Occasional
Frequency of ponding: None
Calcium carbonate, maximum in profile: 1 percent
Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water storage in profile: Low (about 5.3 inches)

Interpretive groups
Land capability classification (irrigated): 3w
Land capability classification (nonirrigated): 4w
Hydrologic Soil Group: A
Ecological site: SANDY BOTTOM (R014XE033CA)
Hydric soil rating: No

Description of Tujunga

Setting
Landform: Flood plains
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from mixed rocks

Typical profile
H1 - 0 to 20 inches: fine sand
H2 - 20 to 60 inches: sand

Properties and qualities
Slope: 0 to 5 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Somewhat excessively drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): High to very high (5.95 to 19.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: Occasional
Frequency of ponding: None
Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water storage in profile: Low (about 4.2 inches)

Interpretive groups
Land capability classification (irrigated): 2w
Land capability classification (nonirrigated): 4w
Hydrologic Soil Group: A
Ecological site: SANDY WASH (R014XE034CA)
Hydric soil rating: No

Minor Components

Xerofluvents
Percent of map unit: 20 percent

Landform: Drainageways
Hydric soil rating: Yes

Elder, loam
Percent of map unit: 2 percent
Hydric soil rating: No

Pico, fine sandy loam
Percent of map unit: 1 percent
Hydric soil rating: No

San emigdio, fine sandy loam
Percent of map unit: 1 percent
Hydric soil rating: No

Unnamed, slopes of 5 to 9 percent
Percent of map unit: 1 percent
Hydric soil rating: No

173—Mocho clay loam, 0 to 2 percent slopes, MLRA 14

Map Unit Setting

National map unit symbol: 2tyyy
Elevation: 660 to 1,830 feet
Mean annual precipitation: 12 to 25 inches
Mean annual air temperature: 59 to 61 degrees F
Frost-free period: 270 to 330 days
Farmland classification: Prime farmland if irrigated

Map Unit Composition

Mocho and similar soils: 75 percent
Minor components: 25 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Mocho

Setting

Landform: Alluvial fans, alluvial flats
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from sedimentary rock

Typical profile

Ap - 0 to 8 inches: clay loam
A - 8 to 19 inches: clay loam
C1 - 19 to 30 inches: clay loam
C2 - 30 to 44 inches: loam
2C - 44 to 58 inches: gravelly loam
3C - 58 to 64 inches: silt loam

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.60 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 5 percent
Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water storage in profile: High (about 10.7 inches)

Interpretive groups

Land capability classification (irrigated): 1
Land capability classification (nonirrigated): 4c
Hydrologic Soil Group: C
Ecological site: FINE LOAMY BOTTOM (R014XE025CA)
Hydric soil rating: No

Minor Components

Still

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

Xerorthents

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

Haploxerolls, gravelly overwash

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

Sorrento

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

Tujunga

Percent of map unit: 2 percent
Hydric soil rating: No

300—Corducci-Typic Xerofluvents, 0 to 5 percent slopes, occasionally flooded, MLRA 14

Map Unit Setting

National map unit symbol: 2xm5w
Elevation: 70 to 2,480 feet
Mean annual precipitation: 9 to 24 inches

Mean annual air temperature: 58 to 61 degrees F
Frost-free period: 219 to 346 days

Map Unit Composition

Corducci and similar soils: 50 percent
Typic xerofluvents and similar soils: 30 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Corducci

Setting

Landform: Alluvial fans, flood plains, stream terraces
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread, talf
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Mixed alluvium derived from igneous and sedimentary rock

Typical profile

A - 0 to 5 inches: fine sand
C1 - 5 to 35 inches: fine sand
C2 - 35 to 45 inches: sand
C3 - 45 to 59 inches: coarse sand

Properties and qualities

Slope: 0 to 5 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Somewhat excessively drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): High to very high (5.99 to 19.99 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: Occasional
Frequency of ponding: None
Available water storage in profile: Low (about 3.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6e
Hydrologic Soil Group: A
Hydric soil rating: No

Description of Typic Xerofluvents

Setting

Landform: Flood plains, stream terraces
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread, talf
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Mixed alluvium derived from igneous and sedimentary rock

Typical profile

A - 0 to 4 inches: sand
C1 - 4 to 31 inches: sand
C2 - 31 to 35 inches: fine sandy loam

C3 - 35 to 59 inches: sand

Properties and qualities

Slope: 0 to 5 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Somewhat excessively drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): High (2.00 to 5.99 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: Occasional
Frequency of ponding: None
Available water storage in profile: Low (about 3.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6e
Hydrologic Soil Group: A
Hydric soil rating: No

Minor Components

Metz, very rarely flooded

Percent of map unit: 5 percent
Landform: Stream terraces, flood plains
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread, talf
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Tujunga, very rarely flooded

Percent of map unit: 5 percent
Landform: Flood plains, stream terraces
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread, talf
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Xeropsamments, frequently flooded

Percent of map unit: 5 percent
Landform: Drainageways
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Talf
Microfeatures of landform position: Channels
Down-slope shape: Linear
Across-slope shape: Concave
Hydric soil rating: Yes

Xerofluvents, frequently flooded

Percent of map unit: 5 percent
Landform: Drainageways
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Talf
Microfeatures of landform position: Channels
Down-slope shape: Linear

Across-slope shape: Concave
Hydric soil rating: Yes

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ALTHOUSE AND MEADE, INC.
BIOLOGICAL AND ENVIRONMENTAL SERVICES

1650 Ramada Drive, Suite 180
Paso Robles, CA 93446
(805) 237-9626 • Fax (805) 237-9181 • www.althouseandmeade.com

January 20, 2023

Duke Energy Sustainable Solutions
Atten: Tony Strader
Tony.Strader@duke-energy.com

RE: Firestone Walker Brewery Tracker – Phase 2, Biological Resources Consistency Review

Dear Mr. Strader,

Althouse and Meade, Inc (A&M) completed a review of biological resources for the proposed Firestone Walker Brewery Tracker – Phase 2 Solar Photovoltaic System Project to evaluate consistency of existing conditions with those described and mapped in the 2018 Preliminary Biological Report for Firestone Solar Plant (A&M 2018). The proposed Phase 2 project entails installation of a 1.2 megawatt (MW) photovoltaic ground tracker array adjacent to the existing Firestone Walker Brewery 2.1 MW ground tracker system. Phase 2 will occupy approximately 4.8 acres of habitat that is within the 28.4-acre Study Area that was examined in 2018. The review and additional information provided here supplements and updates the 2018 report where conditions have changed.

Review of 2018 Preliminary Biological Report

Botanical and wildlife surveys were conducted in May and June 2018 (A&M 2018). One habitat type, Agriculture, was identified within the Phase 2 project footprint. Botanical surveys identified 40 species, subspecies, and varieties of vascular plants in the 2018 Study Area. Wildlife surveys identified 2 reptiles, 22 birds, and 4 mammals in the Study Area. No special-status plants or wildlife were detected. No special status plants were expected to occur. Two special-status species were determined to have a low potential to occur in the Study Area: San Joaquin kit fox (*Vulpes macrotis mutica*) and American badger (*Taxidea taxus*).

San Joaquin kit fox is a federally listed endangered species and state listed threatened species. The cropland in the Study Area provides poor quality habitat for San Joaquin kit fox due to regular disturbance, low prey availability, lack of connection to appropriate foraging territory, barriers to extant populations, and agricultural management. San Joaquin kit fox was not observed in the Study Area during the spring 2018 wildlife surveys. The project footprint is within the California Department of Fish and Wildlife (CDFW) designated two to one mitigation area for San Joaquin kit fox however, based on the results of a CDFW-verified San Joaquin Kit Fox Habitat Evaluation Form prepared for Phase 1, no compensatory mitigation was required.

American badger is a California Species of Special Concern. Badgers are highly mobile and hunt ground squirrels and other small and medium-sized prey. They are generally uncommon in the Paso Robles area, and although suitable open habitat is found in the Study Area, proximity to the urban edge of the City and the sandy wash habitat in the adjacent Salinas River corridor reduces the likelihood of badger presence. Badgers typically inhabit grasslands but do occasionally forage in cropland where California ground squirrels are abundant. Ground squirrels are found in the Study Area. No badgers or badger sign were observed in the Study Area during our surveys in 2018.

Ground nesting birds were determined to have potential to occur within the impact area and tree-nesting raptors were determined to have potential to nest in oak trees located within 500 feet of the impact area.

Consistency Findings and Recommendations

A&M Principal Scientist Dr. Daniel Meade conducted a site survey on November 23, 2022, and A&M Senior Biologist Lisa Herrera conducted a site survey on December 8, 2022. Site conditions at the proposed 4.8-acre Phase 2 impact area remain consistent with those identified in the 2018 biological report. As in 2018, the impact area consists of an agricultural field that is dry farmed for barley (Photos 1 and 2). Valley oaks (*Quercus lobata*) remain present in scattered locations outside of the project footprint.

Unlike Phase 1, the Phase 2 impact area is sited within close proximity to six large valley oaks. While no removal or trimming of the oaks is proposed, portions of the Phase 2 project footprint may impact the critical root zone (CRZ) of one oak tree. Oak trees are a protected resource under the City's Oak Tree Preservation Ordinance (Section 10.01 of the City's Municipal Code) and impacts to the CRZ may require mitigation. The City of Paso Robles defines the CRZ as the area circumscribed around the tree's trunk using a radius of one foot per one-inch DBH. Mitigation of CRZ impacts are assessed according to the percent of CRZ impact, i.e. less than 50 percent or greater than 50 percent.

Six oak trees in the vicinity of the Phase 2 impact footprint were mapped and the DBH recorded on December 8, 2022. One of the oaks (#6) is surrounded by chain-link fencing and could not be directly accessed, therefore the DBH was approximated. Locations of the oaks and mapped CRZ are indicated on Figure 1, attached.

Table 1. Oak Trees

ID	Species	DBH (inches)	CRZ Radius (feet)	Notes
1	Valley Oak	42	63	Crown trimmed due to overhead lines
2	Valley Oak	26	39	Crown trimmed due to overhead lines
3	Valley Oak	50	75	
4	Valley Oak	66	99	
5	Valley Oak	50	75	
6	Valley Oak	36*	54*	Dripline protected by existing chain link fence

*DBH and CRZ estimated

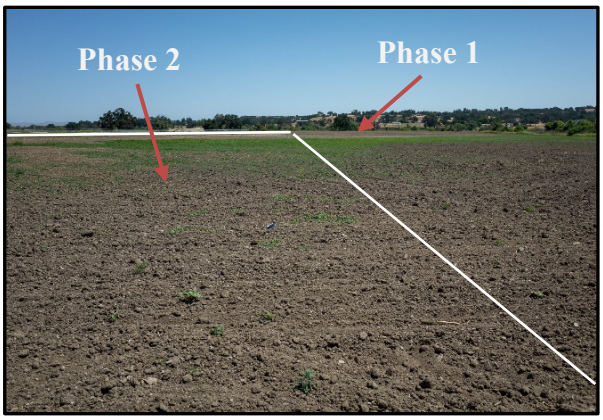


Photo 1. 2018 Study Area overview. Approximate location of Phase 1 (now developed) and proposed Phase 2 (undeveloped) are indicated. View northeast. June 7, 2018.

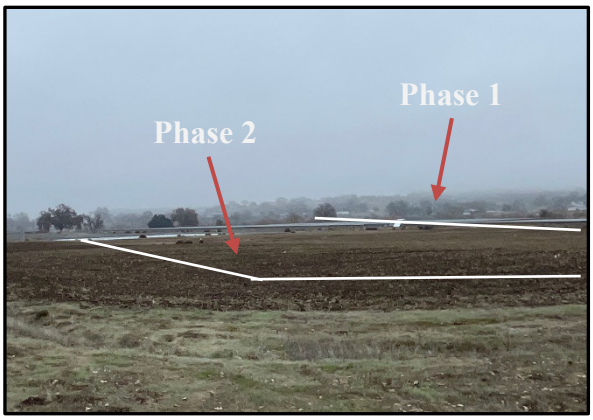


Photo 2. View of Approximate location of Phase 1 (now developed) and proposed Phase 2 (undeveloped) are indicated. View northeast. June 7, 2018.

Photo 3. Valley oak #3. Proposed project area in background. View north-northeast. December 8, 2022.

Photo 4. Valley oaks #1 though #5 (right to left). View south. December 8, 2022.

With exception of the potential impacts to oak trees, we find site conditions and potential project impacts to be consistent with those described in the 2018 biological report. Implementation of the 13 recommended Biological Resource (BR) mitigation measures (BR-1 through BR-13) of the 2018 report would remain applicable to the Phase 2 project. While we expect compensatory mitigation will not be required for San Joaquin kit fox, a Habitat Evaluation Form has been prepared for Phase 2 and is attached. The form must be submitted to the City Planning Division for verification from CDFW.

The following supplemental measures are also recommended for Phase 2 to avoid and minimize impacts to oak trees:

1. **Fencing.** Prior to any site disturbance, tree protection fencing shall be installed as close to the outer limit of the CRZ as practicable for construction operations. The fencing shall be in place throughout the duration of project construction and removed only under the direction of the project's Certified Arborist. The Applicant shall be responsible for maintaining intact tree protection fencing throughout the construction period. The arborist(s), upon notification, will inspect the fence placement once it is erected.

Weatherproof signs shall be permanently posted on the fences with the following information: Tree Protection Zone: No personnel, equipment, materials, or vehicles allowed.

2. **Soil Aeration Methods.** Soils within the CRZ that have been compacted by heavy equipment and/or construction activities must be returned to their original state before all work is completed. Methods include water jetting, adding organic matter, and boring small holes with an auger (18 inches deep, 2-3 feet apart with a 2- to 4-inch auger) and the application of moderate amounts of nitrogen fertilizer. The arborist(s) shall advise if soil aeration is required and methods for completion.
3. **Chip Mulch.** All areas within the CRZ of the trees that are fenced shall receive a 4-6 inch layer of chip mulch to retain moisture, soil structure and reduce the effects of soil compaction.
4. **Trenching within CRZ**. Trenching within the CRZ must be approved by the project's Certified Arborist and shall be done by hand or with an air spade. All major roots shall be avoided whenever possible. All exposed roots larger than 1 inch in diameter shall be clean cut with sharp pruning tools and not left ragged. Any roots exposed during construction shall be evaluated and treated by the Arborist.
5. **Grading within the Critical Root Zone**. Grading should not encroach within the CRZ unless authorized. Grading should not disrupt the normal drainage pattern around the trees. Fills should not create a ponding condition and excavations should not leave the tree on a rapidly draining mound. Any exposed roots shall be covered the same day they are exposed if possible. If they cannot, they must be covered with burlap or another suitable material and wetted down 2 times per day until reburied.
6. **Equipment Operation.** Vehicles and heavy equipment shall not be driven under oak trees, as this will contribute to soil compaction. Additionally, there is to be no parking of equipment or personal vehicles in these areas.
7. **Existing Surfaces.** The existing ground surface within the critical root zone of all oak trees shall not be cut, filled, compacted or pared, unless shown on the grading plans and approved by the arborist.
8. **Construction Materials and Waste.** No liquid or solid construction waste shall be dumped on the ground within the critical root zone of any native tree. The critical root zone areas are not for storage of materials.
9. **Arborist Monitoring.** An arborist shall be present for soil disturbance work within the CRZ of oak trees. Monitoring does not necessarily have to be continuous but observational at times during these activities.
10. **Impacted Root Treatment.** Roots impacted during construction (e.g., trenching or grading operations) shall be treated by the arborist on a case-by-case basis using best practices such as clean cuts accompanied by application of appropriate fungicides and insecticides by a licensed pest control applicator.
11. **Pruning.** A certified arborist shall direct all pruning. No pruning shall take more than 25 percent of the live crown of any native tree.

12. **Landscape.** All landscape within the CRZ shall consist of drought tolerant or native varieties. Lawns shall be avoided. All irrigation trenching shall be routed around critical root zones, otherwise above ground drip-irrigation shall be used. It is the owner's responsibility to notify the landscape contractor regarding this mitigation.
13. **Fertilization.** As the project moves toward completion, the Arborist may suggest either fertilization and/or mycorrhizal inoculation applications that will benefit tree health. Application of mycorrhizal inoculum offers several benefits to the host plant, including faster growth, improved nutrition, greater drought resistance, and protection from pathogens.

Thank you for the opportunity to assist with your project. Should you have any questions regarding the information in this report, please don't hesitate to contact me at (805) 237-9626 or lisa@althouseandmeade.com.

Sincerely,

Lisa Herrera

Lisa Herrera
Senior Biologist

Attachments:

Figure 1. Biological Resources

San Joaquin Kit Fox Habitat Evaluation Form

Figure 1. Biological Resources

Legend

- Property Boundary
- Valley oak
- Critical Root Zone
- Existing Fence

Proposed Site Plan

- Access Road
- Arrays
- Fence

N

0 200 400 Feet

Firestone Walker Brewery Tracker – Phase 2
Map Center: 120.69012°W 35.59669°N
Paso Robles, San Luis Obispo County

Imagery Source: USDA NAIP, 05/13/2022

ALTHOUSE AND MEADE, INC.
BIOLOGICAL AND ENVIRONMENTAL SERVICES

Map Updated:
January 13, 2023 02:43 PM by SAF

Kit Fox Habitat Evaluation Form
Cover Sheet

Project Name: Firestone Walker Brewery Tracker – Phase 2 Solar Photovoltaic System **Date:** January 16, 2022

Project Location: 1400 Ramada Drive, Paso Robles (APN 072-311-018)
*Include project vicinity map and project boundary on copy of U.S.G.S. 7.5. minute map (size may be reduced)

U.S.G.S. Quad Map Name: Templeton

Lat/Long or UTM coordinates (if available): -120.691045, 35.594629

Project Description: Construction of a photovoltaic solar plant

Project Size: 4.8 acres **Amount of Kit Fox Habitat Affected:** 4.8 acres

Quantity of WHR Habitat Types Impacted (i.e. – 2 acres annual grassland, 3 acres blue oak woodland)

WHR type: Dryland Grain and Seed Crops (DGR)	4.8 acres

Comments: The answer to question 1 is given as "E" because the project location is at the outer western boundary of kit fox range, south of the City of Paso Robles, and is not in or between core populations, satellite populations, or a subpopulation.

The answer to question 6 is given as "B," that the project would result in a temporary impact with ongoing maintenance. Although this answer typically applies to a pipeline or other temporary ground disturbance, it is suggested here because the site fence will be kit fox friendly, allowing the possibility of kit fox to utilize the site in the future. From current information kit fox are known to utilize solar farms as habitat, and the structure of this solar field allows virtually all the area to be available as habitat. Therefore, loss of habitat is not necessarily permanent.

Form Completed by: Lisa Herrera

Revised 03/02

San Joaquin Kit Fox Habitat Evaluation Form

Is the project within 10 miles from a recorded San Joaquin kit fox observation or within contiguous suitable habitat as defined in Question 2(A-E)?

YES – Continue with evaluation form
NO – Evaluation form/surveys are not necessary

1. Importance of the project area relative to Recovery Plan for Upland Species of the San Joaquin Valley, California (Williams et al, 1998).
   A. Project would block or degrade an existing corridor linking core populations or isolate a subpopulation (20).
   B. Project is within a core population (15)
   C. Project area is identified within satellite population (12)
   D. Project area is within a corridor linking satellite populations (10)
   E. Project area is not within any of the previously described areas but is within known kit fox range (5)

2. Habitat characteristics of the project area.
   A. Annual grassland or saltbush scrub present >50% of site (15)
   B. Grassland or saltbush scrub present but comprises <50% of project area (10)
   C. Oak savannah present on >50% of site (8)
   D. Fallow ag fields or grain/alfalfa crops (7)
   E. Orchards/vineyards (5)
   F. Intensively maintained row crops or suitable vegetation absent (0)

3. Isolation of project area
   A. Project area surrounded by contiguous kit fox habitat as described in Question 2a-e (15)
   B. Project area adjacent to at least 40 acres of contiguous habitat or part of an existing corridor (10)
   C. Project area adjacent to <40 acres of habitat but linked by existing corridor (i.e.- river, canal, aqueduct) (7)
   D. Project area surrounded by ag but less than 200 yards from habitat (5)
   E. Project area completely isolated by row crops or development and is greater than 200 yards from potential habitat (0)

4. Potential for increased mortality as a result of the project implementation. Mortality may come from direct (e.g. – construction related) or indirect (e.g. –vehicle strikes due to increases in post development traffic) sources.
   A. Increase in mortality likely (10)
   B. Unknown mortality effects (5)
   C. No long-term effect on mortality (0)

5. Amount of potential kit fox habitat affected
   A. > 320 acres (10)
   B. 160-319 acres (7)
   C. 80-159 acres (5)
   D. 40-79 acres (3)
   E. <40 acres (1)

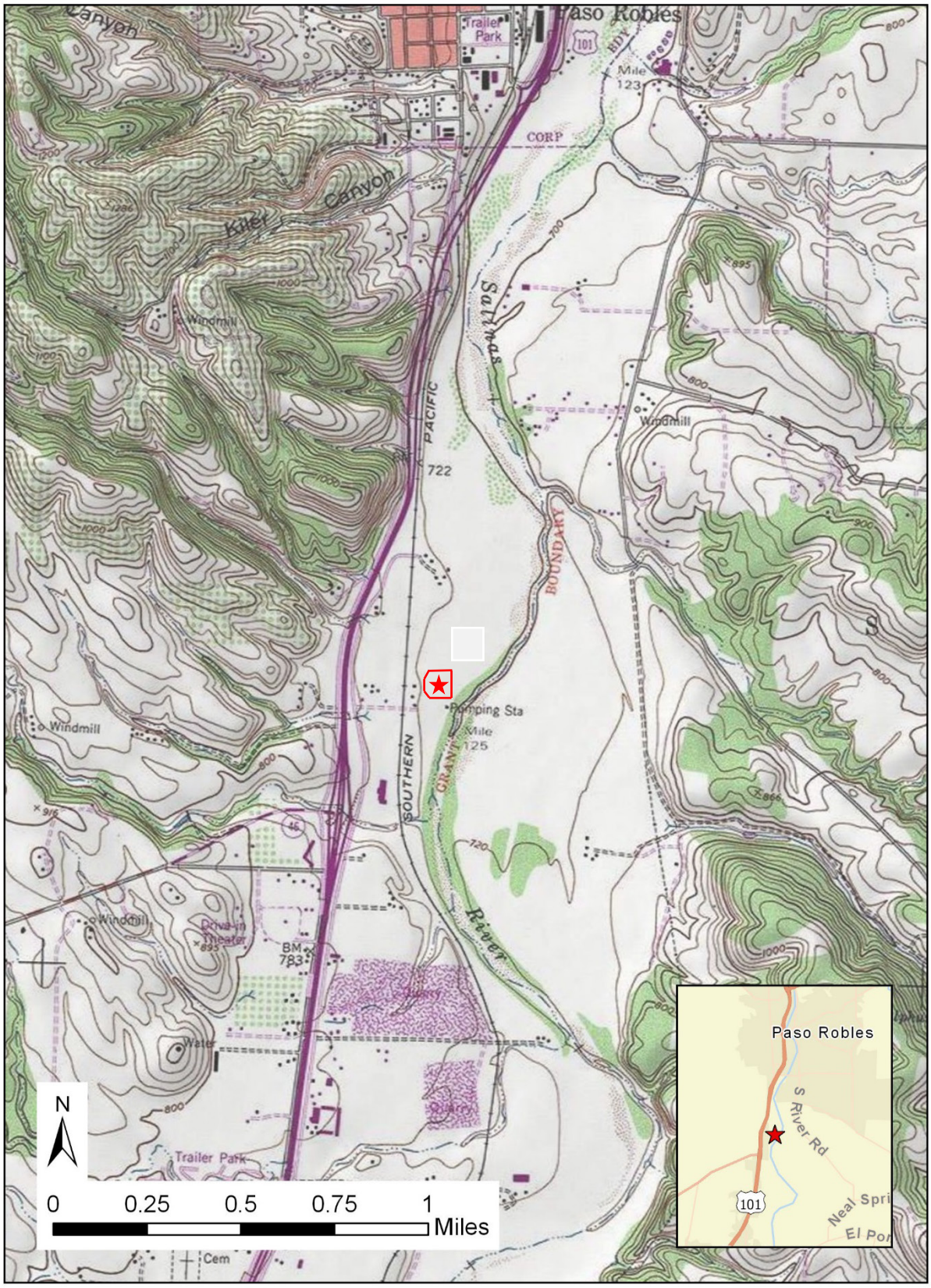
6. Results of project implementation
   A. Project site will be permanently converted and will no longer support foxes (10)
   B. Project area will be temporarily impacted but will require periodic disturbance for ongoing maintenance (7)
   C. Project area will be temporarily impacted and no maintenance necessary (5)
   D. Project will result in changes to agricultural crops (2)
   E. No habitat impacts (0)

7. Project shape
   A. Large block (10)
   B. Linear with >40 foot right-of way (5)
   C. Linear with <40 foot right-of-way (3)

8. Have San Joaquin kit foxes been observed within 3 miles of the project area within the last 10 years?
   A. Yes (10)
   B. No (0)

Scoring

1. Recovery importance	5
2. Habitat condition	7
3. Isolation	7
4. Mortality	5
5. Quantity of habitat impacted	1
6. Project results	7
7. Project shape	10
8. Recent observations	0
Total	**42**



USGS 7.5' topo, quadrangle

ATTACHMENT 5

Cultural Resource Study for the Firestone Phase II Ground Mount Solar Photovoltaic System Project in the City of Paso Robles, California

Luke Cavallaris, Emma Frances Cook, and Kelli Wathen

Prepared By

Applied EarthWorks, Inc.
811 El Captain Way, Suite 100
San Luis Obispo, CA 93401-8943

Prepared For

Duke Energy Sustainable Solutions
3450 Broad Street, Suite 105
San Luis Obispo, CA 93401

February 2023

USGS Templeton 7.5′ quadrangle, Unsec; APNs 009-631-018 and 009-631-019
3.7-acres
Resources: CA-SLO-1896, P-40-001896

MANAGEMENT SUMMARY

At the request of Duke Energy Sustainable Solutions (Duke Energy), under contract with Firestone Walker Brewing Company, Applied EarthWorks, Inc. (Æ) completed a Phase 1 archaeological survey and Extended Phase 1 subsurface archaeological testing at 1400 Ramada Drive, Assessor's Parcel Numbers 009-631-018 and -019, in Paso Robles, San Luis Obispo County, California. The proposed Firestone Phase II Ground Mount Solar Photovoltaic (PV) System (Project) would include installation and construction of a solar PV system and associated electrical equipment and utilities on a 3.7-acre parcel (Project area).

Æ conducted a cultural resource study under contract with Duke Energy to fulfill the requirements the California Environmental Quality Act, which mandates that government agencies consider the effects of permitted actions on important archaeological and historical resources (Public Resource Code 5020 and 21000 et. seq. and California Code of Regulations 15000 et. seq.).

Æ's cultural resources study included records searches of the Central Coast Information Center (CCIC) and Sacred Lands File of the Native American Heritage Commission (NAHC), outreach to local Native American tribal representatives, and a pedestrian surface survey of the entire 3.7-acre Project area. The CCIC search of the Project area and surrounding 0.25-mile buffer identified 3 previous cultural resource studies within the Project area and 22 previous cultural resource studies within a 0.25-mile radius of the Project area. An additional cultural resource study within 0.25 miles of the Project area was identified during background research. One previously recorded cultural resource, CA-SLO-1896, was identified within the Project area, and two previously recorded cultural resources were identified within 0.25 miles of the Project area. Based on Pacific Archaeological Sciences Team's investigations at CA-SLO-1896 in 2003, Æ assumes the site is eligible for listing in the California Register of Historical Resources (CRHR).

