KINGS COUNTY PLANNING COMMISSION

Regular Meeting **Government Center**
7:00 P.M. **Hanford, California**

In compliance with the Americans with Disabilities Act, if you need special assistance to participate in this meeting, please contact the Community Development Agency at (559) 852-2680 by 4:00 p.m. on the Thursday prior to this meeting. Agenda backup information and any public records provided to the Commission after the posting of the agenda for this meeting will be available for public review at the Kings County Community Development Agency, Building No. 6, Kings County Government Center, 1400 W. Lacey Blvd., Hanford, California.

AGENDA
January 6, 2014

This meeting will be held in the Board of Supervisors Chambers, Administration Building No. 1, Kings County Government Center, 1400 W. Lacey Boulevard, Hanford, California. Pursuant to California Government Code Section 65009, subdivision (b), if you challenge the (nature of the proposed action) in court, you may be limited to raising only those issues you or someone else raised at the public hearing, or in written correspondence delivered to the (public entity conducting the hearing) at, or prior to, the public hearing.

I. CALL TO ORDER - Kings County Planning Commission Meeting

1. **REQUEST THAT CELL PHONES BE TURNED OFF**
2. **PLEDGE OF ALLEGIANCE**
2. **SUMMARY OF THE AGENDA** - Staff
3. **UNSCHEDULED APPEARANCES**
   Any person may address the Commission on any subject matter within the jurisdiction or responsibility of the Commission at the beginning of the meeting; or may elect to address the Commission on any agenda item at the time the item is called by the Chair, but before the matter is acted upon by the Commission. Unscheduled comments will be limited to five minutes.
4. **APPROVAL OF MINUTES - Meeting of December 2, 2013.**

II. OLD BUSINESS: None

III. NEW BUSINESS

1. **CONDITIONAL USE PERMIT NO. 13-05 (ImMODO, CA 1)** – A proposal to establish a 3 Megawatt (MW) photovoltaic solar energy generating facility located at 11375 9 ¾ Avenue, Hanford, Assessor's Parcel Numbers 016-160-024 & 069.

   A. Staff Report
   B. Public Hearing
   C. Decision: Roll Call Vote

2. **ADDENDUM NO. 2 TO CONDITIONAL USE PERMIT NO. 11-06 (RE Kansas, LLC)** – The purpose of the Addendum is to: 1) amend the findings, mitigation measures, and conditions of the original Conditional Use Permit relating to Farmland Security Zone Contract compatibility and consistency with Kings County Board of Supervisors Resolution 13-058, and 2) clarify the description of the project substation and gen-tie location. The applicant proposes to establish a 20 Megawatt solar photovoltaic energy facility located on the northeast corner of Jersey Avenue and 21st Avenue, Lemoore, CA. The proposed project is located on Assessor's Parcel Number's 024-100-006 and 024-100-015.

   A. Staff Report
   B. Public Hearing
   C. Decision: Roll Call Vote

3. **ADDENDUM TO CONDITIONAL USE PERMIT NUMBERS 11-09 (RE Mustang, LLC), 12-01 (RE Orion, LLC), AND 12-02 (RE Kent South, LLC)** – The purpose of the Addendum is to: 1) amend the findings, mitigation measures, and conditions of the original Conditional Use Permits relating to Farmland Security Zone Contract compatibility and consistency with Kings County Board of Supervisors Resolution 13-058, and 2) to clarify the description and environmental analysis of the PG&E switching stations. CUP 11-09 proposes to establish a 160 Megawatt solar photovoltaic energy facility located at 15866 25th Avenue, Lemoore, CA on Assessor's Parcel Numbers 024-260-004, 010, 011, and 016; 024-270-001, 004, 006, 007, 008, 010, 015, 016, 018, 022, 023, 024, and 025, CUP 12-01 proposes to establish a 20 Megawatt solar photovoltaic energy facility located at 16480 25th Avenue, Lemoore, CA located on Assessor's Parcel Number's 024-260-004, 010, and 018, and CUP 12-01 proposes to establish a 20 Megawatt solar photovoltaic energy facility located at 17264 25th Avenue, Lemoore, CA located on Assessor's Parcel Number's 024-260-018 and 026-010-041.