Æ identified cultural materials associated with CA-SLO-1896 during the surface survey. Æ conducted an Extended Phase 1 subsurface survey to determine if subsurface archaeological deposits are present. Twenty shovel test pits and augers were excavated at regular intervals across the Project area. Ten shovel test pits and one auger within a shovel test pit were positive for cultural material. Cultural material included sparse shell, lithic debitage, and faunal remains, as well as historic and modern refuse. No formal tools were identified during subsurface investigations.

Subsurface testing revealed sparse, primarily shallow, and extensively disturbed cultural materials with modern debris present. While the overall site is assumed be eligible for the CRHR, archaeological deposits within the Project area appear to lack density, diversity, and integrity, and it is Æ's opinion that significant or intact deposits are not present within the Project area. However, due to the sensitivity of the surrounding area, there is a possibility of encountering pockets of intact subsurface cultural deposits as well as human remains. Therefore, it is recommended that archaeological and Native American monitors be present during all ground-disturbing activities.

Field notes, maps, and a complete set of photographs from the current investigation are on file at Æ's office in San Luis Obispo, California. A copy of the final version of this report and updated California Department of Parks and Recreation forms will be submitted to the CCIC of the California Historical Resources Information Center at the Santa Barbara Museum of Natural History in Santa Barbara, California.

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APPENDICES

FIGURES AND TABLES

1
INTRODUCTION

At the request of Duke Energy Sustainable Solutions (Duke Energy), on behalf of Firestone Walker Brewing Company, Applied EarthWorks, Inc. (Æ) completed a Phase 1 cultural resource study and Extended Phase 1 archaeological testing in support of the proposed Firestone Phase II Ground Mount Solar Photovoltaic (PV) System (Project) at 1400 Ramada Drive (Assessor's Parcel Numbers 009-631-018 and -019) in Paso Robles, San Luis Obispo County, California. Project plans the installation of a solar PV system and associated electrical equipment. The Project parcel is within an unsectioned portion of the Paso de Robles Land Grant on the U.S. Geological Survey (USGS) Templeton 7.5-minute topographical quadrangle (Figures 1-1 and 1-2).

1.1 PROJECT AREA

The Project is east of U.S. Highway 101, east of Ramada Drive and Vendels Circle in Paso Robles, California. The Project area covers 3.7 acres directly south of the Firestone Brewery water treatment facility and is approximately 80 meters northwest of the Salinas River (Figure 1-3). The Project area is within the floodplain of the Salinas River and includes Accessor Parcel Numbers (APN) 009-631-018 and 009-631-019.

1.2 REGULATORY CONTEXT

This Project requires discretionary permits from the City of Paso Robles, which requires compliance with the California Environmental Quality Act (CEQA). CEQA mandates that government agencies consider the effects of permitted actions on important archaeological and historical resources (Public Resource Code [PRC] 5020 and 21000 et seq. and California Code of Regulations 15000 et. seq.). Therefore, applicants must assess the potential impacts of the proposed Project on archaeological and historical resources. The purpose of Æ's Phase 1 study was to identify any cultural resources that could be impacted by the Project and provide recommendations for any further cultural resource work, if necessary. Due to surface cultural materials within the Project area, Æ followed the surface study with Extended Phase 1 subsurface archaeological testing to identify the vertical distribution of cultural materials. Investigation results will assist development planning for the Project concerning cultural resources under CEQA Guidelines.

1.3 PROFESSIONAL QUALIFICATIONS

Æ Principal Archaeologist Erin Enright (M.A., Registered Professional Archaeologist [RPA] 16575) served as principal investigator and provided quality assurance and quality control for this effort. Æ Senior Archaeologist Simone Schinsing (M.A., RPA 28577763) served as project manager and completed technical review of this document. Æ Associate Archaeologist Emma Frances Cook (M.A., RPA 5086) assisted with project management, served as field supervisor for the testing effort, and co-authored this report. Æ Staff Archaeologist Luke Cavallaris (B.S.) conducted the archaeological field survey, assisted with conducting testing effort, and co-authored this report. Æ Associate Archaeologist Kelli Wathen (M.A., RPA 5369)

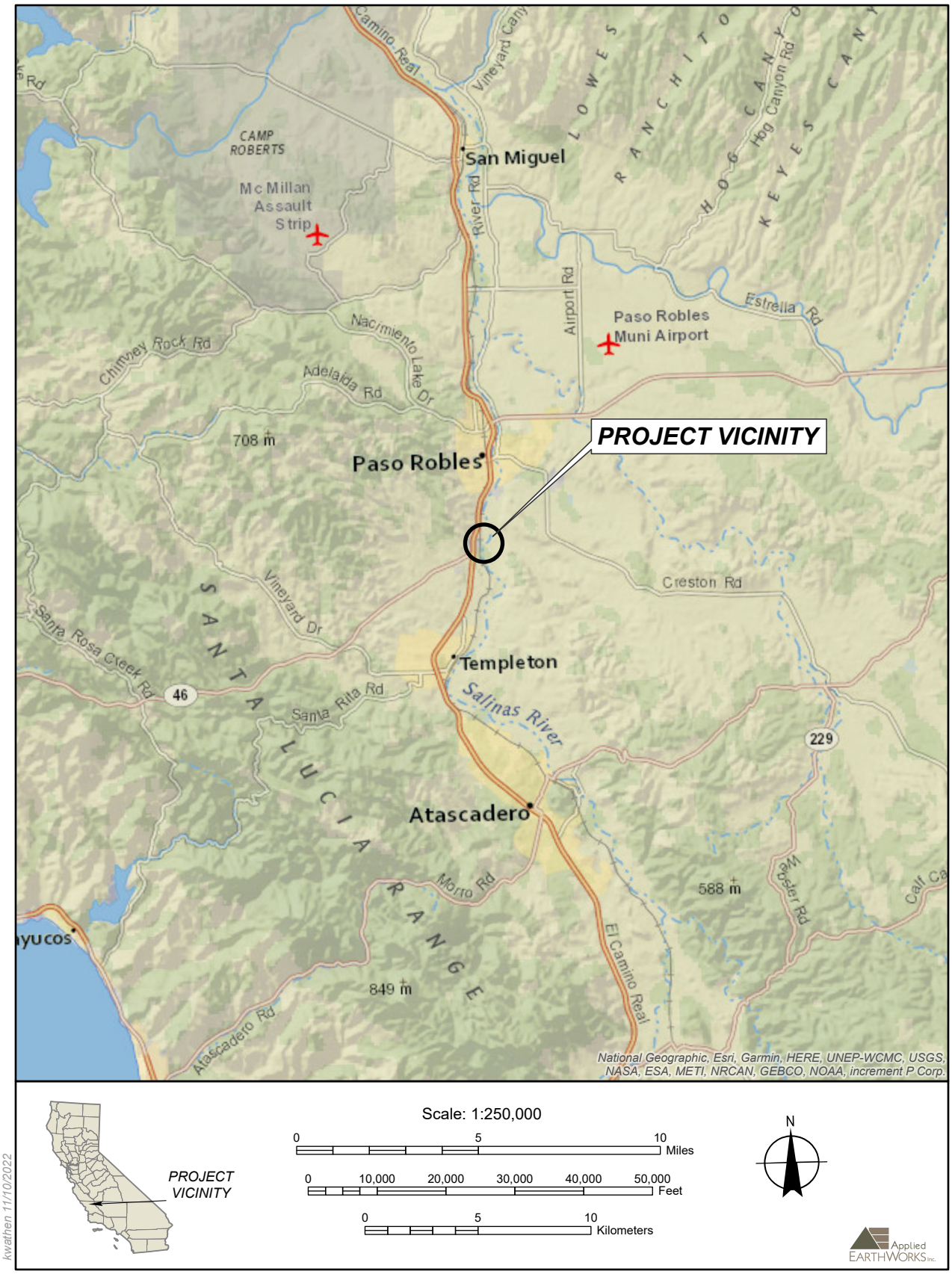

Figure 1-1 Project vicinity in San Luis Obispo County, California.

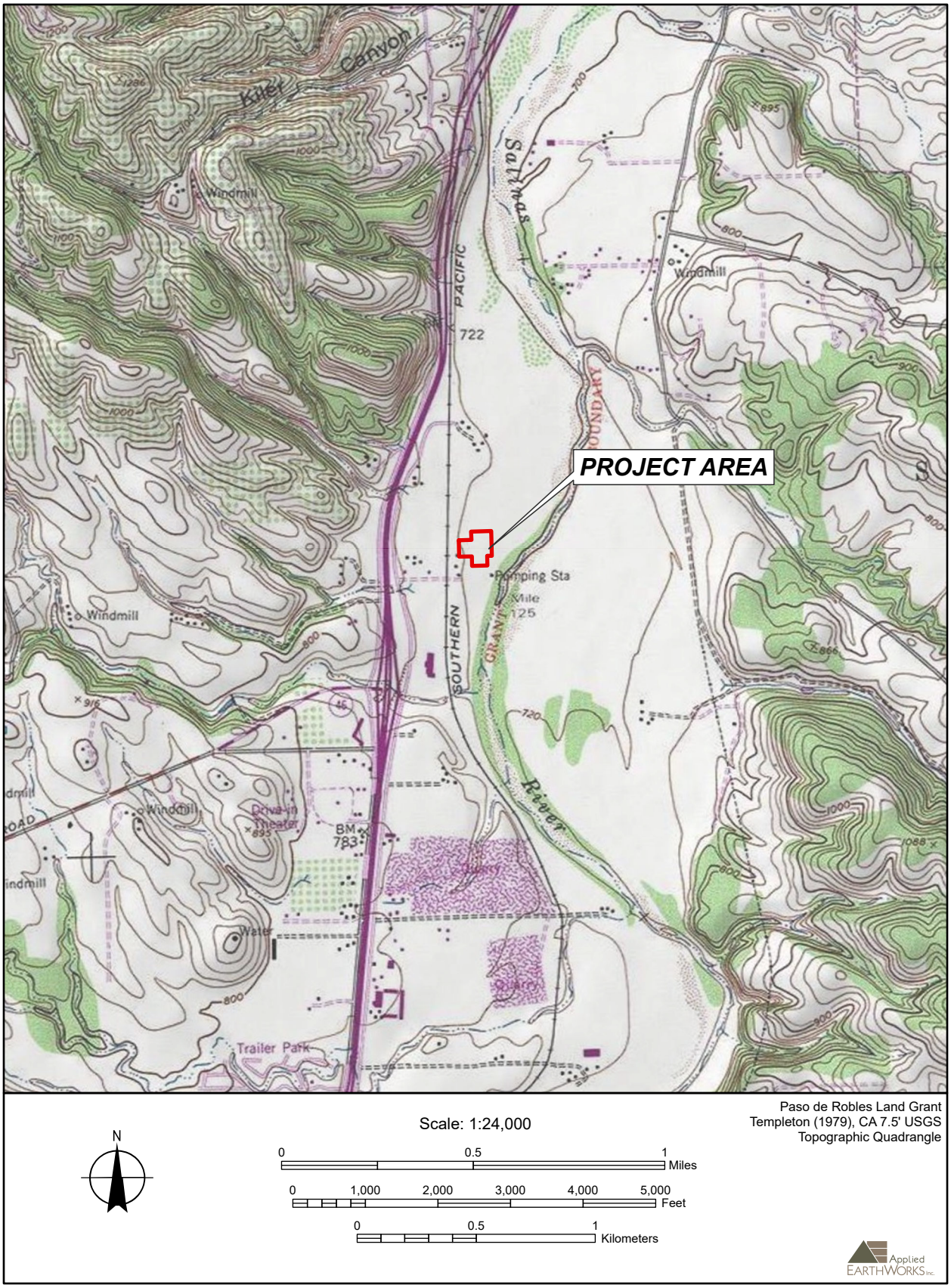

Figure 1-2 Project area on the USGS Templeton 7.5-minute quadrangle.

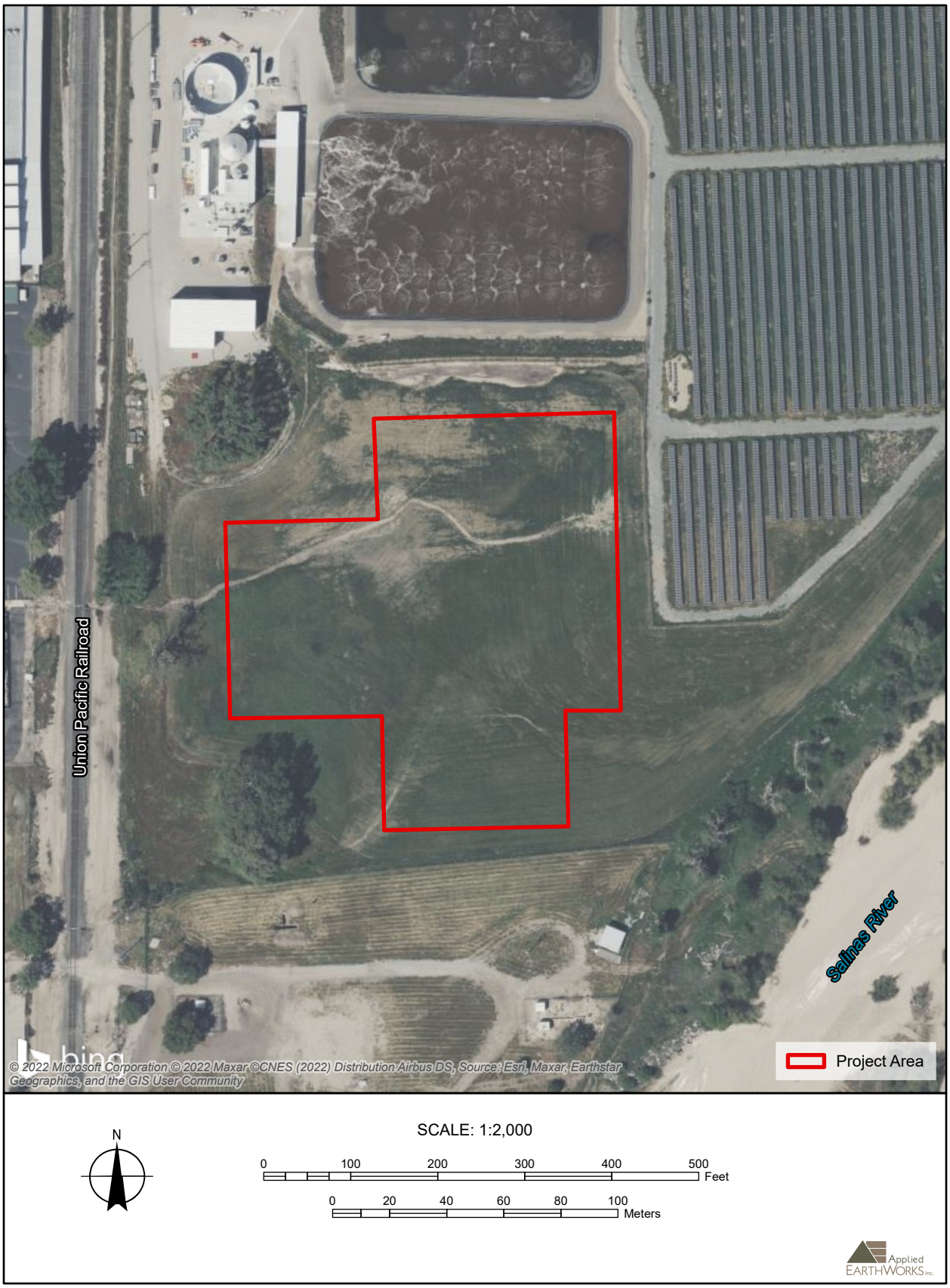

Figure 1-3 Aerial view of the Project area.

produced maps, managed the Geographic Information System data, and co-authored this report. Résumés for the qualified personnel are in Appendix A.

1.4 REPORT ORGANIZATION

This report is prepared in accordance with *Archaeological Resource Management Reports: Recommended Contents and Format* published by the California Office of Historic Preservation (Office of Historic Preservation 1990). This document consists of six chapters. Following this introduction, Chapter 2 describes the natural and cultural setting of the Project area. Chapter 3 presents Æ's methods for the study, including background research and field investigations. Chapter 4 discusses the results of the research and archaeological investigations, and Chapter 5 contains a summary and recommendations. A complete listing of references cited is provided in Chapter 6. Résumés for qualified personnel are in Appendix A. Appendix B presents the results of the records search, Appendix C contains monitoring records and information from May 2020 cultural resource and human remains discoveries northeast of the Project area. Appendix D contains documentation of communication with the Native American Heritage Commission (NAHC) and local tribal representatives, and Appendix E contains California Department of Parks and Recreation (DPR) site forms.

2
SETTING

2.1 ENVIRONMENTAL SETTING

The Project is within the southern extent of the Coast Ranges geologic province in San Luis Obispo County. The Coast Ranges were formed by pressure between the North American and Pacific plates, which folded the North American Plate into a series of northwest-southeast trending ridges and valleys and raised the coastline (Pletka and Pletka 2004). Geology of the area includes Quaternary alluvium, lake, playa, and terrace deposits (California Department of Conservation 2022). Sediments within the Project area consist of dark silty loam (web soil survey data accessed from the Natural Resource Conservation Service website).

The Project is in the southern portion of Paso Robles, within agricultural fields along the western bank of the Salinas River. The local Mediterranean climate is typically warm and dry in the summer, and cool and wet in the winter. Most of the area's rivers, creeks, and streams remain dry during the summer months. Average inland temperatures range from 37 to 89 degrees Fahrenheit; July and August are the warmest months and December is the coldest. Precipitation occurs primarily as winter rain between November and March; February is usually the wettest month. Mean annual precipitation near the Project area is 12.9 inches (Weatherspark.com 2019).

2.2 PREHISTORY AND ARCHAEOLOGY

Early attempts at regional cultural chronology by Rogers (1929) and Olson (1930) divided prehistory into three periods. However, extensive archaeological studies since then and development of more precise dating methods have allowed many refinements to the San Luis Obispo cultural sequences. Currently, the most common chronological system—based on work by Erlandson and Colten (1991), Jones and Ferneau (2002), Jones et al. (2007), King (1990), and Jones et al. (2015)—divides Central Coast prehistory into six periods (Table 2-1).

Table 2-1
Regional Chronology of the Central Coast

Period	Years B.C./A.D.	Cal Years B.P.
Paleo-Indian	pre-8000 B.C.	pre-10,000
Early Archaic	8000–3500 B.C.	10,000–5500 B.P.
Early	3500–600 B.C.	5500–2600 B.P.
Middle	600 B.C.–A.D. 1000	2600–950 B.P.
Middle-Late Transition	A.D. 1000–1250	950–700 B.P.
Late	A.D. 1250–1769	700 B.P.–Historic

2.2.1 Paleo-Indian Period (Pre-10,000 cal. B.P.)

The Paleo-Indian Period represents the earliest human occupations in the region, which began prior to 10,000 years ago. Paleo-Indian sites throughout North America are known by the representative fluted projectile points, crescents, large bifaces used as tools as well as flake

cores, and a distinctive assemblage of small flake tools. Only three fluted points have been reported from Santa Barbara and San Luis Obispo counties, and all are isolated occurrences unassociated with larger assemblages of tools or debris (Erlandson et al. 1987; Gibson 1995; Mills et al. 2005). One of these examples comes from CA-SLO-1429, where Gibson (1995) found a large fluted projectile point in the back dirt from pipeline replacement work on Santa Margarita Ranch near the pumping station off of El Camino Real.

More evidence of Paleo-Indian sites on the mainland is slowly being uncovered. Work on Vandenberg Air Force Base (AFB) uncovered a late Paleo-Indian site (CA-SBA-1547) with a robust artifact assemblage (Lebow et al. 2015). Data recovery work documented a dense single-component shell midden dating to approximately 10,725 calibrated years before present (cal B.P.). Data from this site, also known as the Sudden Flats Site, points to an early culture with a unique tool assemblage that exhibit traits derived from Alaska/Beringia (Lebow et al. 2015).

Along with evidence on the mainland, the Channel Islands provide even more robust examples of Paleo-Indian occupation areas. Interestingly, early sites on San Miguel and Santa Rosa islands have yielded numerous radiocarbon dates of older Paleo-Indian age than found on the mainland. Additionally, these sites do not contain fluted points or other notable artifacts typically associated with Paleo-Indian adaptations (Agenbroad et al. 2005; Erlandson et al. 1996). Nonetheless, both offshore and mainland sites provide clear evidence of watercraft use by California's earliest colonizers and offer tantalizing evidence of pre-Clovis occupations. Overall, inhabitants of the Central Coast during the Paleo-Indian Period are thought to have lived in small groups with a relatively egalitarian social organization and a forager-type land-use strategy (Erlandson 1994; Glassow 1996; Greenwood 1972; Moratto 1984).

2.2.2 Early Archaic Period (10,000–5500 cal B.P.)

Additional evidence of human occupation has been found at sites dating to the Early Archaic. A growing number of Early Archaic, components have been identified, most located in coastal or pericoastal settings. Two such components, at CA-SLO-2 (Diablo Canyon) and CA-SLO-1797 (the Cross Creek Site), are radiocarbon dated between 10,300 and 8,500 cal B.P. providing the earliest evidence for the widespread California Milling Stone adaptive pattern (Greenwood 1972; Jones et al. 2008). The most common artifacts in these assemblages are the eponymous milling slabs and handstones used to grind hard seeds and process other foodstuffs. Choppers, core tools, and large bifaces also are common, while side-notched dart points, pitted stones, simple bone awls, bipointed bone gorges, and possible eccentric crescents occur in lesser frequencies. Population density likely remained low, although settlements may have been semipermanent. Subsistence activities appeared to be aimed broadly at a diverse spectrum of terrestrial and marine resources.

During this time, people appear to have subsisted largely on plants, shellfish, and some vertebrate species using a seemingly simple and limited tool technology. Sites of this age are notable for the prevalence of handstones and milling slabs and less abundant flaked tools and projectile points (Jones et al. 2007:135). Archaeological components from central California show substantial regional variability. Differences in site location, artifact assemblages, and faunal remains suggest that populations were beginning to establish settlements tethered to the unique characteristics of the local environment and adopt subsistence practices responsive to

local conditions. Obsidian from several of these components originated on the east side of the Sierra Nevada, suggesting that long-distance trade networks were also established during this era. Glassow (1990, 1996) infers that site occupants in the Vandenberg area during this time were sedentary and had begun using a collector-type (i.e., logistically mobile) land-use strategy. However, others have argued for a broader and less permanent subsistence base as overexploitation of costal resources pushed human residents towards the interior (Jones and Richman 1995).

2.2.3 Early Period (5500–2600 cal B.P.)

An important adaptive transition occurred along the Central Coast around 5500 cal B.P. (Jones et al. 2007; Price et al. 2012). Technological changes marking the transition into the Early Period include an abundance of contracting-stemmed, Rossi square-stemmed, large side-notched, and other large projectile points (Jones et al. 2007:138). Mortars and pestles were introduced and gradually replaced manos and milling slabs as the primary plant processing tools, indicating expansion of the subsistence base to include acorns (Glassow and Wilcoxon 1988). Shell beads and obsidian materials indicate that trade between regions expanded (Jones et al. 1994). Site occupants appear more settled with more limited mobility, and they increasingly used sites for resource procurement activities such as hunting, fishing, and plant material processing (Jones et al. 1994:62; Jones and Waugh 1995:132). Farquhar et al. (2011:14) argue that cultural changes during this period are the result of population circumscription and economic intensification. Echoing Rogers (1929), Price et al. (2012:36–37) suggest such constraints might have been prompted by the arrival of new populations or adoption of new social norms in the region.

2.2.4 Middle Period (2600–950 cal B.P.)

The Middle Period is defined by continued specialization in resource exploitation and increased technological complexity. Contracting-stemmed points still existed, while square-stemmed and large side-notched variants disappeared (Rogers 1929). The use of mortars and pestles also increased. Additionally, expansion of trade is evident in the increased quantity of obsidian, beads, and sea otter bones (Farquhar et al. 2011:15). Circular shell fishhooks, which facilitated an increase in exploitation of fishes, appeared for the first time (Glassow and Wilcoxon 1988). The appearance of small leaf-shaped projectile points toward the end of the period is evidence for the arrival of bow and arrow technology (Jones et al. 2007:139).

2.2.5 Middle-Late Transition Period (950–700 cal B.P.)

The Middle-Late Transitional Period represents a rapid change in artifact assemblages as large numbers of arrow points appeared and most stemmed points disappeared (Jones et al. 2007:139). Hopper mortars also made their first entry in the archaeological record (Farquhar et al. 2011:16). At the same time, some evidence points to population decline and interregional trade collapse. Obsidian is not found in sites dating to this period (Jones et al. 1994). Settlement shifted away from the coast and people relocated to more interior settings (Jones 1995:215). Marine resources appear to have been largely dropped from the diet and instead people relied more on terrestrial resources such as small mammals and acorns (Farquhar et al. 2011:16). These changes may have been caused by an environmental shift that increased sea and air temperatures, resulting in

decreased precipitation and overexploitation of resources (Arnold 1992; Graumlich 1993; Kennett et al. 1997; Pisias 1978; Stine 1990).

At the same time, it appears that social complexity became more noticeable during the transition between the Middle and Late periods. It is during this time that craft specialization and social ranking developed (Arnold 1992). The *tomol* (plank canoe), which was utilized by the Chumash south of Point Conception where ocean conditions were more favorable, allowed for a greater reliance on marine resources, particularly fish, for food. However, these changes are again more noticeable south of Point Conception, and may have been due, in part, to environmental changes occurring at that time.

2.2.6 Late Period (700 cal B.P.–Historic)

Populations on the Central Coast expanded in the Late Period (Farquhar et al. 2011:17; Glassow 1996). More sites were occupied during this period than ever before (Jones et al. 2007:143). It appears that the inhabitants of the Central Coast used a range of subsistence strategies depending on the available local ecology. Some studies have found that Late Period residents did not increase maritime subsistence activities but instead continued to demonstrate a terrestrial focus with occasional forays to the coastal zone to procure marine products (Farquhar et al. 2011:17; Jones et al. 2007:140; Price 2005; Price et al. 1997:4.13–14.14). However, archaeological investigations at Late Period coastal sites along the Central Coast show evidence of intensification of marine resource use and overall expansion of the subsistence base (Codding et al. 2013; Joslin 2010; Moratto et al. 2009). Analysis of assemblages from two Late Period sites on the San Simeon Reef (Joslin 2010) and excavations at Tom's Pond (CA-SLO-1366/H) on the Pecho Coast (Codding et al. 2013) demonstrate that some human populations responded to climate shifts and associated impacts to terrestrial faunal communities with an increased use of the marine subsistence base. This same trend is visible to the south, along the Vandenberg AFB coast where analysis of faunal assemblages from CA-SBA-694 and -695 found that Late Period inhabitants used coastal sites as camps for exploitation of marine resources, especially shellfish and fish (Moratto et al. 2009).