   A. Staff Report
   B. Public Hearing
   C. Decision: Roll Call Vote

IV. MISCELLANEOUS

1. **FUTURE MEETINGS** - The next regular meeting of the Planning Commission is scheduled for Monday, February 3, 2014.
2. **CORRESPONDENCE**
3. **STAFF COMMENTS**
4. **COMMISSION COMMENTS**

V. ADJOURNMENT

NOTICE OF RIGHT TO APPEAL: For projects where the Planning Commission's action is final, actions are subject to appeal by the applicant or any other directly affected person or party and no development proposed by the application may be authorized until the final date of the appeal period. An appeal may be filed with the Community Development Agency at 1400 W. Lacey Blvd., Building #6, Hanford, CA, on forms available at the Community Development Agency. A filing fee of $320.00 must accompany the appeal form. The appeal must be filed within 8 days of the Planning Commission's decision date, not including the date of the decision. If no appeal is received, the Planning Commission's action is final. There is no right of appeal for projects for which the Planning Commission's action is advisory to the Board of Supervisors.

KINGS COUNTY PLANNING COMMISSION
MINUTES

District 1 Commissioner – Riley Jones | District 2 Commissioner – Bob Bajwa
District 3 Commissioner – R.G. Trapnell* | District 4 Commissioner – Jim Gregory**
District 5 Commissioner - Louise Silacci
*Chairman **Vice-Chairman

December 2, 2013

CALL TO ORDER: The meeting of the Kings County Planning Commission was called to order by Chairman Trapnell, on December 2, 2013, at 7:00 p.m. in the Board of Supervisors Chambers, Administration Building, Kings County Government Center, Hanford, California. The Pledge of Allegiance was recited.

COMMISSIONERS PRESENT: Riley Jones, Bob Bajwa, Louise Silacci, Jim Gregory, R.G. Trapnell

COMMISSIONERS ABSENT:

STAFF PRESENT: Greg Gatzka - Director, Erik Kaeding – County Counsel, Chuck Kinney – Deputy Director, Terri Yarbrough – Executive Secretary, Dan Kassik - Planner

VISITORS PRESENT: Anthony Loza, David Tower, Dennis Lane, Jay Salyer, Nola Lack

SUMMARY OF THE AGENDA: Mr. Gatzka summarized the agenda for the Commission.

UNSCHEDULED APPEARANCES: No one spoke during this portion of the meeting.

APPROVAL OF MINUTES: A motion was made and seconded (Jones/Silacci) to approve the minutes of the September 9, 2013 meeting. Motion carried unanimously with Gregory abstaining.

OLD BUSINESS - None

NEW BUSINESS:

1. **Conditional Use Permit No. 13-03 (TRI CAL INC.)** – Mr. Kassik provided an overview of a proposal to establish a pesticide application company within existing buildings located at 7533 and 7537 Hanford Armona Road, Hanford, Assessor Parcel Number 016-130-079, 080, 081, and 082. Mr. Kassik reported that the only changes to the site would be relocation of the water basin for fire suppression and the addition of a bulk storage tank. Mr. Kassik stated the project was located within a Light Manufacturing zone district (ML) and is consistent with the Kings County 2035 General Plan and Zoning Ordinance.

   Chairman Trapnell opened the public hearing and asked if there was anyone wishing to speak in favor of the project. Dennis Lane, representing Tri Cal, Inc., spoke in favor of the project. Commissioner Jones asked him if there would be any mixing of chemicals. Mr. Lane stated they would only be doing distribution and no mixing. Commissioner Gregory pointed out to Mr. Lane that the airstrip had been moved and was actually further than four miles away as stated in documents submitted. Mr. Jay Salyer, representing Kings County Economic Development Coproration, also spoke in favor of the project. Seeing nobody else wanting to speak in favor of the project, he then asked if there was anyone wanting to speak in opposition to the project. Seeing none, he closed the public hearing.

   A motion was made and seconded (Silacci/Gregory) to adopt Planning Commission Resolution No. 13-08 to approve the proposal to establish a pesticide application company. Motion carried unanimously.

2. **Conditional Use Permit No. 13-07 (TOWER)** – Mr. Kassik provided an overview of a proposal to establish a tattoo parlor within an existing building located at 10889 14th Avenue, Armona, CA, Assessor Parcel Number 017-070-077. Mr. Kassik reported that there would be no change to the environment and the project would be categorically exempt from environmental review. Mr. Kassik also stated that the project was consistent with the Kings County 2035 General Plan and Zoning Ordinance.

   Chairman Trapnell opened the public hearing and asked if there was anyone wishing to speak in favor of the project. Mr. Tower, the applicant, spoke in favor of the project. Ms. Nola Lack, owner of the property also spoke in favor of the project. Mr. Tower also addressed Commissioner Jones' question regarding how many tattoo parlors were located in Armona. Seeing nobody else wanting to speak in favor of the project, he then asked if there was anyone wanting to speak in opposition to the project. Seeing none, he closed the public hearing.