Artifact assemblages from the Late Period within San Luis Obispo County contain an abundance of arrow points, small bead drills, bedrock mortars, hopper mortars, and a variety of bead types (Price 2005). More shell and stone beads appeared in the Late Period and became a more standardized and common form of exchange (Jones et al. 2007:140, 145). The use of handstones and milling slabs continued during this period, but pestles and mortars occurred in greater proportions (Jones and Waugh 1995:121). There are few records of Spanish encounters with the Chumash north of Point Conception (Glassow 1990). However, in San Luis Obispo County it appears that the absence of the *tomol* and a lower population density contributed to a different social and political organization than their neighbors to the south. Moreover, the absence of imported obsidian after 900 cal B.P. suggests a change in trade relationships that is likely associated with the shift in settlement patterns (Jones et al. 1994).

2.3 ETHNOGRAPHIC

The Project area is within the traditional territorial ranges of the Chumash and Salinan tribes (Hester 1978; Jones et al. 2007). Modern decedents of both groups claim territory in northern

San Luis Obispo County. Defining traditional tribal boundaries is complex as written documentation of Native American groups comes from European sources starting at first contact in the 1500s. Prior to European contact, the region had been inhabited for over 10,000 years. During this long span of time, Native American groups moved across the landscape and traditional tribal boundaries fluctuated over the centuries. Archaeological data from prehistoric sites, unfortunately, cannot shed clear light on the differences between Salinan and Chumash groups. Both groups were complex hunter-gathers societies that used similar methods for substance and technology. Differences between these groups would have been in their beliefs, social structure, and shared heritage, which cannot be defined by archaeological data.

During the Mission Period, traditional territories and practices of the local Native Americans were abruptly disrupted and Native Americans from many of the local tribes were moved from their traditional homeland to work at the missions. Data from local mission records, show that both Chumash and Salinan people were moved between missions within San Luis Obispo and Monterey counties. Additionally, individuals who did not enter the mission system fled their homelands to inland or remote areas of the state. Therefore, stories and histories passed down to modern decedents and through ninetieth century ethnographers provide a range of information that indicate that both the Salinan and Chumash groups have ties to the same lands, especially since the start of European contact.

The Northern Chumash occupied land along the Pacific coast from the Santa Maria River north to approximately Point Estero and east to the edge of the San Joaquin Valley. The Chumash people lived in large villages along the Santa Barbara Channel coast, with less dense populations in the interior regions, on the Northern Channel Islands, and in coastal areas north of Point Conception.

The Salinans are separated into northern and southern groups. Northern Salinans, or Antoniaños, were associated with the populations around Mission San Antonio de Padua. The southern group, or Migueleños, were associated with the populations around Mission San Miguel Archángel. The territories of both Salinan groups extended east into the interior of the Coast Range. The Salinan language is a classificatory isolate of the Hokan linguistic group (Golla 2011:114).

Both Salinan and Northern Chumash subsistence was focused on fishing, hunting, and gathering native plants, particularly acorns, although many animals and dozens of plants were used for food (Hester 1978:501). Marine shellfish was an important source of nourishment, and both men and women shared in the task of gathering. Fishing also had a division of labor along gender lines. Men would weave the fishing nets and catch the fish, while women would process the catch. A variety of mammals were hunted, including bear, rabbit, and deer. The meat was roasted, baked, boiled, or dried. Cooking baskets and earth ovens were used in food preparation.

Vegetal foods, especially acorns, provided the bulk of the diet. Acorns were stored in large willow-twig granaries until needed, then ground with a stone mortar and pestle. The tannic acid in the acorn meal was leached out with water, and the result was cooked into a gruel. Other important plant foods included wild grass and sage seeds, berries, mescal, and wild fruits and berries. Animals and birds were captured with snares, traps, spears, and the bow and arrow.

Stone, bone, wood, and shell provided materials for the production of tools (Hester 1978:501). Stone tools were manufactured from locally available chert as well as imported obsidian, and debris from their manufacture and maintenance are most likely to be seen in an archaeological context. Pecked and ground stone objects include bowl mortars, pestles, metates, basket mortars, stone bowls, notched pebble net sinkers, and steatite arrow shaft straighteners. Ornaments are made of steatite and serpentine. Bone and shell tools were also manufactured, especially bone awls and C-shaped fishhooks. Shell beads of olive snail, mussel, abalone, and other species were the basis of the native "currency," with value being assigned based on the color of the shell and other factors (Hester 1978:502).

It appears that Salinan and Chumash people had relationships with the Yokuts to the east, especially those residing on the shore of Tulare Lake. Coastal groups would regularly travel inland to fish and hunt fowl, and the Yokuts, in kind, would venture westward to obtain littoral resources. Trade was extensive with the Yokuts receiving shell beads, unworked shells, and other marine resources; and Chumash and Salinans receiving saltgrass salt, obsidian, seeds, lake fish, and tanned antelope and deer skins (Hester 1978:500).

2.4 HISTORICAL SETTING

One of the first documented European incursions into San Luis Obispo County occurred in 1587, when Pedro de Unamuno, landed near the mouth of Chorro Creek, near the present site of Morro Bay. Unamuno led an expedition approximately 12 miles up either the Los Osos or Chorro Valley, but fled after several skirmishes with the native inhabitants (Krieger 1988). In 1602, Sebastian Vizcaino sailed up the California coast from Mexico looking for a good harbor along the "Manila Galleon" sea route and anchored at San Luis Bay. Over 150 years passed before the next major European expedition reached San Luis Obispo County. In 1769, Gaspar de Portola and Fray Crespi departed the newly established San Diego settlement and marched northward toward Monterey, passing through present-day San Luis Obispo County that same year (Krieger 1988). Father Serra founded the Mission San Luis Obispo de Tolosa three years later in 1772. Mission San Miguel Archángel was founded in northern San Luis Obispo County in 1797.

Spanish rule in Alta California came to an end in 1821 with Mexican Independence. The mission lands were secularized in the 1830s. During Mexican rule, missions declined in influence and large cattle ranches (called ranchos) came into dominance in the Paso Robles area. The Project area falls within the historic boundaries of Rancho Santa Ysabel, granted in 1844 to Francisco C. Arce, which was originally part of Mission San Miguel Archángel's land holdings (Krieger 1988). The Mexican Period ended with the signing of the Treaty of Guadalupe Hidalgo in 1848, which transferred control of California, New Mexico, Texas, and other western properties to the United States.

Paso Robles was a popular tourist location as early as the 1860s because of the reported healing properties of its hot springs and mud baths. The community that developed around Paso Robles remained small through the early American Period with ranching and agriculture dominating the area's early economy. Following the construction of the Southern Pacific Railroad in 1886, a town site was laid out with the hot springs resort as the nucleus. At the end of one year, the town included 523 residents and 100 structures (Sartian 1993). The City of El Paso de Robles incorporated in 1889. Since the 1950s the city has grown through the annexation of various

sections of land east of the Salinas River. As of the 2021 census, the population of Paso Robles was 31,759 (U.S. Census Bureau 2021).

3
METHODS

This chapter describes the methods used to complete the cultural resource study, including a records search to identify previously recorded resources and studies, contact with Native Americans who may have knowledge about the area, an intensive pedestrian survey, and Extended Phase 1 investigations.

3.1 RECORDS SEARCH

Æ conducted a records search for the study on October 10, 2022, at the Central Coast Information Center (CCIC) of the California Historic Resources Information System, housed at the Santa Barbara Museum of Natural History (Appendix B). Æ conducted a thorough examination of maps, site records, and archaeological reports.

3.2 BACKGROUND RESEARCH

Prior to conducting a pedestrian archaeological survey, Æ performed background research to identify areas within the Project area where extant historic-aged buildings, structures, or objects might be present, or where archaeological deposits might exist. Desktop and online library research focused on historical maps, aerial images, atlases, and photographs. Æ reviewed and compiled information from various sources including:

- General Land Office maps (https://glorecords.blm.gov/default.aspx);
- U.S. Geological Survey topographic maps (1919, 1943, 1947, 1948, 1956, 1957, 1958, 1961, 1989; https://ngmdb.usgs.gov/topoview); and
- Aerial photographs, accessed through the Map Aerial Locator Tool maintained by California State University, Fresno (1969; http://malt.lib.csufresno.edu/MALT/); FrameFinder administered by the University of California, Santa Barbara (http://mil.library.ucsb.edu/ap_indexes/FrameFinder/), and HistoricAerials.com administered by NETRonline (1956, 1957, 1981).

3.3 NATIVE AMERICAN COMMUNICATION

Æ contacted the NAHC to request a search of their Sacred Lands File. On November 10, 2022, the NAHC returned a letter stating their search was negative and supplied a list of local Native American individuals and/or groups with interests and knowledge about the area. Those included on the list were contacted by letter and telephone to request comments or information about the Project area.

3.4 PEDESTRIAN SURVEY

Æ Staff Archaeologist Luke Cavallaris completed a pedestrian survey of the 3.7-acre Project area on November 2, 2022. The Project area appeared recently tilled and ground surface visibility was approximately 95 percent. Special attention was also given to rodent back dirt mounds to look

for exposed subsurface deposits. Æ documented representative views of the survey, field conditions, and surrounding environment with digital photography. Methods, observations, and findings were recorded on digital Æ Daily Work Record and Survey Field Record forms. Mr. Cavallaris used an Arrow Gold GNSS Receiver, ESRI FieldMaps, and Survey123 applications to collect geospatial data. All photographs, forms, and field notes are on file at Æ's office in San Luis Obispo, California.

3.5 EXTENDED PHASE 1 SUBSURFACE INVESTIGATION

Background research and surface survey results identified prehistoric site CA-SLO-1896 in the western portion of the Project area. Æ determined a subsurface investigation was necessary to identify the vertical and horizontal extent of cultural materials within the Project area. Æ Associate Archaeologist Emma Cook and Æ archaeologists Nastya Rymzha, Luke Cavallaris, Jenny Altamirano, Justin Tidd, Rachel Burgess, and Gabriel Granado conducted subsurface testing within the Project area from December 8 to 15, 2022. Salinan Tribe of Monterey and San Luis Obispo Counties (Salinan Tribe) representatives Randy Timmerman, Deanna Perry, Josh Cody, and Garrett Segobia monitored Extended Phase 1 testing.

The goal of the Extended Phase 1 effort was to determine distribution of subsurface cultural materials and assess integrity and spatial patterning of artifacts and deposits. Twenty shovel test pits (STP) were distributed on a north-south grid across the entire Project area at approximately 20 to 30 meter intervals. All shovel test pits were 50 centimeters in diameter and excavated in 20-centimeter levels using hand tools. After at least two sterile (no materials present) levels or upon reaching a depth of 1 meter, Æ used a 10-centimeter diameter auger to excavate to 200 centimeters deep (STX). Æ dry-screened all excavated sediments through 1/8-inch hardware mesh and field sorted cultural materials. Following completion of the unit, all cultural materials were reburied, and the unit was backfilled.

Æ documented representative views of the survey, field conditions, units, and surrounding environment with digital photography. Methods, observations, and findings were recorded on digital Æ Daily Work Record and shovel test pits Level Record forms. An Arrow Gold GNSS Receiver, ESRI FieldMaps, and Survey123 applications were used to collect geospatial data. All photographs, forms, and field notes are on file at Æ's office in San Luis Obispo, California.

4
FINDINGS

Æ performed background research on the Project area, a records search of the CCIC and Sacred Lands File of the NAHC, outreach to local Native American tribal representatives, a pedestrian surface survey, and an Extended Phase 1 subsurface testing investigation. Findings of these efforts are described below.

4.1 RECORDS SEARCH RESULTS

On October 14, 2022, the CCIC responded to Æ's record search request (Records Search File No. 22-241). The records search identified one previously recorded cultural resource, CA-SLO-1896, plotted partially within the Project area, and two cultural resources, CA-SLO-1895 and -2790, within a 0.25-mile buffer of the Project area (Figure 4-1). The CCIC search identified 3 previous cultural resource investigations within the Project area and 22 previous cultural resource investigations within the 0.25-mile search radius (Appendix B).

4.1.1 Previous Recorded Resources

4.1.1.1 CA-SLO-1896

Pacific Archaeological Sciences Team (PAST) first recorded CA-SLO-1896 in 1998 as a large prehistoric village or habitation area with a historic barn of unknown antiquity and oak trees. In addition to a lithic and shell scatter, the survey identified a triangular chert projectile point, flaked stone tools, burned faunal bone, a mano fragment, a sandstone pestle fragment, and fire-altered rock at CA-SLO-1896. Most of the cultural material was noted in and around animal burrows and highly disturbed areas.

In 2003, PAST returned to the site to conduct subsurface excavations along the proposed waterline with 21 subsurface exploratory excavation units as well as a single 0.5 by 1.0 meter by 60-centimeter-deep test unit. Upon reaching 60-centimeters, the unit was augered to 110 centimeters. Also, due to dense ground cover, PAST excavated forty-one 1 by 1 meter surface scrapes along the eastern portion of the site. Cultural material identified included a spherical hammer, a core, a tested cobble, lithic debitage, projectile points, scrapers, a pestle, shell beads, shells, and bone fragments (Getchell and Atwood 1998; 2003:iii).

PAST found the site "likely to contain information that is important to prehistory;" however, they did not believe additional investigations or data recovery would yield further data about the deposit within their project boundary (Getchell and Atwood 2003:50). PAST recommended monitoring within their project area during construction. PAST noted the site may be eligible for listing in the CRHR and encouraged testing, assessing integrity, and evaluation for portions of the site beyond their project area (Getchell and Atwood 2003:51).

Figure 4-1 **Cultural resources and previously recorded cultural material within and surrounding the Project area.**

4.1.1.2 CA-SLO-1895

CA-SLO-1895 is outside of the current Project area but within the 0.25-mile buffer. PAST first recorded CA-SLO-1895 in 1998 as a prehistoric lithic scatter with two distinct artifact concentrations. PAST archaeologists defined the two artifact concentrations as the eastern and western concentrations. The eastern concentration contained two chert scrapers, chert cores, lithic debitage, shell fragments, and possible ground stone fragments. The western concentration included a broken sandstone pestle, chert cores, lithic debitage, fire-altered rock, shell fragments, and some possible ground stone fragments. PAST also noted the presence of lithic debitage as well as a chert scarper in between the two artifact concentrations.

4.1.1.3 CA-SLO-2790

CA-SLO 2790 is outside of the current Project area but within the 0.25-mile buffer. Thor Conway first recorded CA-SLO-2790 in 2014. The site contains human remains with no associated artifacts. The site includes several deeply buried groupings of burials within a 10 by 10 meter area. The burials had evidence of being redeposited by alluvial activities. It is speculated that the burials may have been washed into the area from a nearby unrecorded prehistoric cemetery. The burials were uncovered during the excavation of a holding pond that is part of the Firestone Walker Brewery water treatment facility (Conway 2014a, 2014b).

In 2020, Padre Associates, Inc (Padre) monitored construction northeast of the current Project area (Padre's notes and monitoring records are included herein as Appendix C). During monitoring, archaeologists recovered two shell fragments, two flakes, one basalt mortar fragment, one sandstone pestle fragment, fire-affected rock, and a clear glass fragment. Padre noted cultural materials and human remains 85 meters to the north of the current Project area. The Xolon-Salinan Tribe handled subsequent treatment of the remains for reburial (R. Letter, pers. comm.).

4.1.2 Previous Investigations

The CCIC identified three previous cultural resource investigations within portions of the Project area (Table 4-1). As discussed above, PAST identified CA-SLO-1896 within the current Project area during their survey and subsequently conducted Phase 2 testing (Getchell and Atwood 1998, 2003). Æ conducted the third investigation within the Project area in 2018. The investigation included a 9.6-acre pedestrian survey to support the instillation of a solar field on Firestone Walker Brewing property (Patterson 2018). The survey included the northwestern portion of the current Project area and portions of CA-SLO-2790. No additional cultural material was identified. Patterson recommended that a qualified archaeological monitor and a Native American observer be present for all ground-disturbing work.

In addition to the investigations that have occurred within the Project area, 22 previous cultural resource studies have occurred within a 0.25-mile of the Project area (Appendix B). These include archaeological evaluations, cultural resources studies, surveys, testing, and monitoring reports.

Table 4-1
Previous Cultural Resource Studies within the Project area

Report No.	Date	Author(s)	Title
SL-03515	1998	Barbie Stevenson Getchell and John E. Atwood	Cultural Resources Inventory of Riverside Farm Lots 10 and 14, and Adjacent Parcels 3 and 4 Per Assessor's Map 9-63 (200+ Acres) in the City of Paso Robles, San Luis Obispo County, California
SL-05230	2003	Barbie S. Getchell and John E. Atwood	Phase II Archaeological Testing at Prehistoric Sites P-40-001894, P-40-001895, and P-40-001896 for the Proposed Thunderbird Wells 16-Inch Waterline Project in the City of El Paso de Robles, San Luis Obispo County, California
SL-07333	2018	Patterson, Joshua	Cultural Resource Study for the Firestone Walker Brewery Solar Project Paso Robles, California

4.2 NATIVE AMERICAN COMMUNICATION

The NAHC responded to Æ's information request on November 10, 2022, noting that its search of the Sacred Lands File failed to indicate the presence of any Native American cultural resources within the Project area (Appendix D). The NAHC provided a contact list of local individuals and groups and suggested Æ request more information from these contacts. Æ sent a notification letter on November 18, 2022, to individuals on the NAHC list informing them of the nature and intent of the Project and soliciting comments or concerns (Table 4-2). Follow up emails were initiated on November 23, 2022.

Table 4-2
Native American Communication Results

Name	Tribe/Group	Comments
Dayna Barrios	Barbareño/Ventureño Band of Mission Indians	11/23/22: Initial Æ email sent (no mailing address). 12/20/2022: Æ called and left a voicemail. Has not contacted Æ as of 1/31/23.
Annette Ayala	Barbareño/Ventureño Band of Mission Indians	12/12/22: Tribe responded by email, deferred to local tribes.
Brenda Guzman	Barbareño/Ventureño Band of Mission Indians	12/20/2022: Æ called and left a voicemail. Has not contacted Æ as of 1/31/23.
Juilo Quair	Chumash Council of Bakersfield	12/20/2022: Æ called and the phone was disconnected. Has not contacted Æ as of 1/31/23.
Violet Walker	Northern Chumash Tribal Council	12/20/22: Tribe requested email be resent with maps. Æ provided information same day. 1/12/23: NCTC expressed interest in the project.
Patti Dunton	Salinan Tribe of Monterey	12/1/22: Expressed interest in the project. 12/7/22 to 12/15/22: Monitored ground disturbance with Æ.
–	San Luis Obispo County Chumash Council	No email listed. 12/20/22: Æ called both listed numbers. One was disconnected and one went to voicemail. Æ left a voicemail. Has not contacted Æ as of 1/31/23.
Kenneth Kahn	Santa Ynez Band of Chumash Indians	12/1/2022: Æ received a response directing email to Wendy Teeter. 12/20/22: Æ emailed Ms. Teeter. 12/20/22: Æ called. Spoke to Administration Representative for the tribe and left a voicemail for the CRM Department. 1/19/23: Æ received a message indicating the email to Ms. Teeter was not delivered. Has not contacted Æ as of 1/31/23.

Table 4-2 (continued)
Native American Communication Results

Name	Tribe/Group	Comments
Joey Garfield	Tule River Indian Tribe	11/23/22: Æ received a message indicating the email was not delivered. 12/20/22: Æ called and reached Kerri Vera. See below for summary. Has not contacted Æ as of 1/31/23.
Kerri Vera	Tule River Indian Tribe	12/20/22: Æ called and reached Kerri Vera. Ms. Vera requested the initial email and maps be resent. Æ provided information same day. 1/11/23: Ms. Vera indicated interest in the project over email and asked to be kept updated. 1/13/23: Æ emailed a summary of the project to date.
Neil Peyron	Tule River Indian Tribe	12/20/22: Æ called and reached Kerri Vera. See above for summary. Has not contacted Æ as of 1/31/23.
Mona Tucker	Yak tityu tityu yak tilhini – Northern Chumash Tribe	12/20/22: Æ called and spoke to Ms. Tucker. Ms. Tucker requested the information be sent to Lisa Dignan and Lorie Laguna. Æ provided information same day. Has not contacted Æ as of 1/31/23.
Karen White	Xolon-Salinan Tribe	11/26/22: Ms. White contacted Æ and indicated interest in the project. Ms. White requested monitoring by a Native American monitor for testing and monitoring. Æ discussed availability and interest and Ms. White indicated that the Xolon would be interested in monitoring the project. 12/7/22 to 12/15/22: Æ emailed summaries of testing activities.12/20/22: Ms. White contacted Æ and asked about the status of construction.
Donna Haro	Xolon-Salinan Tribe	Has not contacted Æ as of 1/31/23.

On November 26, 2022, Karen White of the Xolon-Salinan Tribe emailed to express interest in the Project. On December 2, 2022, Patti Dunton of the Salinan Tribe of Monterey and San Luis Obispo Counties emailed to express interest in the Project. Æ followed up with both groups and provided information on the testing effort and Project. Members of the Salinan Tribe of Monterey and San Luis Obispo Counties monitored subsurface archaeological testing from December 8 to 15, 2022. The Xolon-Salinan Tribe was sent daily emails on the findings and activity. Æ conducted follow up calls with all groups on December 20, 2022.

Following subsurface archaeological testing, two additional groups contacted Æ about the Project. On January 11, 2023, Kerri Vera of the Tule River Indian Tribe expressed interest in the Project. Ms. Vera requested to be kept updated with Project developments. Æ responded to the email on January 13, 2023, with a summary of work to date. On January 12, 2023, a representative of the Northern Chumash Tribal Council (NCTC) expressed interest, including requesting participation in the Project. Æ responded to the email on January 13, 2023 with a summary of the project to date and directed the NCTC to contact the City of Paso Robles with further questions.

4.3 PEDESTRIAN SURVEY AND FIELD INSPECTION

Æ completed a pedestrian survey of the 3.7-acre Project area on November 2, 2022 (Figure 4-2). The recently tilled or plowed field provided 95 percent ground visibility at the time of the survey (Figure 4-3 and 4-4). Pedestrian survey was conducted in north/south transects at 5–7 meter intervals. No cultural material was collected during survey.

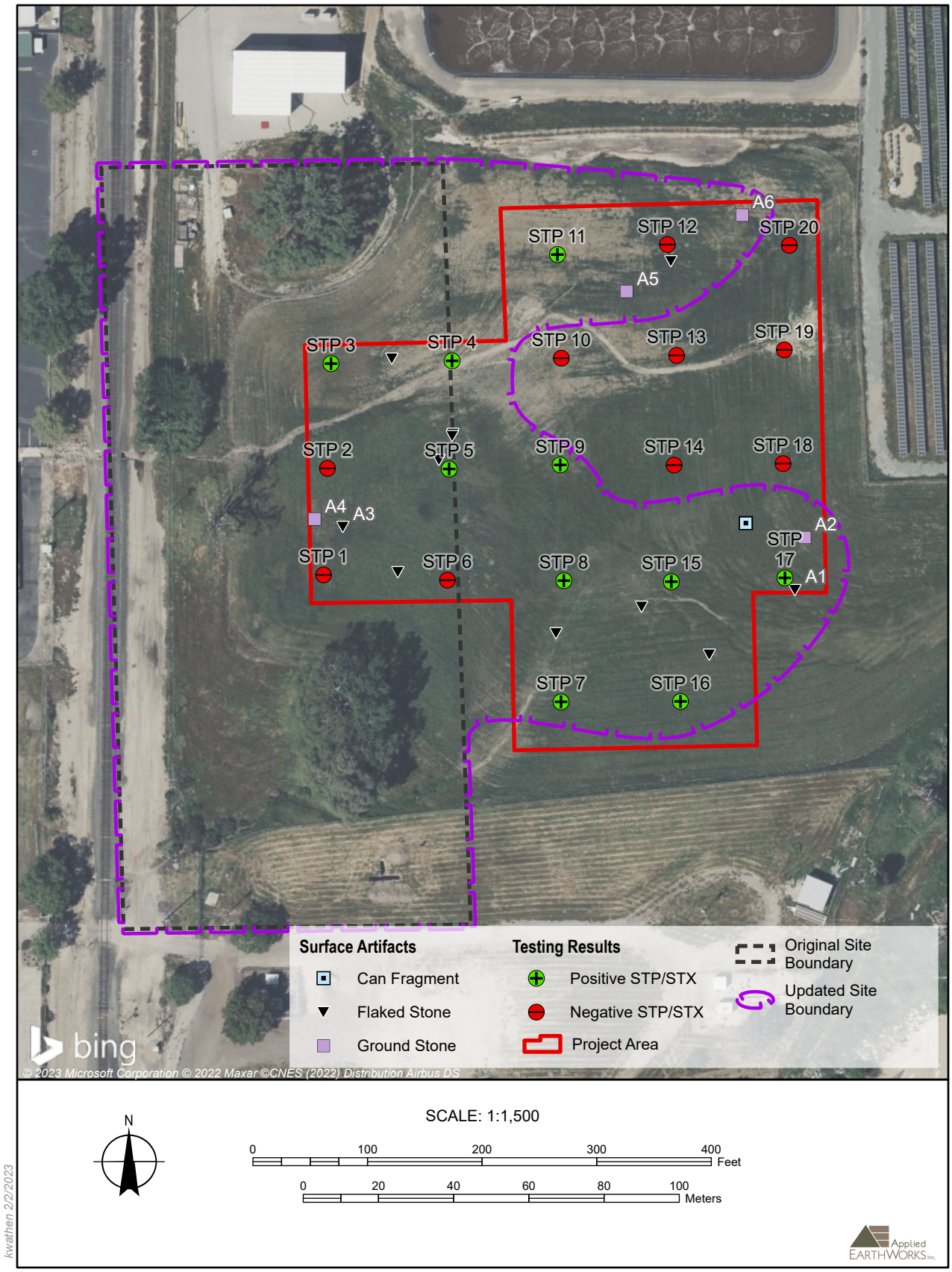

Figure 4-2 Survey and subsurface investigation results.

Figure 4-3 Overview of the Project area, facing north.

Figure 4-4 Overview of the Project area, facing east. CA-SLO-1896 in the foreground.

Æ observed and recorded six formal artifacts during survey (Table 4-3). Æ identified one chert core (Artifact [A]3), lithic debitage, and faunal bone within CA-SLO-1896. Extending east of CA-SLO-1896, Æ observed and recorded a tested chert cobble (A1), a metavolcanic fire-altered mano (A2), a sandstone handstone (A4), a ground stone fragmented (A5), a hammerstone (A6), and a sparse lithic and shell scatter. Historic and modern refuse is present throughout the Project area including glass shards, plastic piping, miscellaneous fragments of metal and plastic, asphalt fragments, and cylindrical concrete fragments.

Table 4-3
Summary of Surface Artifacts

Artifact Number	Artifact Type	Material	Condition	Notes
1	Tested Cobble	Monterey	Fragmentary	More than half of the artifact is gone. There is evidence of flaking on all sides
2	Handstone	Metavolcanic	Fragmentary	Artifact appears to have been burned or heated
3	Core	Monterey	Fragmentary	Exhausted Monterey chert core
4	Handstone	Sandstone	Complete	Orange coloration
5	Ground Stone Fragment	Granite	Fragmentary	Small fragment with possible polish/battering on distal end
6	Hammerstone	Granite	Complete	Artifact exhibits battering along one face.

The barn noted in PAST's site record was constructed sometime before the mid-1940s and was present on the property until 2009. The location of the barn (observed on historic aerial maps from 1956, 1957, 1981 on historicaerials.com) was outside the southwestern boundary of the Project area. There is no visible evidence or indication of the barn within the Project area and no milled lumber or foundation evidence was observed during the survey, but the asphalt and concrete fragments could potentially be associated with the demolished barn.