   A motion was made and seconded (Silacci/Jones) to adopt Planning Commission Resolution No. 13-09 to approve the proposal to establish a tattoo parlor. Motion carried unanimously.

MISCELLANEOUS

1. **FUTURE MEETINGS**: The next regular meeting of the Planning Commission is scheduled for Monday, January 6, 2014.
2. **CORRESPONDENCE:** Commissioner Jones provided a notice of a meeting on fracking held by Assemblyman Jim Patterson.
3. **STAFF COMMENTS:** Erik Kaeding provided a presentation concerning Ex Parte Communication for the Commission. Commissioner's asked for a study session on fracking. Mr. Gatzka said he would bring a study session before the Commission. Mr. Gatzka also reviewed the 2014 calendar.
4. **COMMISSION COMMENTS:** None

ADJOURNMENT – The meeting was adjourned at 8:09 p.m.

Respectfully Submitted,

KINGS COUNTY PLANNING COMMISSION

Gregory R. Gatzka, Commission Secretary

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KINGS COUNTY PLANNING COMMISSION
STAFF REPORT

Conditional Use Permit No. 13-05
Zoning Ordinance No. 269.69

APPLICANT: ImMODO California 1 LLC

PROPERTY OWNERS: Central Valley Cooperative

LOCATION: 11375 9 ¾ Avenue, Hanford

GENERAL PLAN DESIGNATION: Light Manufacturing (ML)

ZONE DISTRICT CLASSIFICATION: Light Industrial (IL)

CONDITIONAL USE PROPOSED: A proposal to establish a 3 Megawatt (MW) photovoltaic solar energy generating facility.

CURRENT USE OF SITE: Vacant – Accessory open storage for a cotton gin.

LAND USE SURROUNDING SITE: Rural residential to the north, single-family residential to the south, vacant industrial land to west and agricultural farm fields to the east.

ENVIRONMENTAL REVIEW:

The Initial Study/Mitigated Negative Declaration (IS/MND) for the ImMODO CA 1 project was circulated for public review from November 15, 2013, through December 17, 2013. Six sets of comments were received before the end of the public review period from the Building Division of the Kings County Community Development Agency, the Kings County Fire Department, the Kings County Environmental Health Department, the Kings County Public Works Department, and the San Joaquin Valley Air Pollution Control District, Native American Heritage Commission, and the California Department of Fish and Wildlife. The letters from the Building Division of the Kings County Community Development Agency, the Kings County Fire Department, the Kings County Environmental Health Department, the Kings County Public Works Department, and the San Joaquin Valley Air Pollution Control District contained comments, standards, and requirements from those agencies, which have been listed in both the staff report and the resolution for this project. The comments from the Native American Heritage Commission and the California Department of Fish and Wildlife are attached to this staff report as Attachment No. 1.

Staff's responses to the comments received from the California Department of Fish and Wildlife and the Native American Heritage Commission during the public review period for the IS/MND, from November 15, 2013, through December 17, 2013, are attached to this staff report as Attachment No. 2. While these comments resulted in minor changes to the IS/MND, none of the comments identified a new, unavoidable significant effect, nor did they result in a finding that the proposed mitigation measures in the IS/MND will not reduce potential effects to less than significant. Instead, the minor changes serve merely to clarify, amplify and make insignificant modifications to the IS/MND. Accordingly, pursuant to CEQA Guidelines § 15073.5, recirculation of the IS/MND is not required. Proposed modifications to the IS/MND are attached to the staff report as Attachment No. 3. The modifications are shown underlined and highlighted in yellow.

A review of this Project in compliance with the *California Environmental Quality Act (CEQA)* indicates that there may be significant adverse impacts to the environment; however, those impacts can be mitigated to an insignificant level by implementing the Mitigation Monitoring and Reporting Program, which is located in Section 4 of the IS/MND and the updated measures, based on the minor changes to the IS/MND, are provided as Attachment No. 4 of this staff report. There is no evidence in the record that indicates that the Project has potential for adverse effects on wildlife, resources or habitat for wildlife.

DISCUSSION:

Project Overview

The proposed project involves the construction and operation of a three megawatt alternating current solar photovoltaic power generating facility. The project would also include an interconnection to an existing Southern California Edison 12 kilovolt distribution line immediately south of the site, as well as the installation of low-impact lighting and fencing for safety purposes.

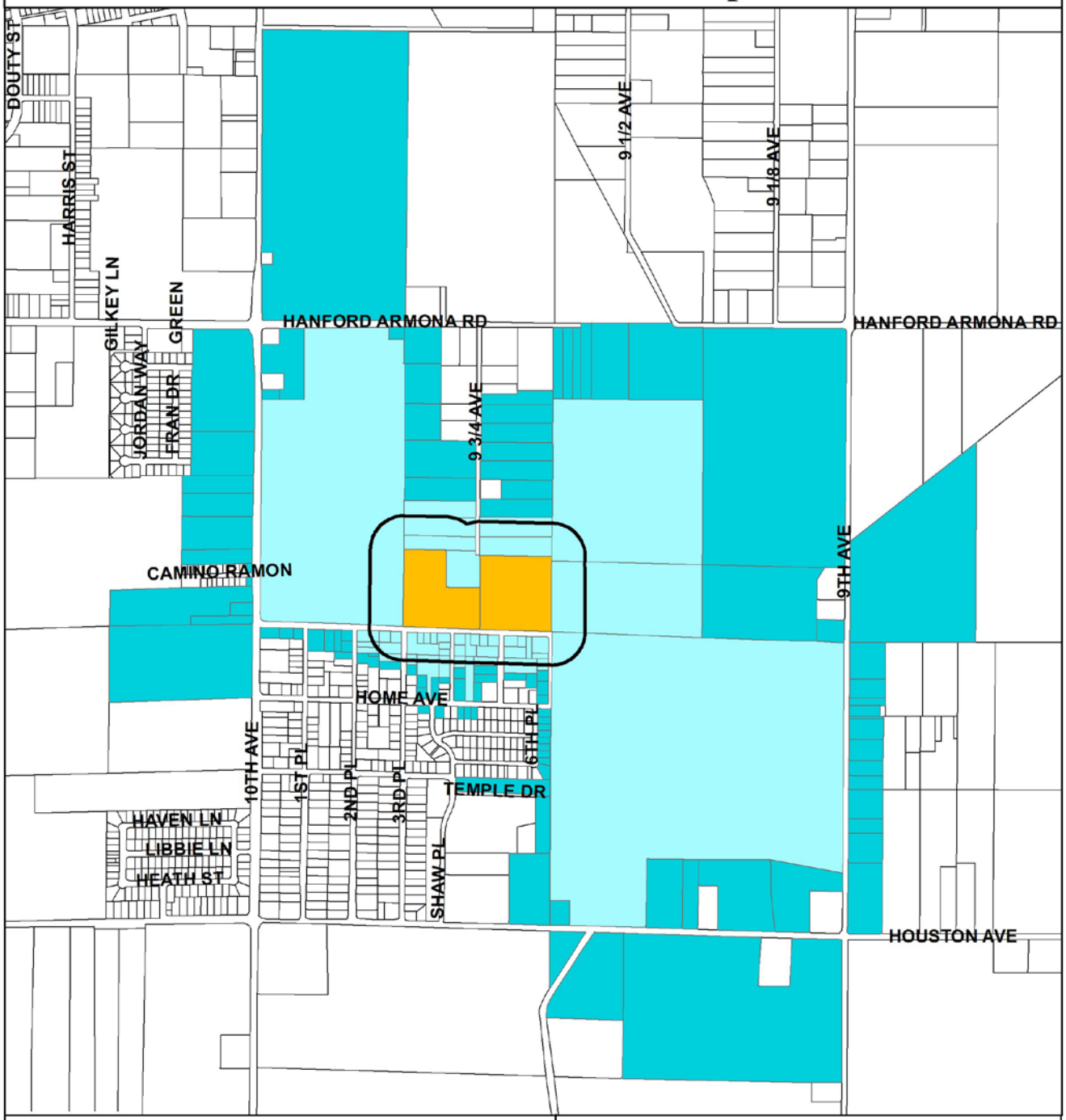
The project site is located west of State Route (SR) 43 and south of SR 198 and more specifically, immediately north of Orchard Drive and east of 10th Avenue. (see Site Map).

The proposed project is just south of the City of Hanford and immediately north of the census-designated place of Home Garden. Immediately to the north of the site is vacant land and a rural residential subdivision. Several of these residences are within a 300 feet radius of the site. There are 38 residences within 300 feet of the site which do not have direct views into the proposed project site as their view is blocked by eucalyptus trees that boarder the residences to the north, south and west. The Hanford Municipal Airport and the Kings County Fairgrounds are also located north of the Project site. Farmland is immediately east of the project site while vacant land is immediately to the west.