EXTENDED PHASE 1 SUBSURFACE INVESTIGATION

Æ completed Extended Phase 1 subsurface testing from December 8 to 15, 2022. Æ excavated 2.63 cubic meters of soil from 20 shovel test pits evenly distributed across the Project area (Figures 4-2 and 4-5). Cultural material was encountered in 10 shovel test pits between 20 and 120 centimeters deep (Table 4-4). Shovel test pits produced 8 pieces of lithic debitage, 27 shell fragments, and 19 faunal remains. Lithic debitage was comprised of Monterey and Franciscan chert. Shell fragments included abalone (*Haliotis* sp.), black turban snail (*Tegula* sp.), California mussel (*Mytilus californianus*), and other unidentified shell. Faunal remains included small mammals and ungulates. Æ did not encounter any formal tools during excavations. Most of the prehistoric cultural material was identified within the upper 60 centimeters of the deposit and no prehistoric cultural artifacts were found below 80 centimeters. Sparse historic and modern refuse such as glass, metal, fabric, and ceramic fragments were also found throughout excavated levels. Two historic artifacts, a ceramic sherd and a nail, were identified between 80–120 centimeters deep.

Soils varied vertically and horizontally across the Project area, but generally consisted of dark brown clay in the upper levels, intermixing with gravels, sand, and silt below. Natural chert

shatter, perhaps resulting from recent tilling of the Project area, was abundant throughout. Evidence of subsurface disturbance was documented in nearly every shovel test pit. Disturbances included bioturbation (primarily ground squirrel and gopher), evidence of agricultural disturbance (tilling, plastic tubing), pedoturbation from flood events and streams, and modern refuse and dumping.

Figure 4-5 Overview of STP/STX 8 and Project area, facing northeast.

Table 4-4
Cultural Material from Extended Phase 1 Testing

Unit	Total Depth (cm)	Max Depth of Cultural Material (cm)	Cultural Material Summary (type[a])	Total Volume (m^3)
STP/STX 1[b]	160	20	1 SHL	0.13
STP/STX 2[b]	170	—	—	0.16
STP/STX 3[b]	200	80	9 SHL, 1 FAU, 1 CHR	0.20
STP/STX 4[b]	160	40	2 SHL, 1 FAU, 1 PLS	0.16
STP/STX 5[b]	180	120	13 SHL, 6 FAU, 4 DEB, 1 FER, 2 GLA, 2 PLS, 2 FAB, 7 NAI, 1 CHR	0.20
STP/STX 6[b]	180	—	—	0.13
STP/STX 7	70	60	2 FAU, 1 DEB, 4 GLA, 2 CER	0.12
STP/STX 8	140	40	1 SHL	0.09

Table 4-4 (continued)
Cultural Material from Extended Phase 1 Testing

Unit	Total Depth (cm)	Max Depth of Cultural Material (cm)	Cultural Material Summary (type[a])	Total Volume (m^3)
STP/STX 9	200	60	6 FAU, 1 DEB, 1 CER	0.20
STP/STX 10	150	—	—	0.12
STP/STX 11	160	40	1 SHL	0.16
STP/STX 12	180	—	—	0.09
STP/STX 13	140	—	—	0.08
STP/STX 14	140	—	—	0.08
STP/STX 15	120	40	1 FAU, 1 DEB	0.16
STP/STX 16	180	40	1 FAU, 1 DEB	0.16
STP/STX 17	180	20	1 FAU, 1 GLA	0.13
STP/STX 18	140	—	—	0.08
STP/STX 19	180	—	—	0.09
STP/STX 20	150	—	—	0.09
Total				**2.63**

a- CHR = charcoal, CER = ceramic, DEB = debitage; FAB = other fabric; FAU = faunal bone; FER = ferrous metal; GLA = glass; PLS = plastic; NAI = nail; SHL = shell.
b- Within original CA-SLO-1896 site boundaries.

The sparse and shallow distribution of cultural material across the area, as well as the intermixed modern and historic refuse and soil mixing, indicate that the cultural deposit within the Project area is highly disturbed and potentially in a secondary context. Due to the continual use of the area as an agricultural field, as well as the construction and demolition of the barn outside of the Project area, it is possible that material from CA-SLO-1896 has been spread and redeposited over the Project area.

The established boundary of CA-SLO-1896 overlaps the western portion of the Project area. Æ excavated shovel test pits with augers inside the site boundary and three, STP/STX 3–5, were positive for cultural material. Fourteen shovel test pits with augers were placed outside of CA-SLO-1896. Of these, seven were positive for cultural material. Æ updated the California DPR cultural resource forms for CA-SLO-1896 with the results of the Phase 1 surface survey and the Extended Phase 1 subsurface archaeological testing. Æ extended the boundary of CA-SLO-1896 based on these findings (Appendix E).

5
SUMMARY AND RECOMMENDATIONS

At the request of Duke Energy, on behalf of Firestone Walker Brewing Company, Æ completed a Phase 1 cultural resource study and Extended Phase 1 testing in support of the proposed Firestone Brewing Phase II Ground Mount Solar PV System Solar Project in the City of Paso Robles, California. The Project is a 3.7-acre parcel at 1400 Ramada Drive (Assessor's Parcel Numbers 009-631-018 and -019), east of U.S. Highway 101 and Vendels Circle. The proposed Project includes the installation of solar panels, switchgear, and underground wiring. Æ's cultural resource study included a record search, background research, surface survey, subsurface testing, and outreach to the NAHC and local Native Americans.

5.1 SUMMARY

The Project area extends into previously recorded site CA-SLO-1896. Based on PAST's investigations at CA-SLO-1896 (Getchell and Atwood 2003:50) Æ assumes the site is eligible for listing in the CRHR. Æ performed a surface survey and subsurface investigation of the current Project area and identified cultural materials associated with CA-SLO-1896 within the previously recorded site boundary and beyond. Æ updated the DPR form with the new site boundary and recorded cultural material from this study. Subsurface testing revealed sparse, primarily shallow, and extensively disturbed cultural materials mixed with modern debris. While the overall site is assumed be eligible for the CRHR, archaeological deposits within the Project area appear to lack density, diversity, and integrity, and it is Æ's opinion that significant or intact deposits are not present within the Project area.

5.2 RECOMMENDATIONS

While Æ's investigation did not identify significant archaeological deposits within the Project area, the parcel does fall within an area with heightened sensitivity for prehistoric cultural materials and human burials. There is a possibility of encountering pockets of intact subsurface cultural deposits as well as human remains. Therefore, Æ recommends archaeological and Native American monitoring during all ground-disturbing activities for the Project.

5.2.1 Monitoring

Æ recommends archaeological and Native American monitoring during all earth-disturbing activities. This includes but is not limited to brushing, grubbing, vegetation removal with machinery other than hand equipment (weed wackers, hand cutters, etc.), fence removal/installation, utility removal/installation potholing, boring, grading, trenching, excavation, and demolition activities. Archaeological monitoring should be conducted by a qualified professional archaeologist familiar with the types of historical and prehistoric resources that could be encountered within the Project area. Cultural resource sensitivity training should be provided by the archaeologist to construction staff prior to beginning construction. A final report should be completed once all construction activities are complete and submitted to the lead agency, the project proponent, the Native American monitoring tribe(s), and the CCIC.

5.2.2 Inadvertent Finds

If intact cultural resources are encountered at any time during construction or ground-disturbing activities within the Project area, all work in the vicinity of the find should be halted until a qualified archaeologist can be retained to assess the discovery. Such finds include intact midden soils, house floors, hearths, grinding implements, stone tools, soapstone bowls, ornaments (e.g., beads, pendants), or any intact feature or archaeological resources. Other finds could include intact building foundations and high concentrations of historical artifacts. If the find(s) is considered a cultural resource or a potential resource, the archaeologist shall make appropriate recommendations to the lead agency. The lead agency shall make the final determination as to treatment and disposition of the resource(s).

5.2.3 Human Remains

If human remains are uncovered, or in any other case when human remains are discovered, all work within 50 feet of the find shall stop and the San Luis Obispo Coroner is to be notified immediately. If the remains are identified—based on archaeological context, age, cultural associations, or biological traits—as those of a Native American, California Health and Safety Code 7050.5 and PRC 5097.98 require that the coroner notify the NAHC within 24 hours of discovery. The NAHC will then identify the Most Likely Descendent who will provide recommendations for treatment and management of the remains based on tribal traditions and customs.

6
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Price, Barry A., Sandra S. Flint, and Kham N. Slater
1997 *Final Report of Cultural Resource Monitoring and Emergency Archaeological Excavations for Segment 2 of the Chorro Valley Water Transmission Pipeline Project*. Applied EarthWorks, Inc., Fresno, California. Prepared for the County of San Luis Obispo. Submitted to Essex Environmental, El Granada, California, and U.S. Army Corps of Engineers, Los Angeles District.

Price, Barry A., Ann M. Munns, Georgeanna Hawley, Terry L. Joslin, Douglas R. Harro, and Rebecca L. McKim
2012 *A Slice of Time at Diablo Canyon: Archaeological Sampling at CA-SLO-61, San Luis Obispo County, California*. Applied EarthWorks, Inc., San Luis Obispo, California. Prepared for Pacific Gas and Electric Company, Sacramento, California.

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2021 Quick Facts: El Paso de Robles (Paso Robles) City, California. https://www.census.gov/quickfacts/fact/table/elpasoderoblespasoroblescitycalifornia/PST045221, accessed January 2023.

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2019 Average Weather in Rancho Santa Margarita, https://weatherspark.com/y/1890/Average-Weather-in-Rancho-Santa-Margarita-California-United-States-Year-Round, accessed January 2019. Weather Spark.

ATTACHMENT 5

APPENDIX A

Résumés and Qualifications

Applied EARTHWORKS Inc.

ERIN ENRIGHT

Vice President/Principal Archaeologist/Project Manager

Areas of Expertise

- Cultural resource management
- Project management
- Archaeological field work/ Supervision
- GIS analysis and desktop site assessments
- Faunal analysis
- Prehistory and history of California and the Southwest

Years of Experience

- 22

Education

M.A., Anthropology and Applied Archaeology, Eastern New Mexico University, Portales, 2008

B.A., Classical and Near Eastern Archaeology, Bryn Mawr College, Pennsylvania, 2000

Registrations/Certifications

- Register of Professional Archaeologists 16575 (2009)
- OSHA 40-hour HAZWOPER (2019)

Permits/Licensure

- Principal Investigator, California BLM Statewide Cultural Resources Use Permit CA-21-21

Professional Affiliations

- Society for American Archaeology
- Society for California Archaeology

Professional Experience

2021–	Vice President/Managing Principal/Principal Archaeologist, Applied EarthWorks, Inc., San Luis Obispo and Fresno, California
2019–2021	Managing Principal/Principal Archaeologist, Applied EarthWorks, Inc., San Luis Obispo, California
2014–2018	Senior Archaeologist/Project Manager, Applied EarthWorks, Inc., San Luis Obispo, California
2008–2014	Associate Archaeologist/Faunal Analyst, Applied EarthWorks, Inc., Lompoc, California
2004–2008	Faunal Analyst/Student Supervisor/ Educational Outreach, Blackwater Draw Archaeological Site and Museum, Eastern New Mexico University, Portales
2001–2004	Staff Archaeologist, Cultural Resource Management Services, Paso Robles, California
2000	Field Archaeologist, Princeton Expedition, Polis Chrysochous, Cyprus
1999	Archaeological Field School, Anathica Field School, Petras, Crete, Greece

Technical Qualifications

Ms. Enright is an experienced professional archaeologist, principal investigator, project manager, and field supervisor/director who has managed projects throughout California and the Southwest. She has participated at all levels within the cultural resource management industry with projects ranging from survey and site recording; testing and data recovery; National Register eligibly excavations; buried site testing (backhoe trenching); development of monitoring plans; database creation and maintenance; curation management; GIS; technical report production; and compliance assistance for NHPA and CEQA projects. Ms. Enright has developed close relationships with tribal groups and individuals throughout the Central Coast and Central Valley. She has played a critical role in providing consultation support between agencies and Native American groups for AB 52, CEQA, and Section 106. Additionally, she has experience managing large on-call contracts and complicated cultural resource management efforts with complex regulatory requirements. Several of these efforts have been in support of energy projects. Ms. Enright has authored or co-authored more than 70 technical reports and other NHPA, NEPA, and CEQA compliance documents, and presented research at state and national archaeological meetings.

Applied EARTHWORKS Inc.

SIMONE M. SCHINSING
Senior Archaeologist/Project Manager/Lab Director

Areas of Expertise

- Cultural resource management
- Archaeological fieldwork
- Scheduling and monitoring coordination
- Field supervision
- Laboratory processing
- Prehistory of California, the Great Basin, and the American Southwest

Years of Experience

- 14

Education

M.A., Anthropology, Northern Arizona University, Flagstaff, 2012

B.A., Social and Behavioral Sciences, California State University, Monterey Bay, 2009

Registrations/Certifications

- Registered Professional Archaeologist 28577763
- OSHA 40-hour HAZWOPER (2019)

Permits/Licenses

- Field Director, California BLM Statewide Cultural Resources Use Permit CA-21-21

Professional Affiliations

- Society for California Archaeology
- Society for American Archaeology
- Society of Bead Researchers

Professional Experience

2019–	Senior Archaeologist, Applied EarthWorks, Inc., San Luis Obispo, California
2016–2018	Associate Archaeologist, Applied EarthWorks, Inc., San Luis Obispo, California
2015–2016	Staff Archaeologist, Applied EarthWorks, Inc., San Luis Obispo, California
2014–2015	Junior Project Manager, Epsilon Systems Solutions, Ridgecrest, California
2012–2014	Archaeologist/Crew Chief, Epsilon Systems Solutions, Ridgecrest, California
2012–2015	Archaeological Laboratory Manager, Epsilon Systems Solutions, Ridgecrest, California
2010–2012	Graduate Assistant, Northern Arizona University, Flagstaff, Arizona
2009	Archaeological Field School, Belize Valley Archaeological Reconnaissance Project, Belize
2007–2008	Restoration Assistant/Archaeological Technician, California State University, Monterey Bay, California

Technical Qualifications

Ms. Schinsing is a Senior Archaeologist at Applied EarthWorks, Inc. She has served as a project manager, field supervisor, shell bead analyst, archaeological laboratory director and manager, and crew chief for a variety of projects throughout California, the Southwest, and the Great Basin. Her experience includes survey, site recording, site testing and data recovery, technical analysis, technical report writing and editing, National Register and California Register recommendations, and management and avoidance recommendations. As a project manager, field supervisor, and laboratory supervisor, Ms. Schinsing is responsible for various aspects of project logistics including communication with clients and local Native American tribal representatives, task delegations, crew/technician management, report production, and report submittal. Ms. Schinsing has co-authored dozens of technical reports, along with other state and federal compliance documents, and presented research at the Society of California Archaeology meetings in 2017, 2018, and 2022 on shell bead analysis. As a shell bead analyst, Ms. Schinsing has been trained in the identification, analysis, and technical report preparation of shell beads from prehistoric archaeological sites in both California and the Southwest.

Applied EARTHWORKS Inc.

EMMA FRANCES COOK

Associate Archaeologist

Areas of Expertise

- Cultural resource management
- California central coast archaeology
- Ground stone technology
- Public archaeology and engagement

Years of Experience

- 7

Education

M.A. Public Archaeology, University of New Mexico, Albuquerque, 2019

B.S. Anthropology and Geography, California Polytechnic University, San Luis Obispo, CA, 2016

Registrations/Certifications

- Registered Professional Archaeologist, 5086
- Heartsaver First Aid CPR AED Certification (2020)
- OSHA 40-hour HAZWOPER (2021) Supervisor 8 Hour HAZWOPER (2021)

Permits/Licensure

- Field Director, California BLM Statewide Cultural Resources Use Permit CA-21-21

Professional Affiliations

- Society of American Archaeology
- Society for California Archaeology
- San Luis Obispo Archaeological Society (Board Member 2022-)

Professional Experience

2021–	Associate Archaeologist, Applied EarthWorks, Inc., San Luis Obispo, California
2019–2020	Staff Archaeologist, Applied EarthWorks, Inc., San Luis Obispo, California
2019	Archaeological Technician, Office of Contract Archaeology, Albuquerque, New Mexico
2018–2019	Archaeological Research Assistant, University of New Mexico, Albuquerque
2017–2018	Graduate Research Assistant, Anthropology Department, University of New Mexico, Albuquerque
2017	Archaeological Field Technician, Garcia and Associates, San Francisco, California
2017	Field Technician, Rebecca Anastasio Consulting, San Luis Obispo County, California.
2017	Crew Chief, Cal Poly Field School, Diablo Canyon, San Luis Obispo, California
2015–2017	Archaeological Research Assistant, CEMML/CA Army National Guard, San Luis Obispo County, California
2016	Crew Chief, Cabrillo College Field School, Camp San Luis Obispo, San Luis Obispo, California
2015–2016	Laboratory/Teaching Assistant, Cal Poly Archaeology Lab/CLA College, San Luis Obispo, California
2015	Archaeological Field School, CA-SLO-51, California Polytechnic University, California

Technical Qualifications

Ms. Cook is an Associate Archaeologist at Applied EarthWorks, Inc. She has worked as a field supervisor, crew chief, laboratory technician, and analyst. Her field experience includes survey, testing, data recovery, technical analysis, site recording, National and California Register recommendations, and technical report contributions. Ms. Cook has worked in California and the Southwest and has additional experience with national and state laws and regulations, communication and consultation, and crew management. Ms. Cook is also a ground stone analyst and has extensive laboratory and curation prep experience. She also is skilled in managing large field projects, human remains, and Native American coordination.

APPENDIX B

Records Search Results

*Archaeological site locations are exempt from the California Public Records Act, as specified in Government Code 6254.10, and from the Freedom of Information Act (Exemption 3), under the legal authority of both the NHPA (PL 89-665, as amended, Section 304[a]) and the Archaeological Resources Protection Act (PL 96-95, Section 9[a]).

Central Coast Information Center
Santa Barbara Museum of Natural History
2559 Puesta del Sol
Santa Barbara, CA 93105
PHONE (805) 682-4711 ext. 181
FAX (805) 682-3170
EMAIL ccic@sbnature2.org

10/14/2022 Records Search # 22-241

Milo Honsberger
Applied Earthworks
811 El Capitan Way, Suite 100
San Luis Obispo, CA 93401

Re: 4449 Firestone CRS

The Central Coast Information Center received your record search request for the project area referenced above, located on the Templeton USGS 7.5' quad(s). The following reflects the results of the records search for the project area and a one quarter mile radius:

As indicated on the data request form, the locations of reports and resources are provided in the following format: ■ custom GIS maps ☐ shapefiles ☐ hand-drawn maps ☐ none

Resources within project area:	One; P-40-001896.
Resources within ¼ mile radius:	Two; P-40-001895, P-40-002790.
Reports within project area:	Three; SL-03515, SL-05230, SL-07333.
Reports within ¼ mile radius:	19; see enclosed list.

Resource Database Printout (list):	■ enclosed	☐ not requested	☐ nothing listed
Resource Database Printout (details):	☐ enclosed	■ not requested	☐ nothing listed
Resource Digital Database Records:	■ enclosed	☐ not requested	☐ nothing listed
Report Database Printout (list):	■ enclosed	☐ not requested	☐ nothing listed
Report Database Printout (details):	☐ enclosed	■ not requested	☐ nothing listed
Report Digital Database Records:	■ enclosed	☐ not requested	☐ nothing listed
Resource Record Copies:	☐ enclosed	☐ not requested	☐ nothing listed
Report Copies:	☐ enclosed	☐ not requested	☐ nothing listed
OHP Historic Properties Directory:	☐ enclosed	☐ not requested	☐ nothing listed
Archaeological Determinations of Eligibility:	☐ enclosed	☐ not requested	☐ nothing listed

The following sources of information are available at **http://ohp.parks.ca.gov/?page_id=28065**. Some of these resources used to be available through the CHRIS but because they are now online, they can be accessed directly. The Office of Historic Preservation makes no guarantees about the availability, completeness, or accuracy of the information provided through the sources listed below.

California State Lands Commission Shipwreck Database	*Caltrans Historic Bridge Inventory*
U.S. Geological Survey Historic Topographic Maps	*Rancho Plat Maps*
National Park Service National Register of Historic Places Nominations	*Natural Resource Conservation Service Soil Survey Maps*
US Bureau of Land Management General Land Office Records	*California Historical Landmarks Listing (by county)*
Five Views: An Ethnic Historic Site Survey for California (1988)	*Historical Soil Survey Maps*

Please forward a copy of any resulting reports from this project to the office as soon as possible. Due to the sensitive nature of archaeological site location data, we ask that you do not include resource location maps and resource location descriptions in your report if the report is for public distribution. If you have any questions regarding the results presented herein, please contact the office at the phone number listed above.

The provision of California Historical Resources Information System (CHRIS) data via this records search response does not in any way constitute public disclosure of records otherwise exempt from disclosure under the California Public Records Act or any other law, including, but not limited to, records related to archeological site information maintained by or on behalf of, or in the possession of, the State of California, Department of Parks and Recreation, State Historic Preservation Officer, Office of Historic Preservation, or the State Historical Resources Commission.

Due to processing delays and other factors, not all of the historical resource reports and resource records that have been submitted to the Office of Historic Preservation are available via this records search. Additional information may be available through the federal, state, and local agencies that produced or paid for historical resource management work in the search area. Additionally, Native American tribes have historical resource information not in the CHRIS Inventory, and you should contact the California Native American Heritage Commission for information on local/regional tribal contacts.

Should you require any additional information for the above referenced project, reference the record search number listed above when making inquiries. Requests made after initial invoicing will result in the preparation of a separate invoice.

Thank you for using the CHRIS.

Sincerely,

Rebecca Albert

Rebecca Albert, M.A.
Assistant Coordinator

Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
SL-00025		1975	Gibson, R.	Archaeological Element of Environmental Impact Report for Paso Robles/Templeton Interceptor Sewer, San Luis Obispo County, California	None given	
SL-00170		1979	Laurence W. Spanne	An Archaeological Evaluation of a Curve Correction Project Near Paso Robles, SLO County 05-SLO-101-54.5 259201	archaeological consultant	
SL-01680		1990	Singer, Clay	Cultural Resources Survey and Impact Assessment for APN 009-631-009 in the City of Paso Robles, San Luis Obispo County, California	Singer & Associates	
SL-02260		1992	Dills, Charles	Archaeological Potential of Santa Ysabel Ranch Project	Charles E. Dills Archaeological Surface Surveys	40-001491, 40-001492
SL-02521		1993	Singer, Clay A	Cultural Resources Survey and Impact Assessment for the Wilmar Property APN 009-631-11 Near Paso Robles, SLO County	C.A. Singer and Associates Inc.	
SL-03129		1996	Singer, Clay A.	Phase I archaeological survey of the junction of Highway 101 and Highway 46 near the City of Paso Robles, San Luis Obispo County, California.	C.A. Singer & Associates, Inc.	
SL-03515		1998	Barbier Stevenson Getchell and John E. Atwood	Cultural Resources Inventory of Riverside Farm Lots 10 and 14, and Adjacent Parcels 3 and 4 Per Assessor's Map 9-63 (200 + Acres) in the City of Paso Robles, San Luis Obispo County, California	Pacific Archaeological Sciences Team	40-001894, 40-001895, 40-001896
SL-04057		2000	Nelson, Wendy J., Maureen Carpenter, and Julia Costello	Cultural Resources Survey For The Level (3) Communications Long Haul Fiber Optics Project Segment WS05: San Jose to San Luis Obispo	Far Western Anthropological Research Group, Inc.	40-000065, 40-000122, 40-000517, 40-000587, 40-000593, 40-000596, 40-001075, 40-001076, 40-001077, 40-001372, 40-001375, 40-001386, 40-001387, 40-001388, 40-001571, 40-001876, 40-001877, 40-001891
SL-04057A		2000	n/a	Appendix A: Project Maps and Site Locations	Far Western Anthropological Research Group	
SL-04101		2000	Gibson, Robert	Results of archival records check and phase one surface survey for the Paso Robles Auto Mall Project, Paso Robles, San Luis Obispo County, CA	Gibson's Archaeological Consulting	

Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
SL-04181		2000	Gibson, Robert O.	Results of Archival Records Check and phase One Surface Survey for the 55 acre Tatum Parcel #20, Paso Robles, San Luis Obispo County, CA	Gibson's Archaeological Consulting	
SL-04809		2002	Farrell, Nancy	Cultural Resources Management Plan for the Santa Ysabel Ranch	Cultural Resource Management Services	
SL-04822		2002	Stevenson, Barbie and John Atwood	Cultural Resources Survey For The Proposed Thunderbird Wells 16-Inch Waterline Project InThe City Of El Paso De Robles, San Luis Obispo County, California.	Pacific Archaeological Sciences Team (PAST)	
SL-04925		2003	Farrell, Nancy	Historical Documentation of the Santa Ysabel Ranch Water Management System	Cultural Resource Management Services	40-041087
SL-05230		2003	Barbie S. Getchell and John E. Atwood	Phase II Archaeological Testing at Prehistoric Sites P-40-001894, P-40-001895, and P-40-001896 for the Proposed Thunderbird Wells 16-Inch Waterline Project in the City of El Paso de Robles, San Luis Obispo County, California	PAST, INC.	40-001894, 40-001895, 40-001896
SL-05593		2005	Gust, Sherri and Kim Scott	Archaeological and Paleontological Evaluation Report and Mitigation Plan for the Vintner's Village Inn Project, City of Paso Robles, California	Cogstone Resource Management Inc.	40-001894, 40-001895, 40-001896, 40-001920, 40-002083, 40-002084, 40-002086
SL-05611		2004	Stevens, Nathan and Nancy Farrell	A Report of Archaeological Monitoring at Santa Ysabel Ranch, San Luis Obispo County, California	Cultural Resource Management Services	40-001920, 40-002084, 40-002184
SL-05611a		2003	Nathan Stevens	Research Plan for Data Recovery Excavations at Prehistoric Site CA-SLO-2084, Santa Ysabel Ranch, San Luis Obispo County, California	Cultural Resource Management Services	
SL-06082		2006	Nancy Sikes, Bryon Bass, Chris Corey, Kevin Hunt, Steve O'Neil, Catherine Pruett, Tony Sawyer, Cindy Arrington, Michael Tuma, Leslie Wagner, and Alex Wesson	Cultural Resources Final Report of Monitoring and Findings for the Qwest Network Construction Project, State of California	SWCA Environmental Consultants	40-000122, 40-000394, 40-000396, 40-000587, 40-000596, 40-000825, 40-000834, 40-001075, 40-001076, 40-001077, 40-001372, 40-001429, 40-001876, 40-001896, 40-001912, 40-001913
SL-06082A		2006	none given	Appendix A: Qwest Fiber Optic Cultural Resources Protocols; Appendix B: Native American Contact Table and Sample Consultation Letter	SWCA Environmental Consultants	

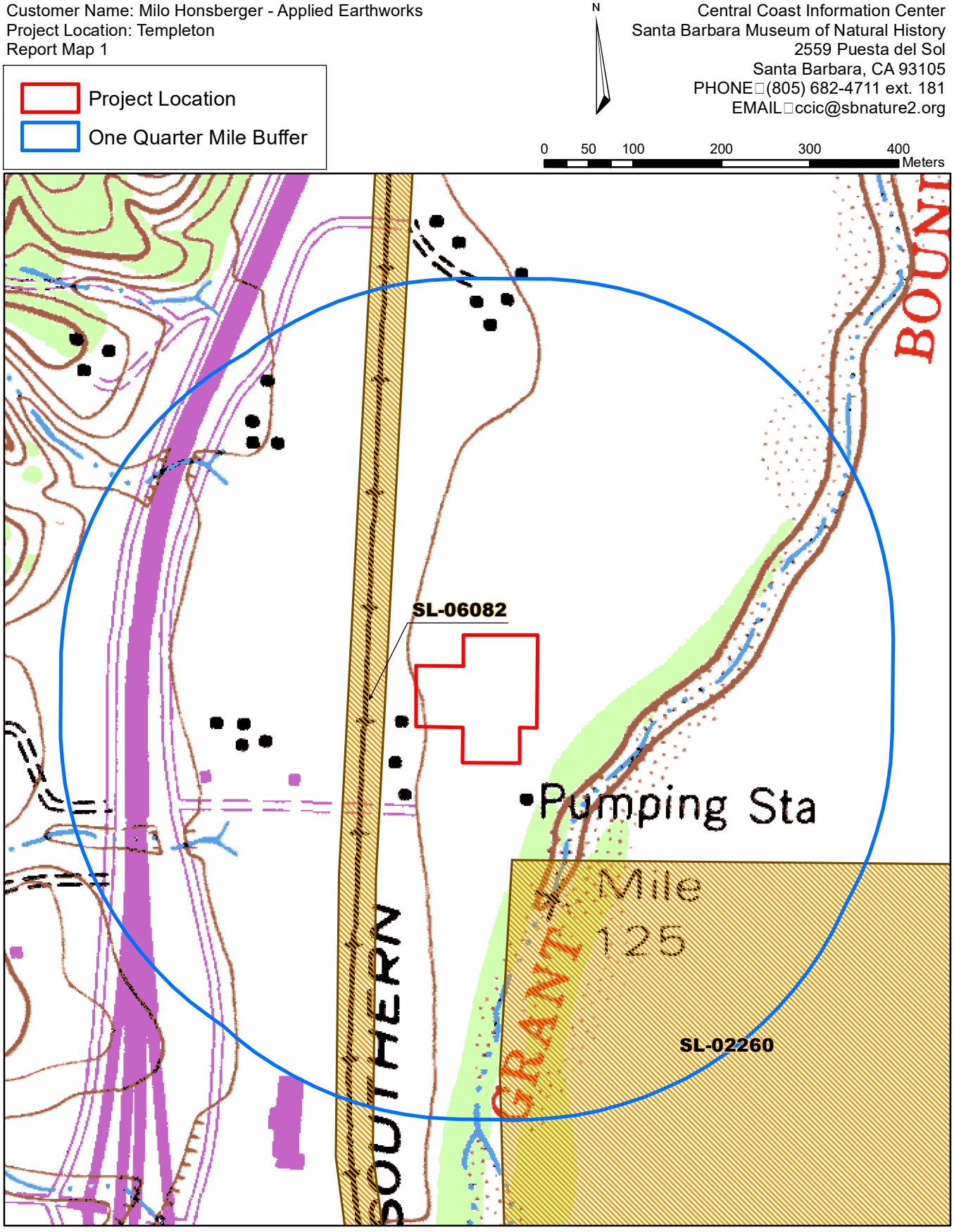
Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
SL-06228		2007	Hollins, Jeremy	Historical Property Survey Report. U.S. 101 Highway/State Route 46 West Interchange Improvement Project San Luis Obispo County, California	URS Corporation	
SL-06236		2008	Conway, Thor	An Archaeological Surface Survey of the Sod Farm project at Vine Street, Paso Robles, San Luis Obispo, California	Heritage Discoveries, Inc.	40-000992
SL-06916		2014	Thor Conway	Archaeological Monitoring for the Firestone Water Treatment Facility Project, 1400 Ramada Drive, Paso Robles, California	Heritage Discoveries, Inc.	40-002790
SL-07333		2018	Joshua Patterson	Cultural Resource Study for the Firestone Walker Brewery Solar Project Paso Robles, California	Applied EarthWorks, Inc.	40-002790
SL-07463		2018	Leroy Laurie	Results of Archaeological Monitoring for the Paso Robles Water Treatment Plant Emergency Bank Stabilization Project, San Luis Obispo County, California / SWCA No. 51042.01	SWCA	

4449 Firestone CRS

Customer Name: Milo Honsberger - Applied Earthworks
Project Location: Templeton
Report Map 1

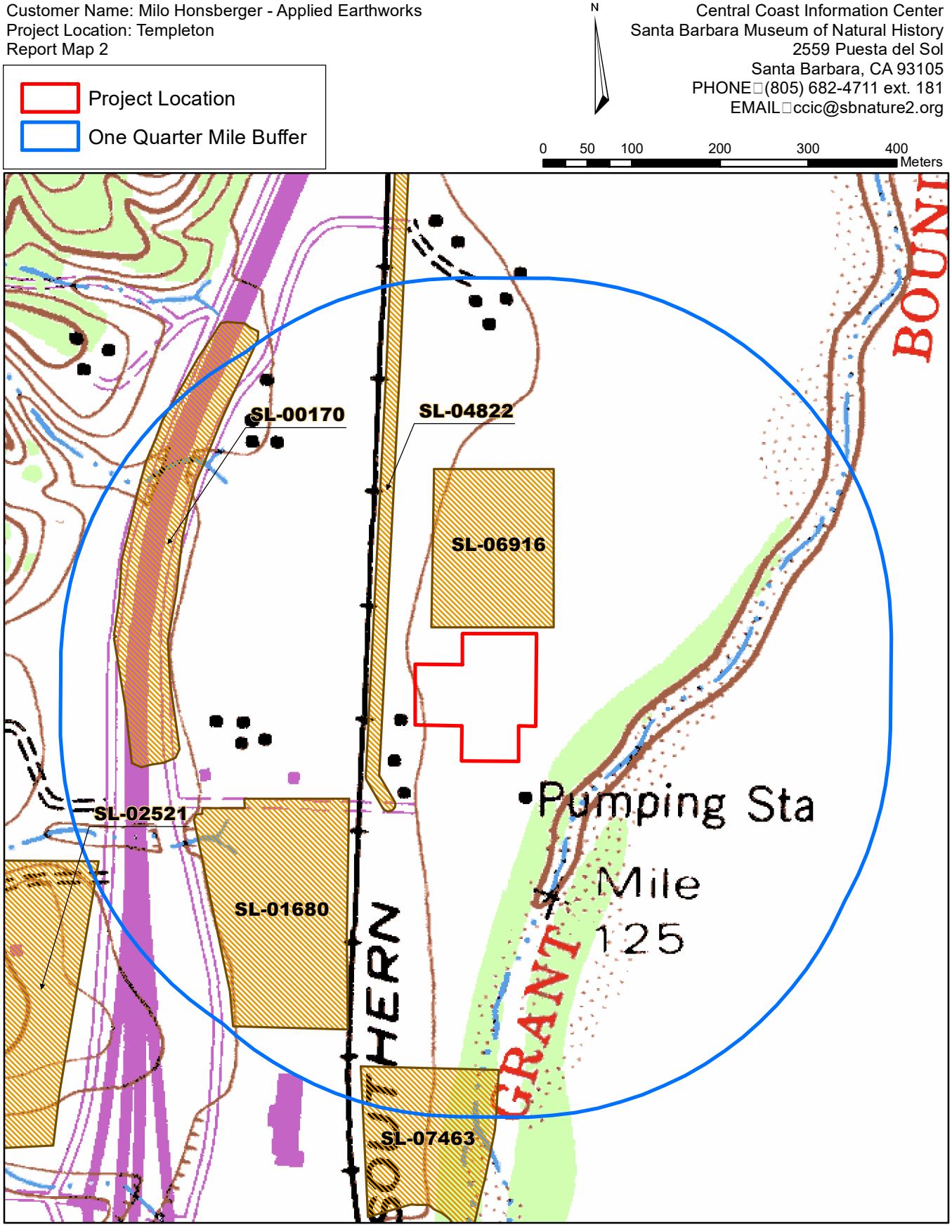
Central Coast Information Center
Santa Barbara Museum of Natural History
2559 Puesta del Sol
Santa Barbara, CA 93105
PHONE (805) 682-4711 ext. 181
EMAIL ccic@sbnature2.org



4449 Firestone CRS

Customer Name: Milo Honsberger - Applied Earthworks
Project Location: Templeton
Report Map 2

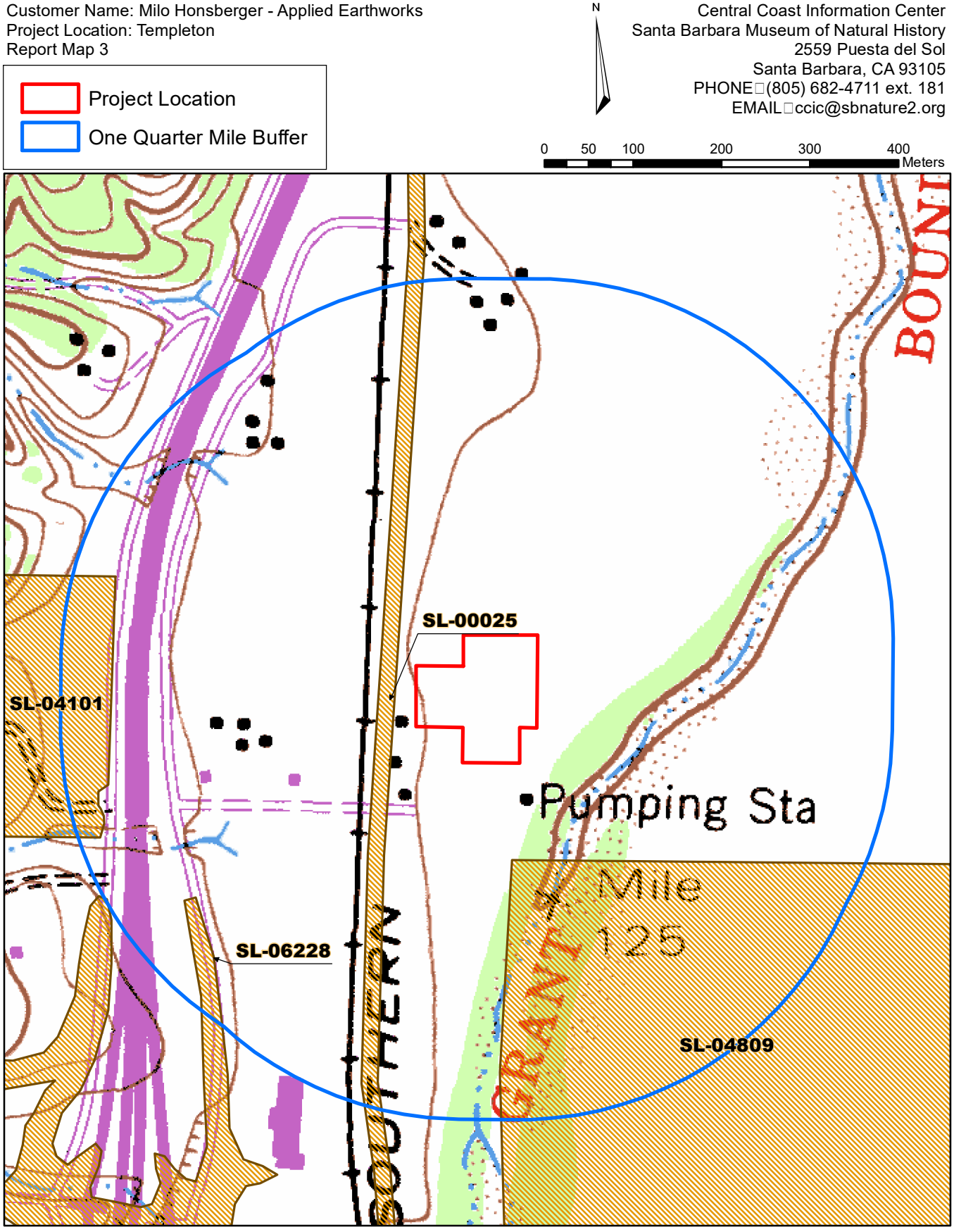
Central Coast Information Center
Santa Barbara Museum of Natural History
2559 Puesta del Sol
Santa Barbara, CA 93105
PHONE (805) 682-4711 ext. 181
EMAIL ccic@sbnature2.org



4449 Firestone CRS

Customer Name: Milo Honsberger - Applied Earthworks
Project Location: Templeton
Report Map 3

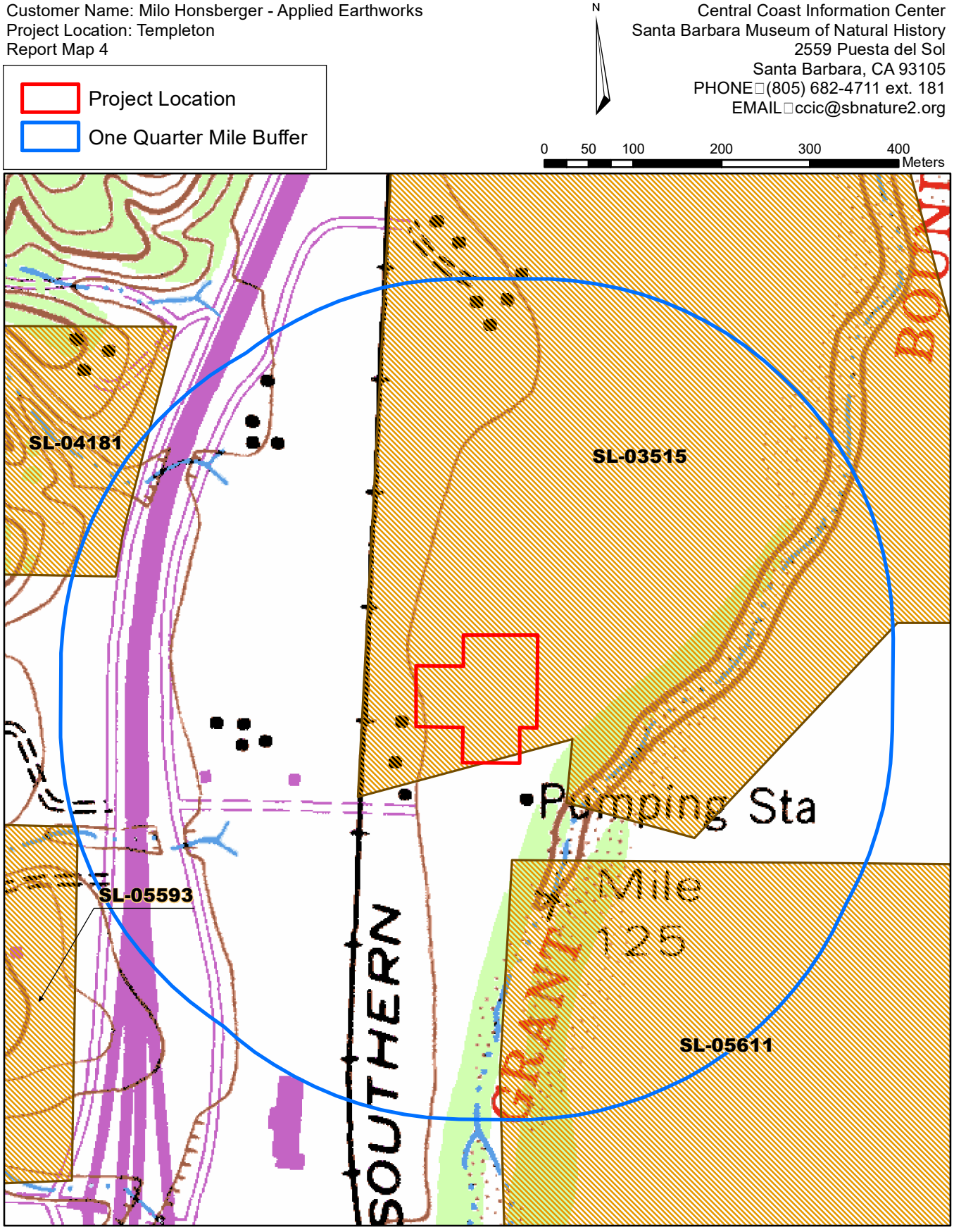
Central Coast Information Center
Santa Barbara Museum of Natural History
2559 Puesta del Sol
Santa Barbara, CA 93105
PHONE (805) 682-4711 ext. 181
EMAIL ccic@sbnature2.org



4449 Firestone CRS

Customer Name: Milo Honsberger - Applied Earthworks
Project Location: Templeton
Report Map 4

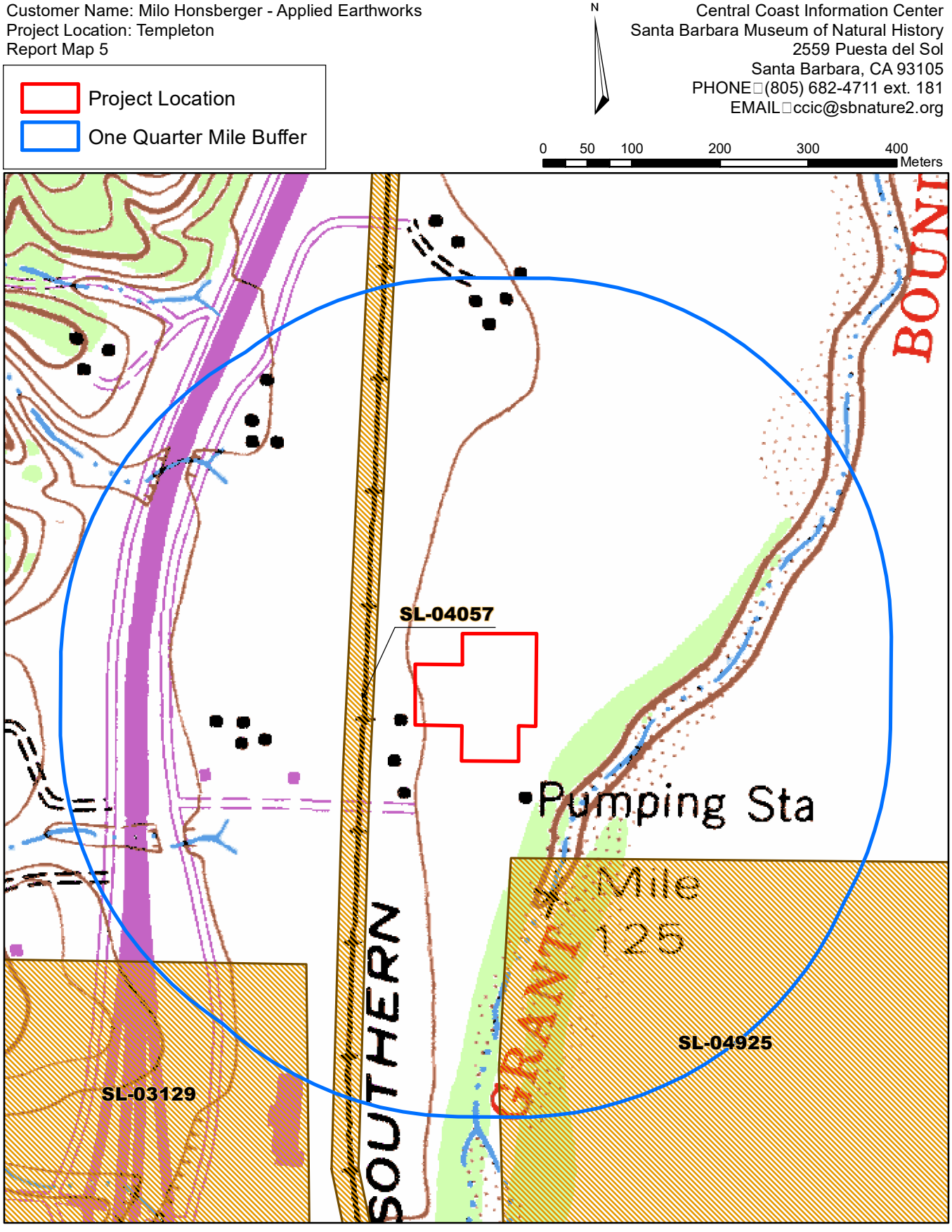
Central Coast Information Center
Santa Barbara Museum of Natural History
2559 Puesta del Sol
Santa Barbara, CA 93105
PHONE (805) 682-4711 ext. 181
EMAIL ccic@sbnature2.org



4449 Firestone CRS

Customer Name: Milo Honsberger - Applied Earthworks
Project Location: Templeton
Report Map 5

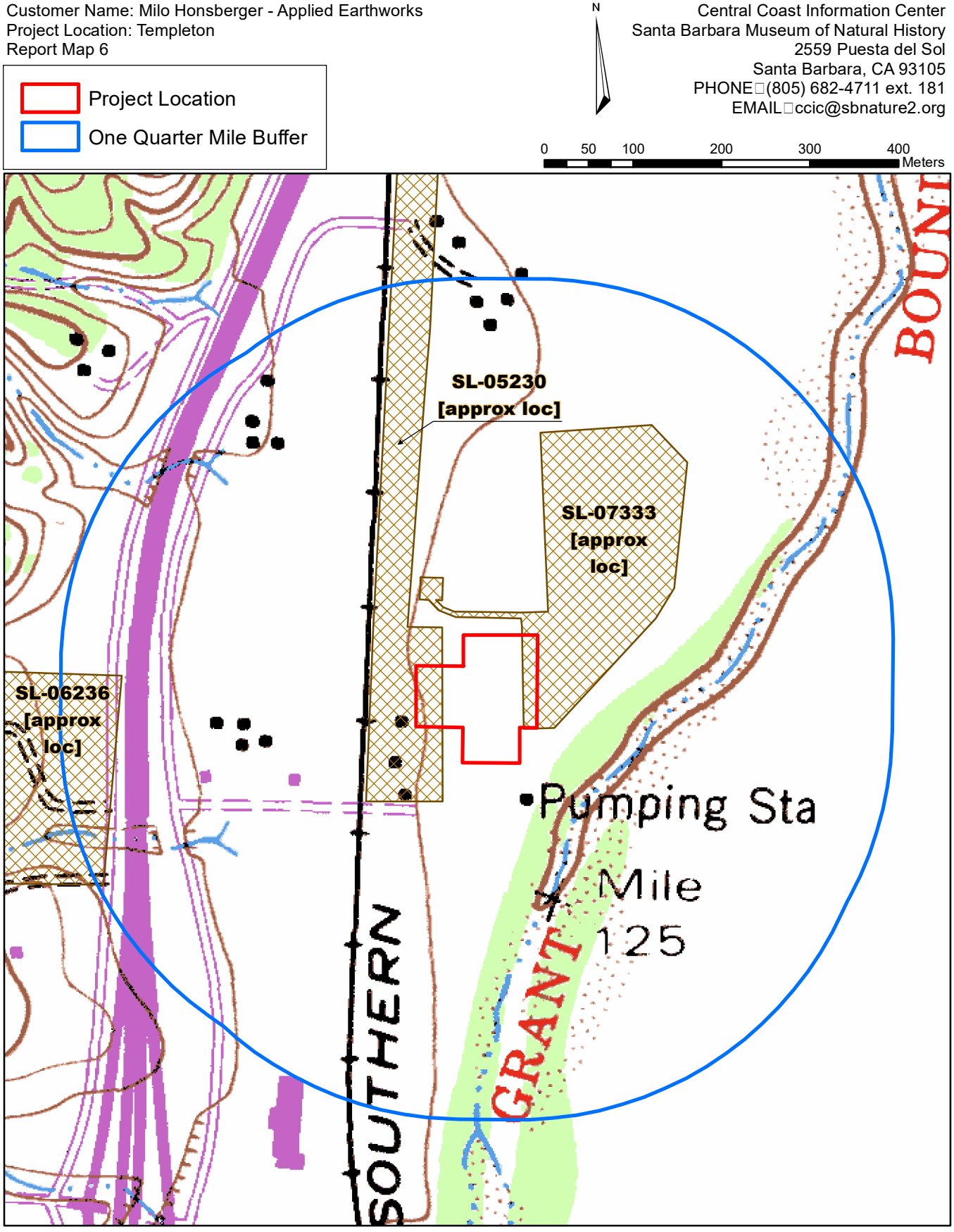
Central Coast Information Center
Santa Barbara Museum of Natural History
2559 Puesta del Sol
Santa Barbara, CA 93105
PHONE (805) 682-4711 ext. 181
EMAIL ccic@sbnature2.org



4449 Firestone CRS

Customer Name: Milo Honsberger - Applied Earthworks
Project Location: Templeton
Report Map 6

Central Coast Information Center
Santa Barbara Museum of Natural History
2559 Puesta del Sol
Santa Barbara, CA 93105
PHONE (805) 682-4711 ext. 181
EMAIL ccic@sbnature2.org



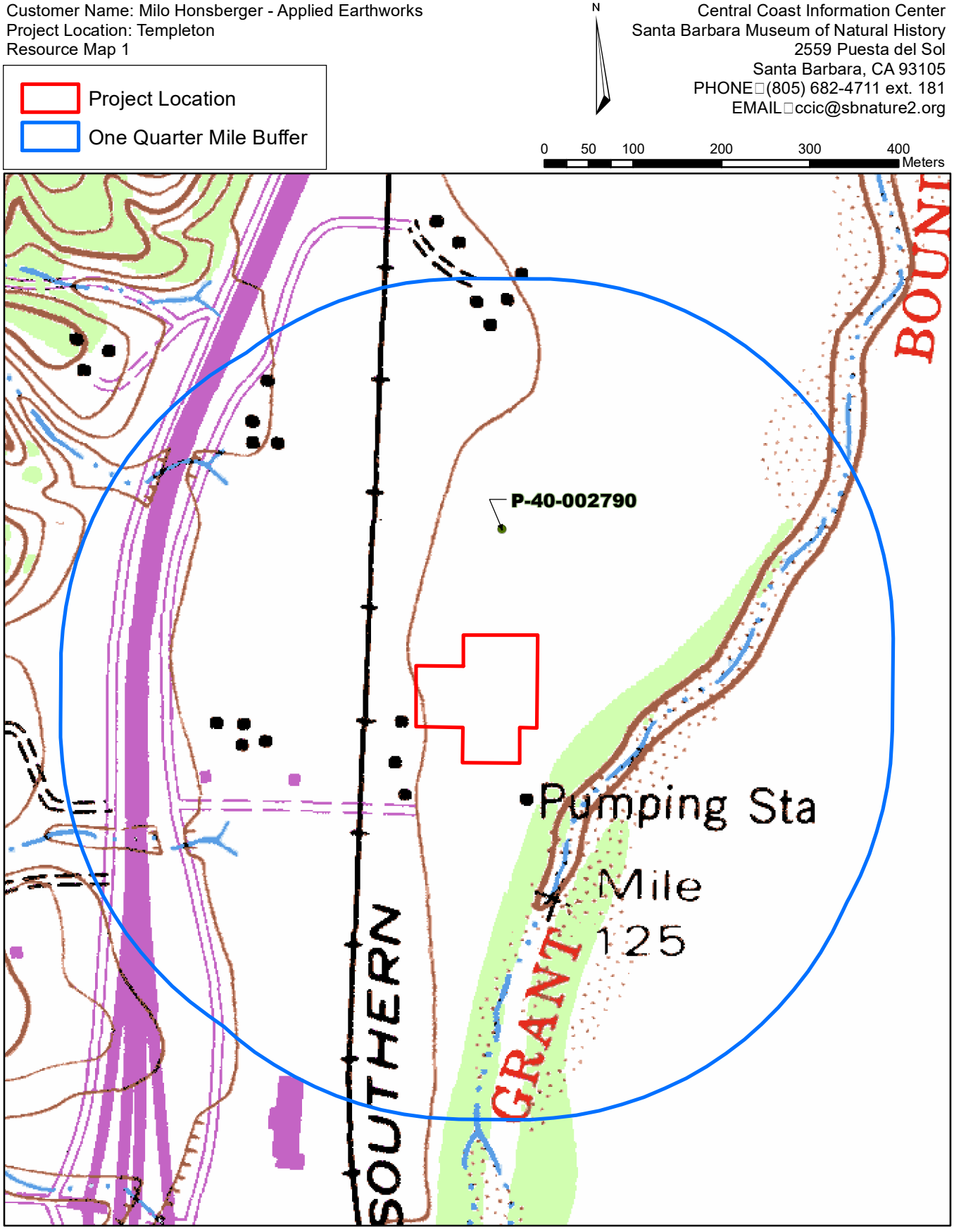
Resource List

Primary No.	Trinomial	Other IDs	Type	Age	Attribute codes	Recorded by	Reports
P-40-001895	CA-SLO-001895	Other - Riverside #2; Other - Riverside Farm Properties #2	Site	Prehistoric	AP15	1998 (John Atwood, Barbie Getchell, Pacific Archaeological Sciences Team)	SL-03515, SL-05230, SL-05593
P-40-001896	CA-SLO-001896	Other - Riverside #1; Other - Riverside Farm Properties #1	Site	Prehistoric	AP15	1998 (John Atwood, Barbie Getchell, Pacific Archaeological Sciences Team)	SL-03515, SL-05230, SL-05593, SL-06082
P-40-002790	CA-SLO-002790	Other - Salinas River Burial Site; Other - Prehistoric burial site	Site	Prehistoric	AP09	2014 (Thor Conway, Heritage Discoveries)	SL-06916, SL-07333