CUP 13-05
Site Map

Map prepared by
Dan Kassik
Kings County Community Development Agency
November 13, 2013
1400 W. Lacey Blvd., Hanford, CA 93230

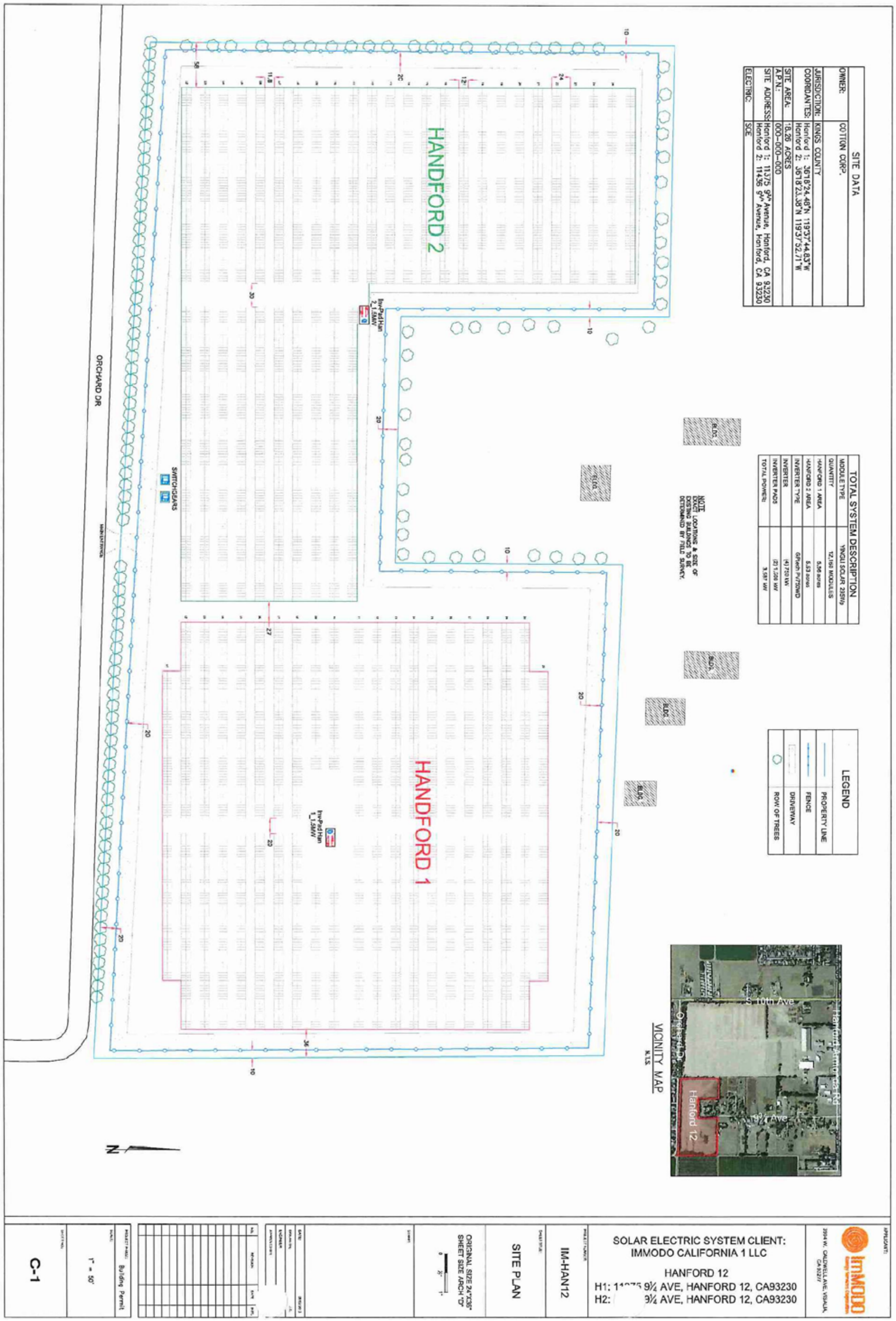
CUP 13-05
Site and Notification Map



Map prepared by
Dan Kassik
Kings County Community Development Agency
November 13, 2013
1400 W. Lacey Blvd., Hanford, CA 93230

Legend

- Subject Parcels
- Adjacent Parcels
- Parcels within 300'


SITE DATA
OWNER: COTTON CORP.
JURISDICTION: KINGS COUNTY
SITE AREA: 18.26 ACRES
ELECTRIC: SCE
HANDFORD 2
HANDFORD 1
ORCHARD DR
SWITCHGEARS
TOTAL SYSTEM DESCRIPTION
LEGEND
PROPERTY LINE
FENCE
DRIVEWAY
ROW OF TREES
VICINITY MAP
N.T.S.
Hanford 12
SOLAR ELECTRIC SYSTEM CLIENT:
IMMODO CALIFORNIA 1 LLC
HANFORD 12
IM-HAN12
SITE PLAN
ORIGINAL SIZE 24"X36"
SHEET SIZE ARCH "D"
Building Permit
1" = 50'
C-1