4449 Firestone CRS

Customer Name: Milo Honsberger - Applied Earthworks
Project Location: Templeton
Resource Map 1

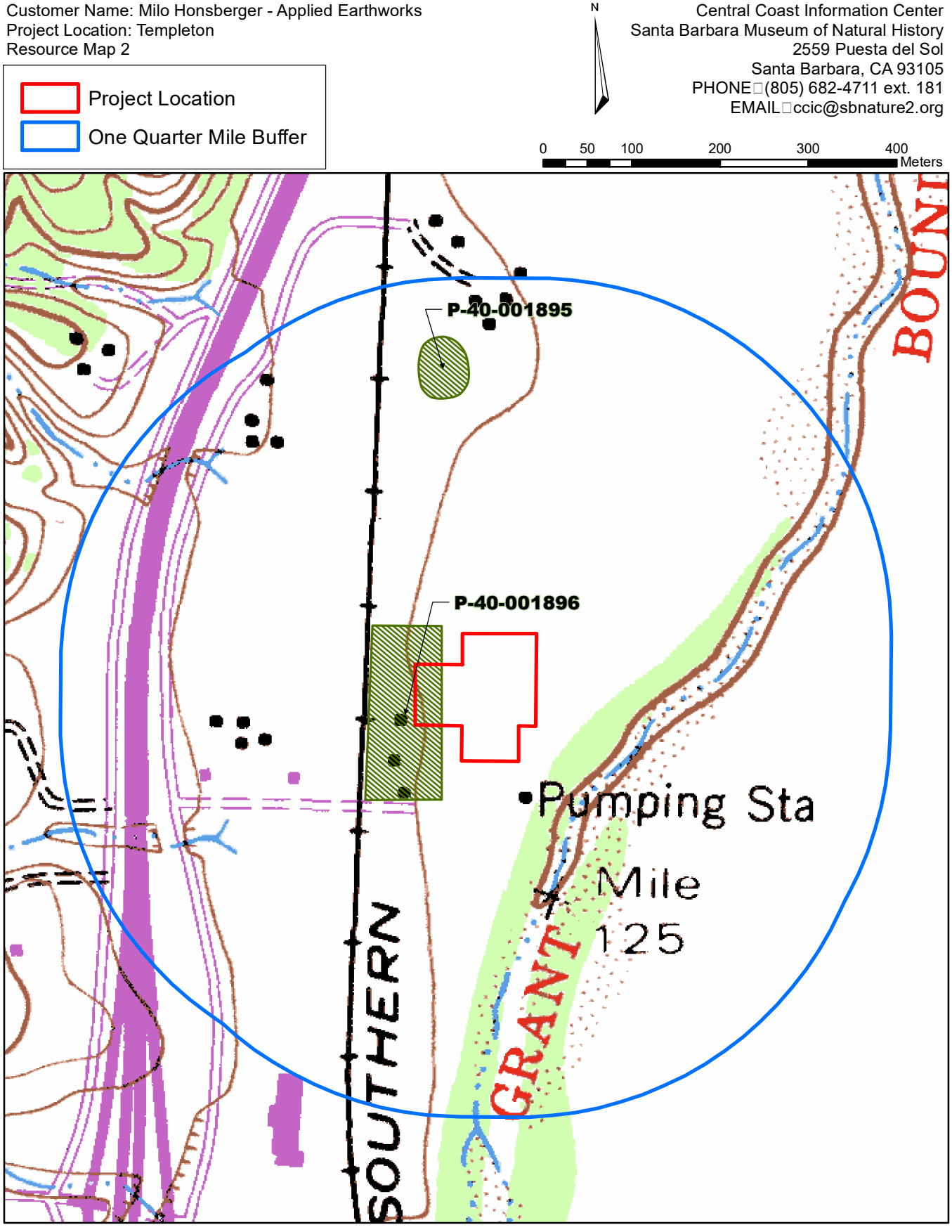
Central Coast Information Center
Santa Barbara Museum of Natural History
2559 Puesta del Sol
Santa Barbara, CA 93105
PHONE (805) 682-4711 ext. 181
EMAIL ccic@sbnature2.org



4449 Firestone CRS

Customer Name: Milo Honsberger - Applied Earthworks
Project Location: Templeton
Resource Map 2

Central Coast Information Center
Santa Barbara Museum of Natural History
2559 Puesta del Sol
Santa Barbara, CA 93105
PHONE (805) 682-4711 ext. 181
EMAIL ccic@sbnature2.org



ATTACHMENT 5

APPENDIX C

Padre Associates, Inc. 2020 Monitoring Information

*Archaeological site locations are exempt from the California Public Records Act, as specified in Government Code 6254.10, and from the Freedom of Information Act (Exemption 3), under the legal authority of both the NHPA (PL 89-665, as amended, Section 304[a]) and the Archaeological Resources Protection Act (PL 96-95, Section 9[a]).

ATTACHMENT 5

Project No. 1801-4021 Task No. _____

padre associates, inc. ENGINEERS GEOLOGISTS & ENVIRONMENTAL SCIENTISTS

Daily Archaeological Monitoring Form

Archaeologist(s): VAN KIRSTINE	**Native American Monitor(s):** DEVIN BALL
Date: 3/30/20	**Weather:** OVERCAST W/ AM FOG, COOL & BREEZY
Location: FIRESTONE SOLAR	**Start/Stop time:** 0715 - 1530 HRS

Excavation Dimensions (estimate):
TRENCH (X1): ABT. 100' LONG, 6' WIDE, 26-29" DEEP; FENCE POST HOLES: 4/6" DIAM, 24" DEEP

Contractors present:
REC SOLAR, LAMONT FENCE COMPANY (LFC), ALTON GEOSCIENCE (ALTON), MEADE (BIO), PADRE

Scope of Work (Include type of equipment):
EXCAVATION OF TRENCH FOR ELECTRICAL CONDUIT USING BACKHOE, MINI-EX AND SKIDSTEER; TAMPER FOR COMPACTING; PERIMETER FENCE INSTALLATION (POWER AUGER)

Environmental Setting (Plants, Nearest water, etc):
MOSTLY LEVEL UPPER TERRACE ALONG WEST BANK OF SALINAS RIVER PATCHY VEGETATION (WEEDS/SEASONAL GRASSES), ISOLATED OAKS OUTSIDE PROJ. SITE

Soil Description (Munsell, Stratigraphy, etc.):
MEDIUM BROWN SANDY CLAY LOAM WITH SCATTERED, HIGHLY ANGULAR ROCK FRAGMENTS ON SURFACE (DISPLACED HOLDING POND EXCAVATION SPOIL?)

Disturbances noted/Redeposited Soils:
BIOTURBATION, AGRICULTURAL PLOWING/DISCING, HEAVY EQUIP. AND VEHICLE TRAFFIC

Cultural Materials Observed (Description, Context, use reverse for more information):
MODERN TRASH (PLASTIC, STEEL BOLT, FIRESTONE BOTTLE CAPS)
NO PREHISTORIC OR HISTORIC MATERIALS OBSERVED

Actions Taken (Stop Work? Redirect? Who did you contact?):
NONE NEEDED

PHOTO LOG	Camera: PERSONAL (IPHONE XR)
Photo numbers:	**Subject/Direction:**
Photo numbers:	**Subject/Direction:**
Photo numbers:	**Subject/Direction:**
Photo numbers:	**Subject/Direction:**

Archaeologist Signature:	**Date:** 3/30/20
Native American Signature:	**Date:**

General Notes:
ADDITIONAL CONSTRUCTION TASKS, INCLUDING INSTALLATION OF SOLAR ARRAY SUPERSTRUCTURE (REC) AND BACKFILLING WERE SPOT-CHECKED

ATTACHMENT 5

Project No. 1801-4021 Task No. _____

padre associates, inc.
ENGINEERS GEOLOGISTS & ENVIRONMENTAL SCIENTISTS

Daily Archaeological Monitoring Form

Archaeologist(s): VAL KIRSTINE	**Native American Monitor(s):** DENIN BALL
Date: 3/31/20	**Weather:** FOGGY, COLD AM; COOL/CLEAR PM
Location: FIRESTONE SOLAR	**Start/Stop time:** 0715 HRS - 1530 HRS

Excavation Dimensions (estimate):
APPROX. 100' x 6' x 28" DEEP (TRENCHES); FENCE POST HOLES 6" DIAM, 24" DEEP

Contractors present:
REC SOLAR, LAMONT FENCE COMPANY (LFC), ALTON; MEADE, PADRE

Scope of Work (include type of equipment):
EXCAVATION OF TRENCHES W/BACKHOE AND BACKFILLING W/SKIDSTEER, MINI-EX
EXCAVATION OF FENCE POST HOLES W/POWER AUGER

Environmental Setting (Plants, Nearest water, etc):
SEE PREVIOUS LOGS

Soil Description (Munsell, Stratigraphy, etc.):
SAME AS PREVIOUSLY NOTED (NO CHANGE)

Disturbances noted/Redeposited Soils:
SAME AS PREVIOUSLY NOTED

Cultural Materials Observed (Description, Context, use reverse for more information):
NONE OBSERVED

Actions Taken (Stop Work? Redirect? Who did you contact?):
NONE NEEDED

PHOTO LOG	Camera: PERSONAL (iPHONE XR)
Photo numbers:	**Subject/Direction:**
Photo numbers:	**Subject/Direction:**
Photo numbers:	**Subject/Direction:**
Photo numbers:	**Subject/Direction:**

Archaeologist Signature: [signature]	**Date:** 3/31/20
Native American Signature:	**Date:**

General Notes:
ADDITIONAL TASKS: CONCRETE POURING AT FENCE POSTS, TRENCH BACKFILLING, CONDUIT-LAYING; COMPACTING, SOLAR ARRAY SUPERSTRUCTURE INSTALLATION

ATTACHMENT 5

Project No. 1801-4021 Task No. _____

padre associates, inc. ENGINEERS, GEOLOGISTS & ENVIRONMENTAL SCIENTISTS

Daily Archaeological Monitoring Form

Archaeologist(s): VALENTINE	**Native American Monitor(s):** DEVIN BALL
Date: 4/1/20	**Weather:** CLEAR, COOL W/ AM FOG
Location: FIRESTONE SOLAR	**Start/Stop time:** 0715 HRS - 1530 HRS

Excavation Dimensions (estimate):
APPROXIMATELY

Contractors present: REC SOLAR, LAMONT FENCING COMPANY (LFC), ALTON & MEADE (BIO)

Scope of Work (include type of equipment):
EXCAVATION OF TRENCHES W/ BACKHOE AND BACKFILLING W/ SKIDSTEER, SHEEP'S FOOT, TAMPER (REC); INSTALLATION OF FENCING (POST HOLES EXCAVATED WITH POWER AUGER (LFC)

Environmental Setting (Plants, Nearest water, etc):
PATCHY VEGETATION (WEEDS & SEASONAL GRASSES)
UPPER TERRACE ALONG W. BANK OF SALINAS RIVER

Soil Description (Munsell, Stratigraphy, etc.):
SOILS LARGELY HOMOGENOUS AND CONSIST OF SANDY CLAY LOAM WITH MINIMAL GRAVEL CONTENT (<5%). GRAVELS ANGULAR TO SUBROUNDED. OCCASIONAL CLASTS OF SHALE, SILICEOUS MONT. & FRANCISCAN CHERT NODULES.

Disturbances noted/Redeposited Soils:
AREA PREVIOUSLY FARMED (PLOWED, DISCED) VEHICLE & HEAVY EQUIP. TRAFFIC (RUTS)

Cultural Materials Observed (Description, Context, use reverse for more information):
1 WEATHERED FRAGMENT OF MYTILUS NACRE OBSERVED ON GROUND SURFACE (SEE UTMS).
1 SECONDARY FLAKE (ISO-1) OF UNKNOWN BLUE/GREEN/GREY CHERT OBSERVED ON GROUND SURFACE NEAR SOUTHERN EDGE OF PROJECT SITE

Actions Taken (Stop Work? Redirect? Who did you contact?):
RACHAEL NOTIFIED OF ISO FIND & RECORDED IN PLACE. NO FURTHER ACTION NEEDED.

PHOTO LOG	Camera: PERSONAL (iPHONE XR)
Photo numbers:	**Subject/Direction:**
Photo numbers:	**Subject/Direction:**
Photo numbers:	**Subject/Direction:**
Photo numbers:	**Subject/Direction:**

Archaeologist Signature:	**Date:** 4/1/20
Native American Signature:	**Date:**

General Notes:
ISO-1 UTMS: 10 N 709311 3941512
SHELL FRAGMENT UTMS: 10 N 709322 3941543

ATTACHMENT 5

Project No. 1801-4021 Task No. _____

padre associates, inc.
ENGINEERS, GEOLOGISTS & ENVIRONMENTAL SCIENTISTS

Daily Archaeological Monitoring Form

Archaeologist(s): VAL KIRSTINE	**Native American Monitor(s):** DENIN BALL
Date: 4/2/20	**Weather:** CLEAR, COOL; BREEZY (WARM/WINDY PM)
Location: FIRESTONE SOLAR	**Start/Stop time:** 0715 - 1530 HRS

Excavation Dimensions (estimate):
TRENCH (X1): ABT 100' LONG, 6' WIDE, 26"-29" DEEP; FENCE POSTS: 4-6" DIAM, 24" DEEP

Contractors present:
REC SOLAR, LAMONT FENCE COMPANY (LFC), ALTON & MEADE (BIO), PADRE

Scope of Work (include type of equipment):
EXCAVATION OF TRENCHES FOR PLACEMENT OF ELECTRICAL CONDUIT (REC) USING BACKHOE, SKIDSTEER, TAMPER; SHEEP'S FOOT FOR COMPACTION; FENCING INSTALLATION (POWER AUGER)

Environmental Setting (Plants, Nearest water, etc):
PROJECT SITE LOCATED ON LEVEL UPPER TERRACE ALONG WEST BANK OF SALINAS RIVER. PATCHY SURFACE VEGETATION (WEEDS/SEASONAL GRASSES).

Soil Description (Munsell, Stratigraphy, etc.):
LARGELY HOMOGENOUS SANDY CLAY LOAM W/LITTLE TO NO GRAVEL OR COBBLE. MEDIUM BROWN IN COLOR, DRY/DRY COMPACTED AND MOIST

Disturbances noted/Redeposited Soils:
BIOTURBATION (GOPHER), HISTORIC TO MODERN AGRICULTURE (PLOWING & DISCING: REMNANT WHEAT OBSERVED); SURFACE SOILS HEAVILY DISTURBED W/POTENTIAL FILL SOILS ORIGINATING FROM WATER HOLDING POND EXCAVATION.

Cultural Materials Observed (Description, Context, use reverse for more information):
ISO-2: FINE-GRAINED BASALT MORTAR FRAGMENT OBSERVED AMONG TRENCH BACKFILL (SEE UTMs). ORIGINATED FROM SANDY CLAY LOAM MATRIX 0-28" BELOW GROUND SURFACE. EXHIBITED OLD BREAKS NOT CAUSED BY RECENT EXPOSURE

Actions Taken (Stop Work? Redirect? Who did you contact?):
CONTACTED RACHAEL; ADVISED OF ISO FINDS. TREVOR (REC) CONTACTED. FIRESTONE CONTACTED AND DARRIN MCMAHON (FIRESTONE FACILITIES DIRECTOR) ARRIVED ON SITE AT LUNCH TO COLLECT ISO-2. DARRIN & DENIN DISCUSSED POSSIBILITY OF DONATING ISO-2 TO YOKUTS SALINAN TRIBE.

PHOTO LOG	Camera: PERSONAL (iPHONE XR)
Photo numbers:	**Subject/Direction:**
Photo numbers:	**Subject/Direction:**
Photo numbers:	**Subject/Direction:**
Photo numbers:	**Subject/Direction:**

Archaeologist Signature: [signature]	**Date:** 4/2/20
Native American Signature:	**Date:**

General Notes:
ISO-2 UTMs: 10N 709286 3941599
ISO-2 DIMENSIONS: L=13 CM, W=12.5 CM, TH=5.9 CM

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Project No. 1801-4021 Task No. _____

padre associates, inc.
ENGINEERS, GEOLOGISTS & ENVIRONMENTAL SCIENTISTS

Daily Archaeological Monitoring Form

Archaeologist(s): VAL KIRSTINE	**Native American Monitor(s):** DEVIN BALL
Date: 4/3/20	**Weather:** CLEAR, WARM & BREEZY
Location: FIRESTONE SOLAR	**Start/Stop time:** 0715 HRS - 1530 HRS

Excavation Dimensions (estimate):
LIGHT BLADING / SCRAPING AT 4 BACKFILLED TRENCHES

Contractors present:
REC SOLAR, LAMONT FENCE COMPANY, ALTON & MEADE, PADRE

Scope of Work (include type of equipment):
SKIDSTEER UTILIZED TO LIGHTLY BLADE / SCRAPE SMOOTH UPPER 3" OF SOIL ALONG LENGTH OF 4 PREVIOUSLY BACKFILLED TRENCHES

Environmental Setting (Plants, Nearest water, etc):
SAME AS PREVIOUSLY NOTED

Soil Description (Munsell, Stratigraphy, etc.):
SAME AS PREVIOUSLY NOTED (NO CHANGE OBSERVED)

Disturbances noted/Redeposited Soils:
SEE PREVIOUS LOGS

Cultural Materials Observed (Description, Context, use reverse for more information):
1 POSSIBLE FLAKE (ISO-3) OBSERVED ON GROUND SURFACE NEAR EAST EDGE OF PROJ. SITE (UTMS: 10 N 709373 E 3941578 N) MONTEREY CHERT, SECONDARY / ANGULAR SHATTER

Actions Taken (Stop Work? Redirect? Who did you contact?):
NONE NEEDED

PHOTO LOG	Camera: PERSONAL (iPHONE XR)
Photo numbers:	**Subject/Direction:**
Photo numbers:	**Subject/Direction:**
Photo numbers:	**Subject/Direction:**
Photo numbers:	**Subject/Direction:**

Archaeologist Signature: [signature]	**Date:** 4/3/20
Native American Signature:	**Date:**

General Notes:

Project No. 1801-4021 Task No. _____

padre associates, inc.
ENGINEERS, GEOLOGISTS & ENVIRONMENTAL SCIENTISTS

Daily Archaeological Monitoring Form

Archaeologist(s): R. Anastasio	**Native American Monitor(s):** Devin Ball
Date: 04-13-2020	**Weather:** Overcast, cold- am, Sunny pm
Location: 1400 Ramada Dr.	**Start/Stop time:** 7:00 am – 3:00 pm

Excavation Dimensions (estimate):
Directional Drilling. For conduit along Sedge of ponds, Trenching btwn ponds

Contractors present:
LTEC, RFC, Lamont Fence Co, Althouse & Meade, Padre & Array

Scope of Work (include type of equipment): backhoe
Ditch with JT30, 420F2 Cat ~~excavator~~, CAT 305.5e mini-ex
Directional drill depth 7-9' DBS, Conduit trench 24-32" dbs

Environmental Setting (Plants, Nearest water, etc):
Same as Previous

Soil Description (Munsell, Stratigraphy, etc.):
In the deepest hole @ the start of the d-drill, 4 strata were observed (see over)

Disturbances noted/Redeposited Soils:
Btwn the ponds & the array, the stratigraphy was upside down with a thick layer of sandy clay loam (10YR 4/3) over the darker soils.

Cultural Materials Observed (Description, Context, use reverse for more information):
none – some chert pebbles, sub-angular & water-worn, clearly not worked

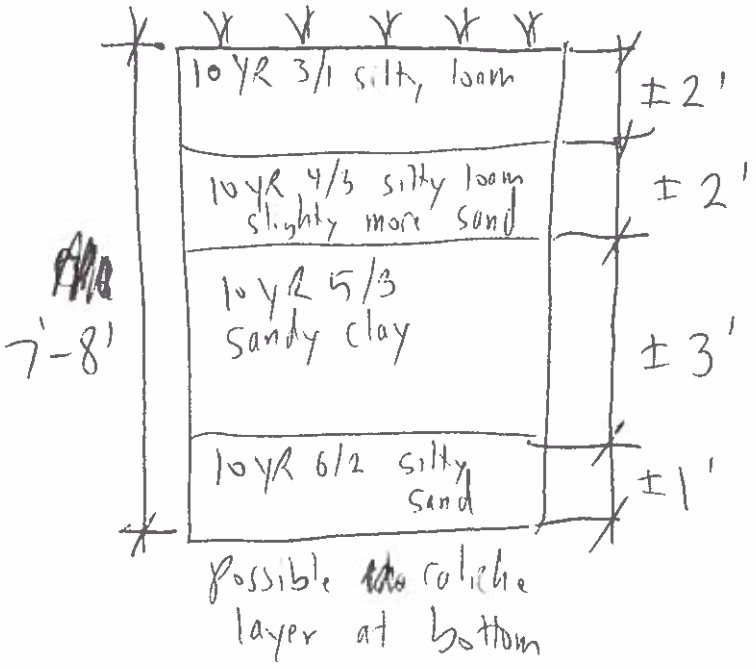
Actions Taken (Stop Work? Redirect? Who did you contact?):
None

PHOTO LOG	Camera: Personal (Samsung Note 5)
Photo numbers:	**Subject/Direction:**
Photo numbers:	**Subject/Direction:**
Photo numbers:	**Subject/Direction:**
Photo numbers:	**Subject/Direction:**

Archaeologist Signature:	**Date:** 04-13-2020
Native American Signature:	**Date:**

General Notes:

ATTACHMENT 5



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Project No. 1801-4021 Task No. _____

padre associates, inc.
ENGINEERS, GEOLOGISTS & ENVIRONMENTAL SCIENTISTS

Daily Archaeological Monitoring Form

Archaeologist(s): R Anastasio	**Native American Monitor(s):** Devin Ball
Date: 04-14-2020	**Weather:** Overast, cool am; Sunny & warm pm
Location: 1400 Ramada Drive	**Start/Stop time:** 7:15 - 3:15
Excavation Dimensions (estimate):	
Contractors present: LTEC, REC, Lamont Fence, Althouse & Meade, Padre	
Scope of Work (include type of equipment): Pulling conduit thru drill hole, Excavate Trench From near water Treatment equip to drill hole start +3'D3S	
Environmental Setting (Plants, Nearest water, etc): Same as previous	
Soil Description (Munsell, Stratigraphy, etc.): Same as previous	
Disturbances noted/Redeposited Soils: probably distubed by previous construction	
Cultural Materials Observed (Description, Context, use reverse for more information): ~~None~~ 1 Fingernail-size piece of mytilus macre Found in back dirt of Trench btwn water treatment equip and drill start	
Actions Taken (Stop Work? Redirect? Who did you contact?): None	

PHOTO LOG	**Camera:** personal (Samsung Note 2)
Photo numbers:	**Subject/Direction:**
Photo numbers:	**Subject/Direction:**
Photo numbers:	**Subject/Direction:**
Photo numbers:	**Subject/Direction:**

Archaeologist Signature: R Anastasio	**Date:** 04-14-2020
Native American Signature:	**Date:**

General Notes:

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Project No. 1801-4021 Task No. _____

padre associates, inc.
ENGINEERS GEOLOGISTS & ENVIRONMENTAL SCIENTISTS

Daily Archaeological Monitoring Form

Archaeologist(s): R Anastasio	**Native American Monitor(s):** Devin Ball
Date: 04-15-2020	**Weather:** Sunny, warm
Location: 1400 Ramada Drive	**Start/Stop time:** 7:15 - 3:15

Excavation Dimensions (estimate):
Pad area and connections near H_2O Treatment, stubs to Array motors (A) & [illegible]

Contractors present:
REC, Althouse & Meade, Padre

Scope of Work (include type of equipment):
and excavation for Christie boxes @ Array B

Environmental Setting (Plants, Nearest water, etc):
Same as previous

Soil Description (Munsell, Stratigraphy, etc.):
Same as previous

Disturbances noted/Redeposited Soils:
Previous construction, plowing, rodent (crotavina)

Cultural Materials Observed (Description, Context, use reverse for more information):
None

Actions Taken (Stop Work? Redirect? Who did you contact?):
None

PHOTO LOG	Camera: Personal (Samsung Note 5)
Photo numbers:	**Subject/Direction:**
Photo numbers:	**Subject/Direction:**
Photo numbers:	**Subject/Direction:**
Photo numbers:	**Subject/Direction:**

Archaeologist Signature:	**Date:** 04-15-2020
Native American Signature:	**Date:**

General Notes:
Work very slow

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Project No. 1801-4021 Task No. _____

padre associates, inc.
ENGINEERS, GEOLOGISTS & ENVIRONMENTAL SCIENTISTS

Daily Archaeological Monitoring Form

Archaeologist(s): R Anastasio	**Native American Monitor(s):** Devin Ball
Date: 04-16-2020	**Weather:** Sunny, warm
Location: 1400 Ramada Dr.	**Start/Stop time:** 7:15 - 3:15

Excavation Dimensions (estimate):

Contractors present: REC, Althouse & Meade, Padre

Scope of Work (include type of equipment):
Excavation at area of massed connections & Christie boxes at Array B
Very slow - surveyed surrounding area in downtime

Environmental Setting (Plants, Nearest water, etc):
Same as previous

Soil Description (Munsell, Stratigraphy, etc.):

Disturbances noted/Redeposited Soils:
Soils in area were "upside down" with lighter, sandier soil over darker silter soil *

Cultural Materials Observed (Description, Context, use reverse for more information):
Two chert flakes, one in backdirt about 7m north of SW corner of Array B, one about 45.5 m E of SW corner of Array B
Lots of fractured porcellanite/white chert that looks like shatter A

Actions Taken (Stop Work? Redirect? Who did you contact?):
No stop, collected flakes, photographed them, and returned them

PHOTO LOG	Camera: Personal Samsung Note 5
Photo numbers:	**Subject/Direction:**
Photo numbers:	**Subject/Direction:**
Photo numbers:	**Subject/Direction:**
Photo numbers:	**Subject/Direction:**

Archaeologist Signature:	**Date:** 04-16-2020
Native American Signature:	**Date:**

General Notes:
* Probably a result of pond excavation spoil being dumped in the area
A not shatter - "plow-i-facts" - all very similar, no other flakes or cores

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Project No. 1801-4021 Task No. _____

padre associates, inc. ENGINEERS, GEOLOGISTS & ENVIRONMENTAL SCIENTISTS

Daily Archaeological Monitoring Form

Archaeologist(s): R Anastasio	**Native American Monitor(s):** Devin Bell
Date: 04-17	**Weather:** Sunny, windy
Location: 140s Ramada Drive	**Start/Stop time:** 7:15 - 3:15

Excavation Dimensions (estimate): Excavated trench in front of Array C (3' deep)

Contractors present: REC, Padre

Scope of Work (include type of equipment):
Same as previous re: equipment
Trenching included connection to Array C motor

Environmental Setting (Plants, Nearest water, etc):
Same as previous

Soil Description (Munsell, Stratigraphy, etc.):
Same as previous

Disturbances noted/Redeposited Soils:
Soil in front of most of Array C is upside down

Cultural Materials Observed (Description, Context, use reverse for more information):
Human bone, small fragment with old break and new break. Found in smeared and compacted backdirt near NW corner of Array C. No other bone or artifacts in the immediate area. (over)

Actions Taken (Stop Work? Redirect? Who did you contact?):
Stop to assess. Contacted R Letter, SLO PD, County Sheriff/coronor. Contacted Lise Mifsud for 2nd opinion. After area was examined & flagged off, work continued at S end of Trench.

PHOTO LOG	Camera: personal Samsung Note 5
Photo numbers:	**Subject/Direction:**
Photo numbers:	**Subject/Direction:**
Photo numbers:	**Subject/Direction:**
Photo numbers:	**Subject/Direction:**

Archaeologist Signature:	**Date:** 04-17-2020
Native American Signature:	**Date:**

General Notes:

Appeared to be small long bone Frag. Lise confirmed that it was human Fibula.

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Project No. 1801-4021 Task No. _____

padre associates, inc.
ENGINEERS, GEOLOGISTS & ENVIRONMENTAL SCIENTISTS

Daily Archaeological Monitoring Form

Archaeologist(s): R. Anastasio	**Native American Monitor(s):** Devin Bell
Date: 04-20-2020	**Weather:** rainy am, sunny & windy pm
Location: 1400 Ramada Dr.	**Start/Stop time:** 7:15-3:15

Excavation Dimensions (estimate):

Contractors present: REC, LTEC, Padre

Scope of Work (include type of equipment):
Excavate trench from Middle of Array C (in front) to inverter area, dig out

Environmental Setting (Plants, Nearest water, etc):
Same as prev.

Soil Description (Munsell, Stratigraphy, etc.):
Same- intact soils here, less clast & channers than to the west

Disturbances noted/Redeposited Soils:
none but rodent & plowing

Cultural Materials Observed (Description, Context, use reverse for more information):

none

Actions Taken (Stop Work? Redirect? Who did you contact?):

None

PHOTO LOG	**Camera:** Personal Samsung Note 5
Photo numbers:	**Subject/Direction:**
Photo numbers:	**Subject/Direction:**
Photo numbers:	**Subject/Direction:**
Photo numbers:	**Subject/Direction:**

Archaeologist Signature: R Ana	**Date:** 04-20-2020
Native American Signature:	**Date:**

General Notes:
Pad area @ inverters, expose drill-conduit

Project No. 1801 - 4021 Task No. _____

padre associates, inc.
ENGINEERS, GEOLOGISTS & ENVIRONMENTAL SCIENTISTS

Daily Archaeological Monitoring Form

Archaeologist(s): R Anastasio	**Native American Monitor(s):** Devin Ball
Date: 04-21-2020	**Weather:** Sunny, cool am - warm pm
Location: 1400 Ramada Drive	**Start/Stop time:** 7:30 - 2:30

Excavation Dimensions (estimate):

Contractors present: REC, LTEC, Padre

Scope of Work (include type of equipment):
Almost no excavation or backfill today, just widend Christie box area at Array B

Environmental Setting (Plants, Nearest water, etc):
Same

Soil Description (Munsell, Stratigraphy, etc.):
Same

Disturbances noted/Redeposited Soils:
Same "upside down" stratigraphy

Cultural Materials Observed (Description, Context, use reverse for more information):
None

Actions Taken (Stop Work? Redirect? Who did you contact?):
None

PHOTO LOG	**Camera:** Personal, Samsung Note 5
Photo numbers:	**Subject/Direction:**
Photo numbers:	**Subject/Direction:**
Photo numbers:	**Subject/Direction:**
Photo numbers:	**Subject/Direction:**

Archaeologist Signature:	**Date:** 04-21-2020
Native American Signature:	**Date:**

General Notes:

ATTACHMENT 5

Project No. 1301 4021 Task No. _____

padre associates, inc.
ENGINEERS, GEOLOGISTS & ENVIRONMENTAL SCIENTISTS

Daily Archaeological Monitoring Form

Archaeologist(s): R Anastasio	**Native American Monitor(s):** Devon Ball
Date: 04-22-2020	**Weather:** Sunny, hot
Location: 1400 Ramada Dr.	**Start/Stop time:** 7:30 - 2:00

Excavation Dimensions (estimate):

Contractors present: REC, LTEC, Padre

Scope of Work (include type of equipment):
Excavated for PG&E connection west of existing switchgear

Environmental Setting (Plants, Nearest water, etc):
Same

Soil Description (Munsell, Stratigraphy, etc.):
Same

Disturbances noted/Redeposited Soils:
PG&E conduit in area at 4' depth

Cultural Materials Observed (Description, Context, use reverse for more information):
None

Actions Taken (Stop Work? Redirect? Who did you contact?):
None

PHOTO LOG	**Camera:** Personal Samsung Note 5
Photo numbers:	**Subject/Direction:**
Photo numbers:	**Subject/Direction:**
Photo numbers:	**Subject/Direction:**
Photo numbers:	**Subject/Direction:**

Archaeologist Signature: R A	**Date:** 04-22-2020
Native American Signature:	**Date:**

General Notes:

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Project No. 1801-4021 Task No. _____

padre associates, inc.
ENGINEERS, GEOLOGISTS & ENVIRONMENTAL SCIENTISTS

Daily Archaeological Monitoring Form

Archaeologist(s): VAL VANDERLINDE	**Native American Monitor(s):** GEOREE LARSON
Date: 4/27/20	**Weather:** CLEAR; SUNNY/BREEZY & WARM
Location: 1400 RAMADA DRIVE	**Start/Stop time:** 0715 HRS - 1530 HRS

Excavation Dimensions (estimate):

Contractors present:
REC SOLAR, LTEC, PADRE

Scope of Work (include type of equipment):
EXCAVATION OF 3' WIDE, 2' DEEP TRENCH ALONG W. EDGE PROJ. SITE TO TIE IN ELECTRICAL CONDUIT (BACKHOE). MINI-EX DUG SHOT TRENCH OVER PREVIOUSLY DUG AREA TO FIX LINE. BACKFILLING

Environmental Setting (Plants, Nearest water, etc):
SEE PREVIOUS

Soil Description (Munsell, Stratigraphy, etc.):
SEE PREVIOUS

Disturbances noted/Redeposited Soils:
SEE PREVIOUS

Cultural Materials Observed (Description, Context, use reverse for more information):
NONE OBSERVED

Actions Taken (Stop Work? Redirect? Who did you contact?):
NONE REQUIRED

PHOTO LOG	Camera: iPHONE XR
Photo numbers:	**Subject/Direction:**
Photo numbers:	**Subject/Direction:**
Photo numbers:	**Subject/Direction:**
Photo numbers:	**Subject/Direction:**

Archaeologist Signature:	**Date:** 4/27/20
Native American Signature:	**Date:**

General Notes:

ATTACHMENT 5

Project No. 1101-4021 Task No. _____

padre associates, inc.
ENGINEERS, GEOLOGISTS & ENVIRONMENTAL SCIENTISTS

Daily Archaeological Monitoring Form

Archaeologist(s): Chris Cotter	**Native American Monitor(s):** George Pearson
Date: 4/28/20	**Weather:** Clear
Location: 1400 Ramada Drive	**Start/Stop time:** 7:00 - 12:00

Excavation Dimensions (estimate): 75 feet long x 1.5 feet wide 24 inches deep

Contractors present: REC Solar, LTEC

Scope of Work (include type of equipment): Excavator used to dig a trench in order to install electrical conduit and then backfill trench also using a backhoe

Environmental Setting (Plants, Nearest water, etc):
Same

Soil Description (Munsell, Stratigraphy, etc.):
Same

Disturbances noted/Redeposited Soils:
Plow / disc

Cultural Materials Observed (Description, Context, use reverse for more information):

NCM

Actions Taken (Stop Work? Redirect? Who did you contact?):

ϕ

PHOTO LOG	Camera:
Photo numbers:	**Subject/Direction:**
Photo numbers:	**Subject/Direction:**
Photo numbers:	**Subject/Direction:**
Photo numbers:	**Subject/Direction:**

Archaeologist Signature:	**Date:** 4/28/20
Native American Signature:	**Date:**

General Notes: Initial work consisted of backfilling trenches opened yesterday then excavation of new trench. Val arrived at lunch to work rest of day

ATTACHMENT 5

Project No. 1801-4021 Task No. _____

padre associates, inc. ENGINEERS, GEOLOGISTS & ENVIRONMENTAL SCIENTISTS

Daily Archaeological Monitoring Form

Archaeologist(s): VALKYRIE STINE	**Native American Monitor(s):** GEORGE LARSON
Date: 4/29/20	**Weather:** MOSTLY CLEAR W/PM HAZE; WARM/BREEZY
Location: 1400 RAMADA DRIVE	**Start/Stop time:** 0700 HRS -

Excavation Dimensions (estimate):
CONDUIT REPAIR/EXPOSURE: 15'x10'x3' DEEP; HYDRO VAC LINE LOCATING/TRENCHING: ABT. 10'x3'x 3-5' DEEP

Contractors present:
REC SOLAR, LTEC, PADRE, ALTON; MEADE

Scope of Work (include type of equipment):
LTEC USED HYDRO VAC TRUCK & H2O KNIFE TO EXPOSE EXISTING ELECTRICAL LINES; TRENCH AT SW CORNER OF POND; REC SOLAR USED MINI-EX & HAND TOOLS TO DIG UP PREVIOUSLY BACKFILLED CONDUIT FOR REPAIR

Environmental Setting (Plants, Nearest water, etc):
SEE PREVIOUS LOGS

Soil Description (Munsell, Stratigraphy, etc.):
HYDRO-VAC LOCATION: TRENCH FILL COMPOSED OF ROCKY, LOAMY CLAY
REC CONDUIT REPAIR: CLAYEY LOAM WITH LITTLE TO NO GRAVEL; MOSTLY PREVIOUSLY DISTURBED

Disturbances noted/Redeposited Soils:
PREVIOUS TRENCHING FOR UTILITIES, ROAD DEVELOPMENT

Cultural Materials Observed (Description, Context, use reverse for more information):

NONE OBSERVED

Actions Taken (Stop Work? Redirect? Who did you contact?):

NONE REQUIRED

PHOTO LOG	Camera: PERSONAL (iPHONE XR)
Photo numbers:	**Subject/Direction:**
Photo numbers:	**Subject/Direction:**
Photo numbers:	**Subject/Direction:**
Photo numbers:	**Subject/Direction:**

Archaeologist Signature: [signature]	**Date:** 4/29/20
Native American Signature:	**Date:**

General Notes:
REC CREW SHUT DOWN EARLY (1430) TO CLEAN UP WORK SITE

ATTACHMENT 5

Project No. 1801-4021 Task No. _____

padre associates, inc.
ENGINEERS, GEOLOGISTS & ENVIRONMENTAL SCIENTISTS

Daily Archaeological Monitoring Form

Archaeologist(s): VAL KIRSTINE	**Native American Monitor(s):** GEORGE LARSON
Date: 4/30/20	**Weather:** MOSTLY CLEAR, WARM & WINDY PM
Location: 1400 RAMADA DRIVE	**Start/Stop time:** 0700 - 1530 HRS

Excavation Dimensions (estimate):
SMALL AMT. (3' x 5' x 2-3' DEEP) OF HYDRO-VAC EXCAVATION NEAR POND (LTEC, CONDUIT-TIE-IN)

Contractors present:
LTEC, REC SOLAR, PADRE

Scope of Work (include type of equipment):
HYDRO VAC TRUCK CREW WORKED ON UTILITY TRENCH TIE-IN AREA W/ WATER KNIFE & VACUUM HOSE; REC SOLAR INSTALLED ELECTRICAL BOXES, RAN WIRE, AND BACKFILLED

Environmental Setting (Plants, Nearest water, etc):
SEE PREVIOUS LOGS

Soil Description (Munsell, Stratigraphy, etc.):
NO VISIBLE STRATIGRAPHY; SURFACE SOILS SAME AS PREV. NOTED

Disturbances noted/Redeposited Soils:
UTILITY TRENCHING, ROAD DEVELOPMENT, AGRICULTURAL LAND USE

Cultural Materials Observed (Description, Context, use reverse for more information):
1 FINE-GRAINED SANDSTONE PESTLE (INCOMPLETE, LIKELY PROXIMAL END, ABOUT 1/2 - 2/3 OF ORIGINAL LENGTH). FOUND ON DISTURBED GROUND SURFACE ALONG ACCESS ROAD SHOULDER, ADJACENT TO RECENTLY BACKFILLED TRENCH. DARK CLAY W/ ANGULAR ROCK FRAGS ADHERING TO OUTER SURFACE. POSSIBLY FIRE-AFFECTED.
L= 14 CM, W= 6 CM, TH= 6.2 CM

Actions Taken (Stop Work? Redirect? Who did you contact?):
NOTIFIED RACHAEL OF FIND. TOOK PHOTOGRAPHS, GPS POINT, & COLLECTED PESTLE FOR LATER PASSING OFF TO CLIENT OF SALIWAN TRIBE.

PHOTO LOG	Camera: PERSONAL (iPHONE XR)
Photo numbers:	**Subject/Direction:**
Photo numbers:	**Subject/Direction:**
Photo numbers:	**Subject/Direction:**
Photo numbers:	**Subject/Direction:**

Archaeologist Signature: [signature]	**Date:** 4/30/20
Native American Signature:	**Date:**

General Notes:

ATTACHMENT 5

Project No. 1801-4021 Task No. _____

padre associates, inc.
ENGINEERS, GEOLOGISTS & ENVIRONMENTAL SCIENTISTS

Daily Archaeological Monitoring Form

Archaeologist(s): VAL HARSTINE	**Native American Monitor(s):** GEORGE LARSON
Date: 5/1/20	**Weather:** CLEAR, WARM, BREEZY
Location: 1400 RAMADA DRIVE	**Start/Stop time:** 0700 - 1430

Excavation Dimensions (estimate):

Contractors present:
REC SOLAR, LTEC, PADRE

Scope of Work (include type of equipment):
HYDRO-VAC EXCAVATION / EXPOSURE OF UTILITIES AND ELECTRICAL CONDUIT NEAR SW CORNER OF SOUTH POND (LTEC), BACKFILLING OF PREVIOUSLY EXPOSED CONDUIT (REC)

Environmental Setting (Plants, Nearest water, etc):
SEE PREVIOUS LOGS

Soil Description (Munsell, Stratigraphy, etc.):
SEE PREVIOUS LOGS

Disturbances noted/Redeposited Soils:
SAME AS PREV. NOTED

Cultural Materials Observed (Description, Context, use reverse for more information):
NONE OBSERVED

Actions Taken (Stop Work? Redirect? Who did you contact?):
NONE NEEDED

PHOTO LOG	**Camera:** PERSONAL (iPHONE XR)
Photo numbers:	**Subject/Direction:**
Photo numbers:	**Subject/Direction:**
Photo numbers:	**Subject/Direction:**
Photo numbers:	**Subject/Direction:**

Archaeologist Signature:	**Date:** 5/1/20
Native American Signature:	**Date:**

General Notes:

ATTACHMENT 5

Project No. 1801-4021 Task No. _____

padre associates, inc.
ENGINEERS, GEOLOGISTS & ENVIRONMENTAL SCIENTISTS

Daily Archaeological Monitoring Form

Archaeologist(s): VAL VIRGINIA	**Native American Monitor(s):** GEORGE LARSON
Date: 5/4/20	**Weather:** MOSTLY CLEAR; WARM; BREEZY
Location: 1400 RAMADA DR.	**Start/Stop time:** 0700 - 1530 HRS

Excavation Dimensions (estimate):
NO EXCAVATION TODAY (BACKFILLING ONLY)

Contractors present:
REC SOLAR, LTEE, PADRE

Scope of Work (include type of equipment):
BACKFILLING (REE) W/ BACKHOE, MINI-EX, COMPACTION W/ WHACKER NEWSOM REMOTE OPERATED

Environmental Setting (Plants, Nearest water, etc):
SEE PREVIOUS LOGS

Soil Description (Munsell, Stratigraphy, etc.):
SEE PREVIOUS LOGS

Disturbances noted/Redeposited Soils:
SEE PREV. LOGS

Cultural Materials Observed (Description, Context, use reverse for more information):

NONE OBSERVED

Actions Taken (Stop Work? Redirect? Who did you contact?):

NONE NEEDED

PHOTO LOG	Camera: PERSONAL (iPHONE XR)
Photo numbers:	**Subject/Direction:**
Photo numbers:	**Subject/Direction:**
Photo numbers:	**Subject/Direction:**
Photo numbers:	**Subject/Direction:**

Archaeologist Signature:	**Date:** 5/4/20
Native American Signature:	**Date:**

General Notes:

ATTACHMENT 5

Project No. _____ Task No. _____

padre associates, inc.
ENGINEERS, GEOLOGISTS & ENVIRONMENTAL SCIENTISTS

Daily Archaeological Monitoring Form

Archaeologist(s): VALKYRIE STINE	**Native American Monitor(s):** GEORGE LARSON
Date: 5/5/20	**Weather:** CLEAR, WARM, BREEZY
Location: 1400 RAMADA DRIVE	**Start/Stop time:** 0700 HRS

Excavation Dimensions (estimate):

Contractors present: REC SOLAR, LTEC, PADRE, DAVID CRYE CONSTRUCTION

Scope of Work (include type of equipment): BACKFILLING OF CONDUIT TRENCH (REC SOLAR), EXPOSURE OF PREV. BACKFILLED CONDUIT NEAR POND W/BACKHOE (LTEC, REC), GRADING, RIPPING, COMPACTING OF ROADS (6-12") W/ D-6 RIPPER, SKID LOADER, 2 ROAD CONSIDERS, BARREL COMPACTOR, 2 HAUL TRUCKS, 2 WATER TRUCKS

Environmental Setting (Plants, Nearest water, etc):

SEE PREVIOUS LOGS

Soil Description (Munsell, Stratigraphy, etc.):

SOILS IN ROAD CUT ON N. SIDE CONTAINMENT PONDS V. DARK BROWN CLAY W/ABUNDANT ANGULAR ROCK FRAGS. SOILS ADJACENT TO SOLAR ARRAY APPEAR V. DISTURBED

Disturbances noted/Redeposited Soils: AND CONSIST OF MED. BRWN SILTY CLAY LOAM WITH ANGULAR TO SUB-ROUNDED

Cultural Materials Observed (Description, Context, use reverse for more information):

2 FRAGS POSSIBLE FIRE-AFFECTED ROCK OBSVD. DURING ROAD GRADING (1 ON W. SIDE OF SOLAR ARRAYS OPPOSITE WATER TREATMENT POND, 1 ALONG EDGE OF E-W ORIENTED ACCESS ROAD GRADING IN CENTER OF SOLAR ARRAY AREA. BOTH FRAGS OBSVD. IN HIGHLY DISTURBED SOILS W/ NO ASSOCIATED ASH/CHARCOAL

Actions Taken (Stop Work? Redirect? Who did you contact?):

NONE NEEDED

PHOTO LOG	Camera: PERSONAL (iPHONE XR)
Photo numbers:	**Subject/Direction:**
Photo numbers:	**Subject/Direction:**
Photo numbers:	**Subject/Direction:**
Photo numbers:	**Subject/Direction:**

Archaeologist Signature:	**Date:** 5/5/20
Native American Signature:	**Date:**

General Notes:

Project No. 1801-4021 Task No. _____

padre associates, inc. ENGINEERS, GEOLOGISTS & ENVIRONMENTAL SCIENTISTS

Daily Archaeological Monitoring Form

Archaeologist(s): VAL KIRSTINE	**Native American Monitor(s):** GEORGE LARSON
Date: 5/6/20	**Weather:** CLEAR, WARM, BREEZY
Location: 1400 RAMADA DRIVE	**Start/Stop time:** 0700 HRS - 1530 HRS

Excavation Dimensions (estimate):
SEE BELOW

Contractors present:
REC SOLAR, LTEC, D. CRYE, PADRE

Scope of Work (include type of equipment):
GRADING, COMPACTION OF ROADS AND LAYING OF IMPORTED BASE MATERIAL (D.CRYE) USING 2 GRADERS, 1 D-6 W/RIPPER ATTACHMENT, 1 VIBRATING ROLLER, 2 WATER SPRAYER TRUCKS, AND MULTIPLE HAUL TRUCKS. (CONT'D. IN NOTES BELOW)

Environmental Setting (Plants, Nearest water, etc):
SEE PREV. LOGS

Soil Description (Munsell, Stratigraphy, etc.):
SEE PREV. LOGS

Disturbances noted/Redeposited Soils:
DISTURBANCES AND INTRODUCED SOILS SAME AS PREV. NOTED

Cultural Materials Observed (Description, Context, use reverse for more information):
NO PREHISTORIC MATERIALS OBSERVED
1 FRAGMENT (BODY) CLEAR GLASS LIQUOR BOTTLE EMBOSSED "PINT", POSSIBLY HISTORIC

Actions Taken (Stop Work? Redirect? Who did you contact?):
NONE REQUIRED

PHOTO LOG	Camera: PERSONAL (iPHONE XR)
Photo numbers:	**Subject/Direction:**
Photo numbers:	**Subject/Direction:**
Photo numbers:	**Subject/Direction:**
Photo numbers:	**Subject/Direction:**

Archaeologist Signature:	**Date:** 5/6/20
Native American Signature:	**Date:**

General Notes:
ADDITIONAL WORK INCLUDED BACKHOE EXCAVATION OF FORMERLY BACKFILLED CONDUIT ON MAIN ROAD (W. SIDE OF ARRAY), BY REC SOLAR AND LTEC. TRENCH ABT. 10' x 4' x 3' DEEP. OTHER, UNMONITORED WORK INCLUDED RUNNING WIRE THROUGH CONDUIT (REC) AND BLADING OF NEWLY ADDED ROAD BASE (D. CRYE)

APPENDIX D

Native American Communication

ATTACHMENT 5

Applied EARTHWORKS Inc.
811 El Capitan Way, Suite 100
San Luis Obispo, CA 93401-8943
O: (805) 594-1590 | F: (805) 594-1577
www.appliedearthworks.com

October 11, 2022

Native American Heritage Commission
1550 Harbor Blvd, Suite 100
West Sacramento, CA 95691

Re: Cultural Resource Study for the Firestone Phase 2 Ground Mount Solar Photovoltaic System Project in Paso Robles, San Luis Obispo County, California

To Whom it May Concern:

Applied EarthWorks, Inc. is conducting a cultural resource study of 13.75 acres for the Firestone Phase 2 Ground Mount Solar Photovoltaic (PV) System (Project) at 1400 Ramada Drive in Paso Robles, San Luis Obispo County, California. Duke Energy Sustainable Solutions, on behalf of Firestone Walker Brewing Company (FWBC) plans the installation of a solar PV system and associated electrical equipment. The Project area is within the Paso De Robles Land Grant as depicted on the attached copy of the Templeton, CA 7.5-minute quadrangle map.

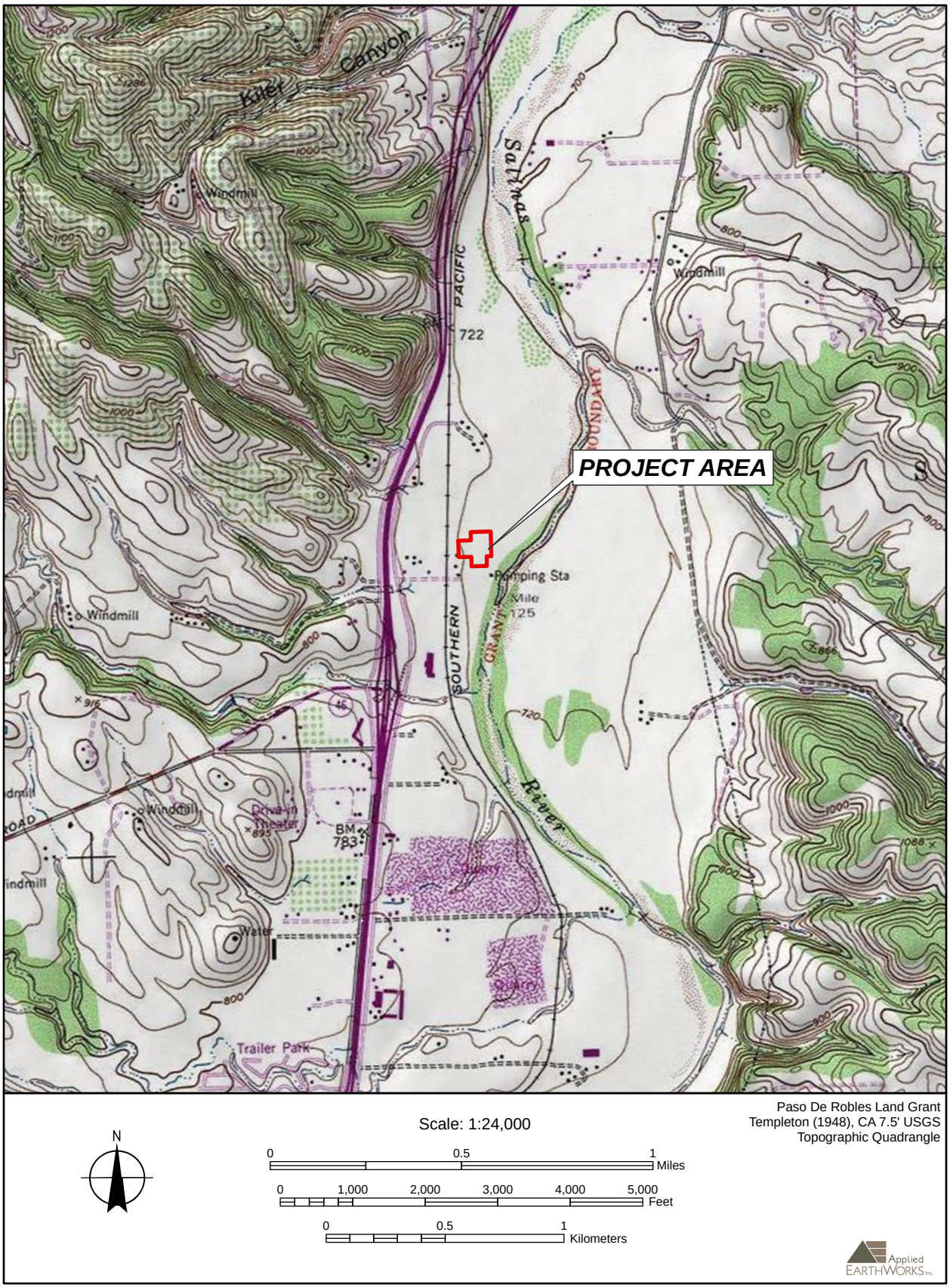
This letter is being submitted to formally request your agency to conduct a search of its *Sacred Lands Inventory File*. Your information will aid us in determining if any other cultural properties are present within the general vicinity of the proposed Project, thereby assisting us in our environmental analysis. In addition, we are requesting the names, addresses, and phone numbers of officially recognized tribal representatives in the Project area.