Project Objectives

The 18-acre Project would provide Kings County as well as the State of California with a renewable energy source that would assist the State of California in complying with the Renewables Portfolio Standard (RPS) under Senate Bill 1078, which requires that 33 percent of all electricity sold in the state to be generated from renewable energy sources by the year 2020. The applicant is proposing to construct the project to meet the following objectives:

- Provide up to a 3-MW project generating electricity through the optimization of renewable solar energy sources
- Stimulate the local economy through job creation
- Support California's efforts to reduce greenhouse gas (GHG) emissions consistent with the timeline established by California Assembly Bill 32, the Global Warming Solutions Act of 2006
- Support California's aggressive RPS goal of 33 percent renewable energy generation by 2020
- Meet obligations under a proposed Power Purchase Agreement with a utility to assist it in meeting its RPS mandate
- Develop an economically feasible and commercially financeable project
- Provide solar-generated electricity to the California Independent System Operator grid
- Provide property tax revenues to Kings County

The 3 MW Solar Generation Facility (Project) will include the installation of approximately 16,700 to 23,750 solar modules, depending on the final module selection and their corresponding size ranging generally from 240-305 watts per module. This Project will generate approximately 6,049 MWh of electricity in the first year which is enough energy to power 100% of the electricity usage of 660 households in Kings County. Also included in the Project is the interconnection of the Solar Generation Facility to the existing Southern California Electric (SCE) 12 kV distribution line that runs north along Orchard Drive and ultimately connects to the Hanford Substation.

Project Facilities

The Applicant will install PV modules upon a fixed-mount racking system which will generally consist of arrays of 12-18 modules installed in 2-4 rows of modules approximately 12 feet tall and 20-30 feet long. Each array will have generally 3-5 ram-post supports which will be pile-driven into the ground to depths of 6-10 feet. The arrays will be generally tilted at approximately 10-50 degrees facing south. The maximum height of the arrays is not more than 13 feet and the ground clearance at the lowest point of the array is about 2 feet. The arrays are aligned in generally even length rows with the centerline of each row approximately 18-28 feet apart. The clear space between rows of modules will be 10-16 feet providing enough space for service and cleaning vehicles. (see Site Plan on Page 5)

Access/Circulation

Preferred access to the site will be from Orchard Drive from a common access onto Orchard Drive using the existing road easement for an extension to 9 ¾ Avenue which is being proposed to be vacated. The Applicant is concurrently requesting that Kings County vacate approximately 680' of a 50' road easement for an extension to Avenue 9 ¾. An alternative access would be for each site to have a separate access along Orchard Drive.

Interior service driveways will be 18- 20 feet wide and consist of crushed aggregate. The 10-14 feet space between the rows will be compacted and will provide service access to vehicles for maintenance, repair and cleaning. Though four designated gravel parking spaces will be provided on-site, there will be no employees stationed at the site on a permanent basis.

Project Transmission Network and Interconnections

The proposed project will interconnect to a SCE 12 kv distribution on the north side of Orchard Drive which connects to the Hanford Substation. On-site the feeds from the inverter/transformer pads will run to a switchgear and production meter at the point-of-ownership change (POC) at the perimeter fence line. Everything past the meter is owned by SCE and is considered to be on the "utility-side" of the meter.

Based upon SCE's System Impact Studies conducted for interconnection of this project, the SCE interconnection scope of work will consist of and not be limited to: primary riser poles, approximately 2 x 250' 1/0JCN UG 12kV Lines; and automation controls including remote controlled switches, metering, associated wiring and new 3-Way pad-mounted gas switches. SCE also will conduct 12kV Distribution Upgrades which may include the reprograming of a transducer.

Telecommunications

The proposed Project will include the installation of real-time telemetry to provide Watt and VAR flow from the generation facility to the SCE distribution system. Telemetry will be installed in the existing ROW and include a Remote Terminal Unit and a T1 line from the phone company to the proposed Project location. This T1 line may be provide by a direct line or by microwave. Telemetry may be accomplished through a dedicated or a centralized RTU. Communications lines will also be used for the Applicant's on-site security and monitoring/control system. The facility will be designed and operated with the Applicant's proprietary Supervisory Control and Data Acquisition (SCADA) system to allow remote monitoring of facility operation and/or remote control of critical components. Within the site, the cabling required for the monitoring system will typically be installed in buried conduit, leading to a centrally located (or series of appropriately located) SCADA system electronic cabinets in one of the control rooms, to be designated as the primary control room. External telecommunications connections to the SCADA system cabinets may be through either wireless or hard wired connections to locally available commercial service providers.

Meteorological Data Collection System

A weather station will also be configured to collect meteorological data such as solar resources, temperature, humidity, precipitation, pressure, and wind direction. The meteorological instruments are mounted 10 feet high on a pole at one of the control rooms well inside the property perimeter.

Fencing and Lighting

For public safety and security, 6 to 8 feet tall fencing with security wire will be installed around the perimeter of the proposed project consistent with County requirements under the building permit.

A motion-activated security lighting system may be installed with the lights hooded and directionally aligned to interior to minimize off-site light and glare. The motion sensor will be calibrated to moving objects greater than 50 pounds. If the lights are motion-triggered, a signal would go to the Applicant's off-

site security service and/or to central off-site control room to remotely control multiple projects. An off-site security services and/or monitoring technician/operator will control on-site, web-based video cameras to identify the nature of the intrusion alert and respond accordingly.

Operation, Security and Maintenance

The solar facility will be remotely operated and require no on-site daily operating staff. Occasional service employees may be on-site for scheduled, preventive maintenance as well as unscheduled service.

Combustible vegetation on and around the proposed Project boundary will be managed by the Applicant, and the proposed Project will include fire breaks around the proposed Project boundary in accordance with County and/or state standards. The Applicant will also coordinate with the County and state fire officials as necessary to provide photovoltaic training to fire responders and to construction, operational, and maintenance staff. The intent of this training will be to familiarize both responders and workers of the codes, regulations, associated hazards, and mitigation processes related to solar electricity. This training will include techniques for fire suppression of PV systems.

Primary water use by the proposed project will be for solar module washing. The water will be provided by a third party from an off-site location and delivered by water trucks. Module washing is expected to require approximately 13,000 gallons, or 0.05 acre-feet per year will be used for the twice a year cleaning.

Construction

Each construction phase is expected to have the following stages and general durations:

- Site preparation including grading fencing, underground trenching. One month duration.
- Installation of PV structures, panels and control room equipment. Three month duration.
- System testing, commissioning, interconnection and clean up. One month duration.

Construction equipment will include the use of graders, compacters, trenchers, backhoes, forklifts, pile drivers, skid steers, front end loaders, and materials hauling trucks.

General hours during the construction phase will be conducted during day light hours, Monday through Friday, excluding holidays. The proposed Project construction will also include the installation of the PV panels and control rooms. Post construction activities will include site system testing, commissioning and site clean-up.

Storm Water Protection

Because construction of the project would disturb a surface area greater than 1-acre, the applicant would be required to obtain coverage under the state Construction General Permit for Storm Water Discharges Associated With Construction and Land Disturbance Activities (2012-0006-DWQ). To enroll under this permit, the project sponsor would prepare a Storm Water Pollution Prevention Plan (SWPPP) that details project information; monitoring and reporting procedures; and Best Management Practices (BMPs), such as dewatering procedures, stormwater runoff quality control measures, and concrete waste management,

as necessary. The SWPPP would be based on final engineering design and would include all project components.

Material Staging

Construction of the project would require temporary staging and storage areas for materials and equipment during the construction process. The materials staging and storage would take place within the project site in areas that would not be used for panels. Additional staging and vehicle parking would be located at the southern terminus for the initial phases of the project.

Other Permits and Approvals that may be Required

The project sponsor has submitted an application for a CUP to the Kings County Community Development Agency for the project. The following required permits and approvals have been identified for the project. Additional permits and approvals may also be required.

- **Kings County, Construction Permit (Building Permit).** The county authorizes construction activities under the master Construction Permit. This permit encompasses grading, building, electrical, mechanical, landscaping and other activities. The county's review for ordinance standards is undertaken as part of this review.
- **Kings County, Encroachment Permit.** Kings County requires an Encroachment Permit for utility trenching within a public right-of-way. As part of the application for the Encroachment Permit, the applicant must submit construction drawings and a traffic control plan for any work that would take place in public streets.
- **Central Valley Regional Water Quality Control Board, National Pollutant Discharge Permit.** Construction of the project and alternatives would disturb a surface area greater than 1 acre, so the project sponsor would be required to obtain a National Pollutant Discharge Elimination System Permit from the Central Valley Regional Water Quality Control Board. As part of this permit, a SWPPP would be developed and implemented.
- **San Joaquin Valley Air Pollution Control District (SJVAPCD), Indirect Source Review.** An Indirect Source Review (District Rule 9510) will be filed with the SJVAPCD to determine potential mitigation, if any, for oxides of nitrogen (NOx) and particulate matter less than or equal to 10 microns in diameter (PM10) emissions.
- **SJVAPCD, Dust Control Plan.** A dust control plan is required to be submitted and approved by the SJVAPCD prior to initiation of ground disturbances activities associated with construction.