Please email the results to sschinsing@appliedearthworks.com and call me at (831) 917-9735 if you have any questions or require additional information. Thank you for your time and consideration in this matter.

Sincerely,

Simone Schinsing, M.A. RPA 28577763
Senior Archaeologist/Project Manager
Applied EarthWorks, Inc.

Enclosures: project map



Project location map for the *Firestone Project - AE4449*.

STATE OF CALIFORNIA **Gavin Newsom, *Governor***

NATIVE AMERICAN HERITAGE COMMISSION

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

November 10, 2022

Simone Schinsing
Applied EarthWorks, Inc.

Via Email to: sschinsing@appliedearthworks.com

Re: Firestone Phase 2 Ground Mount Solar Photovoltaic (PV) System Project, San Luis Obispo

To Whom It May Concern:

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were negative. However, the absence of specific site information in the SLF does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Attached is a list of Native American tribes who may also have knowledge of cultural resources in the project area. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated; if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call or email to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from tribes, please notify me. With your assistance, we can assure that our lists contain current information.

If you have any questions or need additional information, please contact me at my email address: Cody.Campagne@nahc.ca.gov.

Sincerely,

Cody Campagne

Cody Campagne
Cultural Resources Analyst

Attachment

Native American Heritage Commission
Native American Contact List
San Luis Obispo County
11/10/2022

Barbareno/Ventureno Band of Mission Indians
Dayna Barrios, Chairperson
Phone: (805) 890 - 6855 — Chumash
barrios_dayna@yahoo.com

Barbareno/ Ventureno Band of Mission Indians
Annette Ayala, CRM Committee Chair
188 S. Santa Rosa Street — Chumash
Ventura, CA, 93001
Phone: (805) 515 - 9844
annetteayala78@yahoo.com

Chumash Council of Bakersfield
Julio Quair, Chairperson
729 Texas Street — Chumash
Bakersfield, CA, 93307
Phone: (661) 322 - 0121
chumashtribe@sbcglobal.net

Northern Chumash Tribal Council
Violet Walker, Chairperson
P.O. Box 6533 — Chumash
Los Osos, CA, 93412
Phone: (760) 549 - 3532
violetsagewalker@gmail.com

Salinan Tribe of Monterey, San Luis Obispo Counties
Patti Dunton, Tribal Administrator
7070 Morro Road, Suite A — Salinan
Atascadero, CA, 93422
Phone: (805) 464 - 2650
info@salinantribe.com

San Luis Obispo County Chumash Council
1030 Ritchie Road — Chumash
Grover Beach, CA, 93433

Santa Ynez Band of Chumash Indians
Kenneth Kahn, Chairperson
P.O. Box 517 — Chumash
Santa Ynez, CA, 93460
Phone: (805) 688 - 7997
Fax: (805) 686-9578
kkahn@santaynezchumash-nsn.gov

Tule River Indian Tribe
Joey Garfield, Tribal Archaeologist
P. O. Box 589 — Yokut
Porterville, CA, 93258
Phone: (559) 783 - 8892
Fax: (559) 783-8932
joey.garfield@tulerivertribe-nsn.gov

Tule River Indian Tribe
Kerri Vera, Environmental Department
P. O. Box 589 — Yokut
Porterville, CA, 93258
Phone: (559) 783 - 8892
Fax: (559) 783-8932
kerri.vera@tulerivertribe-nsn.gov

Tule River Indian Tribe
Neil Peyron, Chairperson
P.O. Box 589 — Yokut
Porterville, CA, 93258
Phone: (559) 781 - 4271
Fax: (559) 781-4610
neil.peyron@tulerivertribe-nsn.gov

Xolon-Salinan Tribe
Karen White, Chairperson
P. O. Box 7045 — Salinan
Spreckels, CA, 93962
Phone: (831) 238 - 1488
xolon.salinan.heritage@gmail.com

Xolon-Salinan Tribe
Donna Haro, Tribal Headwoman
P. O. Box 7045 — Salinan
Spreckels, CA, 93962
Phone: (925) 470 - 5019
dhxolonaakletse@gmail.com

This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resource Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources assessment for the proposed Firestone Phase 2 Ground Mount Solar Photovoltaic (PV) System Project, San Luis Obispo County.

Native American Heritage Commission
Native American Contact List
San Luis Obispo County
11/10/2022

yak tityu tityu yak tiłhini – Northern Chumash Tribe
Mona Tucker, Chairperson
660 Camino Del Rey
Arroyo Grande, CA, 93420
Phone: (805) 748 - 2121
olivas.mona@gmail.com

Chumash

This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resource Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources assessment for the proposed Firestone Phase 2 Ground Mount Solar Photovoltaic (PV) System Project, San Luis Obispo County.

Applied EARTHWORKS Inc.

Native American Outreach

Organization	Name	Position	Date sent Letter	Date E-mailed	Summary of Contact
Barbareno/ Ventureno Band of Mission Indians	Danya Barrios	Chairperson	N/A	11/23/22	11/18/22: NO MAILING ADDRESS 11/23/22 Emailed 12/20/22: Called - No response. Left a voicemail.
Barbareno/ Ventureno Band of Mission Indians	Annette Ayala	CRM Committee Chair	11/18/22	11/23/22	11/18: Letter Sent 11/23: Emailed 12/12: Response received. "I'd like to defer to the local tribe."
Barbareno/ Ventureno Band of Mission Indians	Brenda Guzman		11/18/22	11/23/22	11/18/22: Letter Sent 11/23/22: Emailed 12/20/22: Called - No response. Left a voicemail.
Chumash Council of Bakersfield	Julio Quair	Chairperson	11/18/22	11/23/22	11/18/22: Letter Sent 11/23/22: Emailed 12/20/22: Called - PHONE IS DISCONNECTED.
Northern Chumash Tribal Council	Violet Walker	Chairperson	11/18/22	11/23/22	11/18/22: Letter Sent 11/23/22: Emailed 12/20/22: Called. Violet Walker requested the email be resent with maps. 12/20/22: Email resent. 1/12/23: Received email of interest from Ernest Houston of NCTC on behalf of Violet Walker.
Salinan Tribe of Monterey, San Luis Obispo Counties	Patti Dutton	Tribal Administrator	11/18/22	11/23/22	11/18/22: Letter Sent 11/23/22: Emailed 12/1/22: Patti Dunton responded with interest in the project. 12/2/22: Called Patti Dunton and Robert Piatti. The Salinan Tribe has expressed interest in the area and in monitoring the testing effort. 12/2/22: Emailed Ms. Dunton with additional information. 12/5/22: Monitoring Contract sent to Ms. Dunton.
San Luis Obispo County Chumash Council	-	-	11/18/22	N/A	11/18/22: Letter Sent 11/23/22: NO EMAIL 12/20/22: Called (805) 481-2461 - PHONE IS DISCONNECTED. 12/20/22: Called (805) 474-4729 - No response. Left a voicemail.

Applied EARTHWORKS Inc.

Native American Outreach

Santa Ynez Band of Chumash Indians	Kenneth Kahn	Chairperson	11/18/22	11/23/22	11/18/22: Letter Sent 11/23/22: Emailed 12/1/22: Received a response with deference to Wendy Teeter (cc/'d on email). 12/20/22: Called (805) 688-7997. Spoke to Administration Representative and was transferred to CRM Department. Left a voicemail for extension 7509. 12/20/22: Emailed Ms. Teeter.
Tule River Indian Tribe	Joey Garfield	Tribal Archaeologist	11/18/22	11/23/22	11/18/22: Letter Sent 11/23/22: Emailed 11/23/22: Email Failed to Deliver. 12/20/22: Called (559) 783-8892. Kerri Vera requested the email be resent with maps. Discussed the other representatives on phone. 12/20/22: Email resent.
Tule River Indian Tribe	Kerri Vera	Environmental Department	11/18/22	11/23/22	11/18/22: Letter Sent 11/23/22: Emailed 12/20/22: Called (559) 783-8892. Kerri Vera requested the email be resent with maps. Discussed the other representatives on phone. 12/20/22: Email resent. 1/11/23: Received an email from Kerri Veri indicating no knowledge was known of the area at this time, but that they would be interested if cultural resources were identified during the process.
Tule River Indian Tribe	Neil Peyron	Chairperson	11/18/22	11/23/22	11/18/22: Letter Sent 11/23/22: Emailed 12/20/22: Called (559) 783-8892. Kerri Vera requested the email be resent with maps. Discussed the other representatives on phone. 12/20/22: Email resent.
yak tityu tityu yak tiłhini – Northern Chumash Tribe	Mona Tucker	Chairperson	11/18/22	11/23/22	11/18/22: Letter Sent 11/23/22: Emailed 12/20/22: Called. Mona Tucker requested that Lisa Dignan and Lorie Laguna receive the information. 12/20/22: Emailed Lisa Dignan and Lorie Laguna.

Applied EARTHWORKS Inc.

Native American Outreach

Xolon-Salinan Tribe	Karen White	Chairperson	11/18/22	11/23/22	11/18: Letter Sent 11/23: Emailed 11/26: Ms. White Contacted AE by email - requested monitoring in the area due to remains previously identified in the area (with Xolon as MLD) 12/1/22: Called Ms. White and discussed the project further. Ms. White provided information on the cultural sensitivity in the area and indicated an interest in monitoring the construction work when it begins. between 12/7 and 12/15 and 12/16 Ms. Cook emailed excavation updates to Ms. White. 12/20/22: Ms. White called Ms. Cook and requested information on construction monitoring. Ms. Cook informed Ms. White that construction start date is TBD.
Xolon-Salinan Tribe	Donna Haro,	Tribal Headwoman	11/18/22	11/23/22	11/18: Letter Sent 11/23: Emailed In communication with Karen White of the Xolon Salinan

ATTACHMENT 5

APPENDIX E

CA Department of Parks and Recreation Forms

*Archaeological site locations are exempt from the California Public Records Act, as specified in Government Code 6254.10, and from the Freedom of Information Act (Exemption 3), under the legal authority of both the NHPA (PL 89-665, as amended, Section 304[a]) and the Archaeological Resources Protection Act (PL 96-95, Section 9[a]).

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

Primary # 40-001896
HRI #/Trinomial CA-SLO-1896

☒ Continuation ☒ Update

This Continuation Sheet provides supplemental information to the existing site record. It does not replace the previous records generated for this site.

***P3a. Description:** In November 2022, Applied EarthWorks, Inc. (Æ) conducted a pedestrian survey of a 68-meter-long by 40-meter-wide section of CA-SLO-1896 and identified cultural material east of the original site boundary. Survey findings include two handstones, a tested cobble, a core, a hammerstone, and a ground stone fragment. In December 2022, Æ excavated six shovel test pits in the central and eastern portion of the previously recorded site boundary. Of the six shovel test pits within the original site boundaries, three (STPs 3, 4, 5) were positive for cultural material with shell fragments, debitage, bone, charcoal, modern debris, metal, and glass. Æ excavated an additional 14 shovel test pits east of the original site boundaries, 7 (STPs 10, 12, 13, 14, 18, 19, 20) were positive for cultural material including debitage, faunal bone, shell, glass, ceramics, and charcoal. Based on these findings, the site boundary was extended approximately 106 meters to the east. The site is now 204 meters north to south by 197 meters east to west.

***P5a. Photograph or Drawing:**

P5b. Description of Photo: Site overview, facing southeast.

***P7. Owner and Address:**
Firestone Brewery,
1400 Ramada Drive,
Paso Robles, CA, 93446

***P8. Recorded By:** L. Cavallaris;
Applied EarthWorks, Inc.,
811 El Capitan Way, Suite 100,
San Luis Obispo, CA, 93401

***P9. Date Recorded:** December 15, 2022

***P10. Survey Type:** ☒ Intensive
☐ Reconnaissance ☐ Other

Describe: Less than 5-meter interval pedestrian survey and subsurface testing.

***P11. Report Citation:**

Cavallaris, Luke, Emma Frances Cook, and Kelli Wathen.
2023 *Cultural Resource Study for the Firestone Phase II Ground Mount Solar Photovoltaic System Project in the City of Paso Robles, California*. Applied EarthWorks, Inc. San Luis Obispo. Prepared for Duke Energy Sustainable Solutions, San Luis Obispo, California.

***Attachments:**

☐ NONE	☒ Location Map	☒ Sketch Map	☒ Continuation Sheet
☐ Building, Structure, and Object Record	☐ Archaeological Record	☐ District Record	☐ Linear Feature Record
	☐ Milling Station Record	☐ Rock Art Record	☒ Artifact Record
☐ Photograph Record	☐ Other (list):		

State of California — The Resources Agency **Primary #** 40-001896
DEPARTMENT OF PARKS AND RECREATION **HRI #/Trinomial** CA-SLO-1896
CONTINUATION SHEET

☒ Continuation ☒ Update

***A1.** **Dimensions: a. Length** 204 N–S **x** **b. Width** 197 meters E–W

Method of Measurement: ☐ Paced ☐ Taped ☐ Visual estimate ☒ Other: Arrow Gold GIS.

Method of Determination (check any that apply): ☒ Artifacts ☐ Features ☐ Soil ☐ Vegetation ☐ Topography ☐ Cut bank ☐ Animal burrow ☒ Excavation ☐ Property boundary ☐ Other (explain):

Reliability of Determination: ☒ High ☐ Medium ☐ Low Explain: Subsurface testing; and pedestrian survey.

Limitations (check any that apply): ☐ Restricted access ☐ Paved/built over ☐ Site limits incompletely defined ☐ Disturbances ☐ Vegetation ☐ Other (explain):

A2. **Depth:** 1.2 Meters ☐ None ☐ Unknown Method of determination: Excavation with hand tools in 20-centimeter levels. All shovel test pits were 50 centimeters in diameter and to at least two sterile (no cultural material present) levels. After at least two sterile levels, a 10-centimeter diameter auger was used to excavate to 200 centimeters deep.

***A3.** **Human Remains:** ☐ Present ☐ Absent ☐ Possible ☒ Unknown (explain): No human remains observed during testing effort, however, human remains have been encountered during monitoring projects within 0.25 miles of CA-SLO-1896.

***A4.** **Features:** None observed.

***A5.** **Cultural Constituents (not associated with features):** Survey and testing revealed a low-density deposit of shell, lithic, and ground stone. Surface artifacts include (A1) a tested Monterey chert cobble; (A2) a fragment of a metavolcanic handstone; (A3) a Monterey chert core; (A4) a complete sandstone handstone; (A5) a granite ground stone fragment; and (A6) a complete granite hammerstone. During testing, shell was the most predominate artifact, with dozens of shell fragments observed including turban snail (*Tegula funebralis),* California mussel (*Mytilus californianus*), abalone *(Haliotis* sp.) and little neck clam (*Leukoma staminea*). Debitage is sparce, consisting mostly of Monterey chert. See Table 1 for a full record of recovered material.

Table 1
Cultural Material from Extended Phase 1 Testing at CA-SLO-1896

Unit	Total Depth (cm)	Max Depth of Cultural Material (cm)	Cultural Material Summary (type[a])	Total Volume (m^3)
STP/STX 1[b]	160	20	1 SHL	0.13
STP/STX 2[b]	170	—	—	0.16
STP/STX 3[b]	200	80	9 SHL, 1 FAU, 1 CHR	0.20
STP/STX 4[b]	160	40	2 SHL, 1 FAU, 1 PLS	0.16
STP/STX 5[b]	180	120	13 SHL, 6 FAU, 4 DEB, 1 FER, 2 GLA, 2 PLS, 2 FAB, 7 NAI, 1 CHR	0.20
STP/STX 6[b]	180	—	—	0.13
STP/STX 7	70	60	2 FAU, 1 DEB, 4 GLA, 2 CER	0.12
STP/STX 8	140	40	1 SHL	0.09
STP/STX 9	200	60	6 FAU, 1 DEB, 1 CER	0.20
STP/STX 10	150	—	—	0.12
STP/STX 11	160	40	1 SHL	0.16
STP/STX 12	180	—	—	0.09
STP/STX 13	140	—	—	0.08
STP/STX 14	140	—	—	0.08
STP/STX 15	120	40	1 FAU, 1 DEB	0.16
STP/STX 16	180	40	1 FAU, 1 DEB	0.16
STP/STX 17	180	20	1 FAU, 1 GLA	0.13

Table 1
Cultural Material from Extended Phase 1 Testing at CA-SLO-1896

Unit	Total Depth (cm)	Max Depth of Cultural Material (cm)	Cultural Material Summary (type[a])	Total Volume (m^3)
STP/STX 18	140	—	—	0.08
STP/STX 19	180	—	—	0.09
STP/STX 20	150	—	—	0.09
Total				**2.63**

a- CHR = charcoal, CER = ceramic, DEB = debitage; FAB = other fabric; FAU = faunal bone; FER = ferrous metal; GLA = glass; PLS = plastic; NAI = nail; SHL = shell.
b- Within original CA-SLO-1896 site boundaries.

***A6.** **Were Specimens Collected?** ☒ No ☐ Yes (If yes, attached Artifact Record or catalog.) All specimens were reburied on site.

***A7.** **Site Condition:** ☐ Good ☐ Fair ☒ Poor ☐ Disturbances: Extensive plowing and agricultural activities; some modern refuse and dumping (within current eastern portion of the site).

***A12.** **Age:** ☒ Prehistoric ☐ Protohistoric ☐ 1542–1769 ☐ 1769–1848 ☐ 1848–1880 ☐ 1880–1914 ☐ 1914–1945 ☐ Post 1945 ☐ Undetermined Describe position in regional prehistoric chronology or factual historic dates if known:

A14. **Remarks:** Subsurface testing revealed sparse, primarily shallow, and extensively disturbed cultural materials with modern debris present. Æ assumes the overall site is eligible for listing in the CRHR, however, archaeological deposits within the current Project area appear to lack density, diversity, and integrity, and it is Æ's opinion that significant or intact deposits are not present within the Project area. However, due to the sensitivity of the surrounding area, there is a possibility of encountering pockets of intact subsurface cultural deposits as well as human remains. Monitoring is recommended during any future ground disturbance.

***A17.** **Form Prepared By:** Luke Cavallaris and Emma Frances Cook **Date:** 1/15/2023
Affiliation and Address: Applied EarthWorks, Inc., 811 El Capitan Way, Suite 100, San Luis Obispo, CA 93401

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

LOCATION MAP

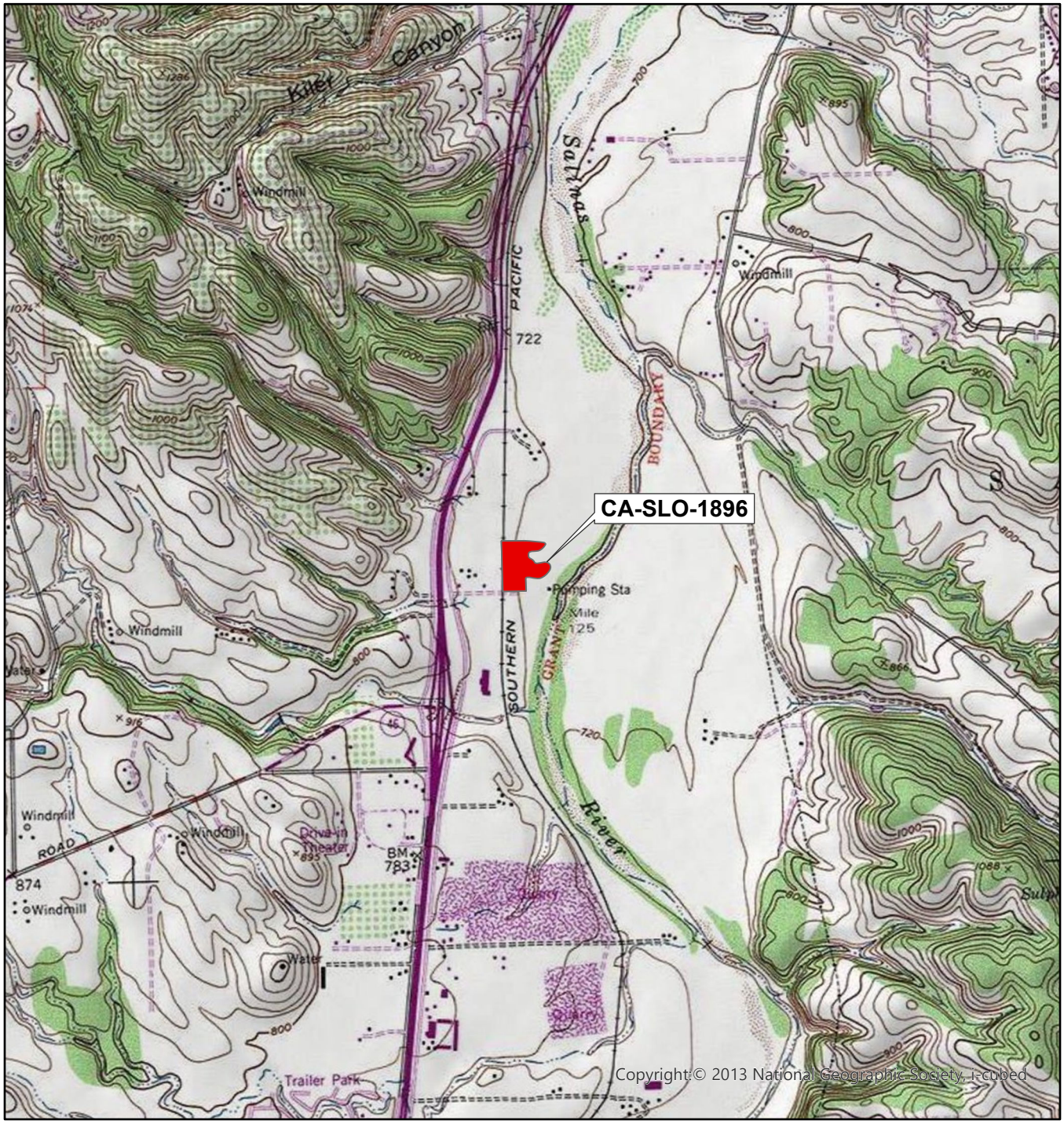
Primary # 40-001896
HRI#
Trinomial CA-SLO-1896

Resource Name or #:

Scale: 1:24,000

Map Name: Templeton (1979), CA, USGS 7.5' quadrangle(s)

Date: 2022



Scale: 1:24,000

N

0 0.5 1 Miles

0 1,000 2,000 3,000 4,000 5,000 Feet

0 0.5 1 Kilometers

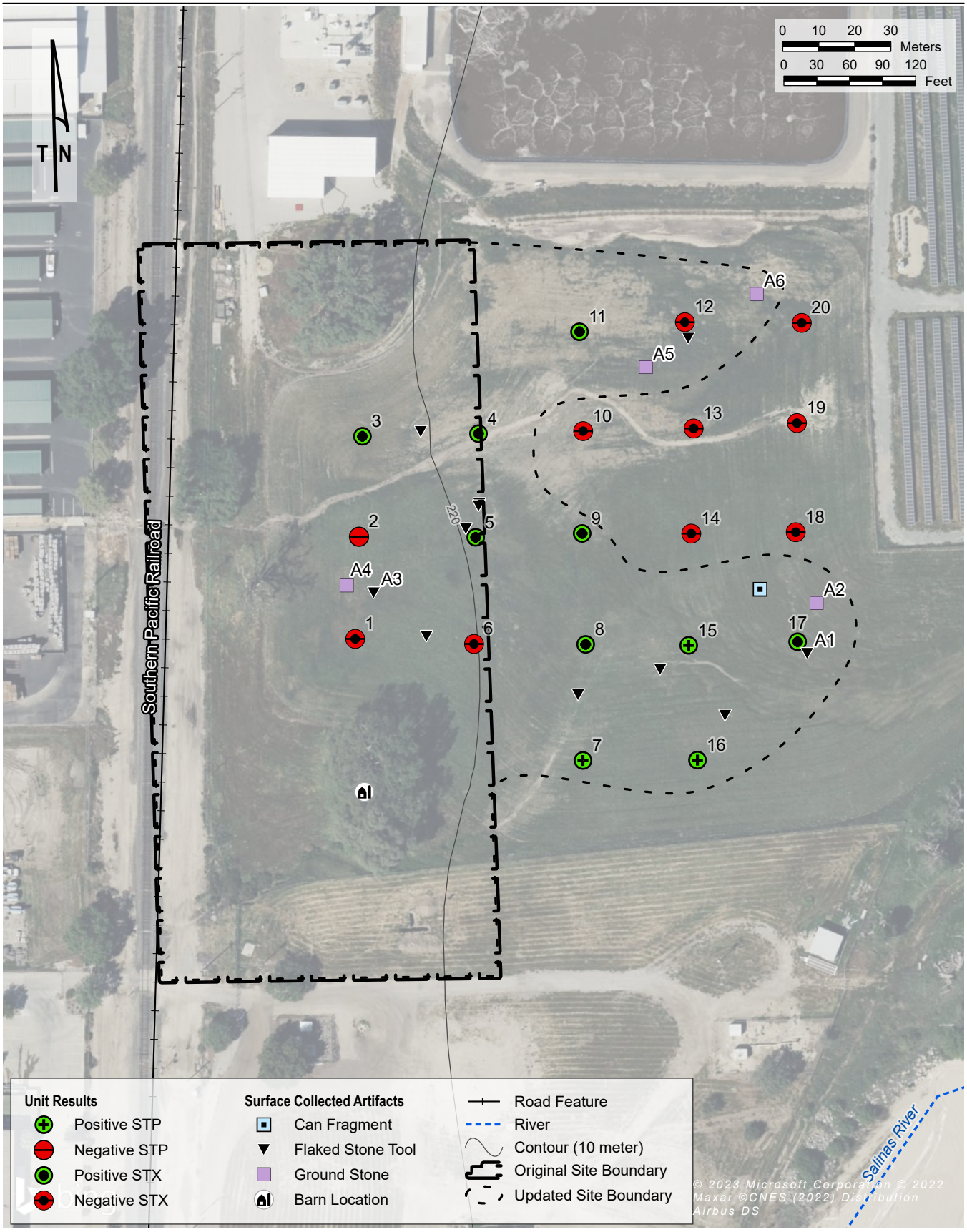
*Required information

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

Primary # 40-001896
HRI#
Trinomial CA-SLO-1896

Page 5 **of** 5 ***Resource Name or #:**

***Drawn by:** K. Wathen ***Scale:** 1 inch equals 125 feet ***Date of map:** January 2023



***Required information**