PROJECT REVIEW:

August 7, 2013	Application submitted
August 8, 2013	Application certified complete
November 15, 2013	Begin 30-day review period for environmental review
December 17, 2013	30-day environmental review period ends
January 6, 2014	Planning Commission hearing

STAFF ANALYSIS: In order to approve this permit, the Commission is first required to find that:

- The use conforms to the policies of the *General Plan*.
- The use should not be detrimental to public health and safety, nor materially injurious to properties in the vicinity.
- The use will comply with applicable provisions of the *Ordinance*.

With regard to these required findings, staff comments that:

1. The proposed Project, as recommended for approval, is consistent with the objectives and the policies of the *2035 Kings County General Plan*, specifically:

   A. Page LU-4, Section I.D of the "Land Use Element" of the *2035 Kings County General Plan* states that "Urban Fringe" represents the residential, commercial and industrial land uses immediately adjacent to the Cities of Corcoran, Hanford and Lemoore, and includes the County unincorporated islands surrounded by the City of Hanford. The project site is located within the Light Industrial (LI) land use designation and the Light Industrial (ML) Zone District, which is within the "Urban Fringe" adjacent to the City of Hanford. Therefore, the proposed project is considered an urban type. Section 303.G of the *Kings County Improvement Standards* contains the requirements for parking lots and states that "Heavy Use" shall be considered to be in effect if the development is an Urban type.

   B. Page LU-16, Section III.A.5. of the "Land Use Element" of the *2035 Kings County General Plan* states industrial land use designations are intended to achieve the following purposes: to reserve appropriately located areas for various types of industrial plants and related activities; to protect areas appropriate for industrial use from intrusion by residences and other inharmonious uses; to protect residential and commercial properties and to protect nuisance-free non-hazardous industrial uses from noise, odor, dust, dirt, smoke, vibration, heat, glare, fire, explosion, noxious fumes, radiation and other hazardous and objectionable influences incidental to certain industrial uses; to provide opportunities for certain types of industrial plants to concentrate in mutually beneficial relationships to each other; to provide adequate space to meet the needs of modern industrial development, including off-street parking and truck loading areas, and to provide industrial employment opportunities for residents of the County.

   C. Page LU-16, Section III.A.5. of the "Land Use Element" of the *2035 Kings County General Plan* states the Light Industrial designation is intended for less intensive industrial and manufacturing operations that may be located within closer proximity to residential and commercial areas. Light Industrial is designated primarily within Community Districts and Urban Fringe areas.

   D. Page LU-38, LU Policy B7.1.3 of the "Land Use Element" of the *2035 Kings County General Plan* states that power generation facilities for commercial markets shall be

allowed and regulated through the Conditional Use Permit approval process, and include thermal, wind, and solar photovoltaic electrical generating facilities that produce power.

E. Page RC-50, Section G, Objective G1.2 of the "Resource Conservation Element" states that the County will promote the development of sustainable and renewable alternative energy sources, including wind, solar, hydroelectric and biomass energy.

F. Page RC-51, Section G, Policy G1.2.7 of the "Resource Conservation Element" states the County will require commercial solar and wind energy systems to be reviewed as a conditional use permit pursuant to the procedures of the Kings County Zoning Ordinance.

2. The use should not be detrimental to public health and safety, nor materially injurious to properties in the vicinity. A Mitigated Negative Declaration has been recommended for this Project. The proposed Project may have significant adverse impacts on the environment; however, those impacts can be mitigated to an insignificant level by implementing the Mitigation Monitoring and Reporting Plan attached to the Planning Commission Resolution for this project as Exhibit "A." On the bases of the whole record (including the initial study and all comments received), there is no substantial evidence that the project will have a significant effect on the environment. The Mitigated Negative Declaration reflects the Planning Commission's independent judgment and analysis.

3. The use complies with the applicable provisions of the ordinance, specifically: The proposed Project, as recommended for approval, is consistent with the *Kings County Zoning Ordinance*.

A. Article 13, Section 1305.D.7 of the Commercial Service (CS) District lists solar photovoltaic electrical generating facilities that commercially produce power for sale, which comply with all local, regional, State, and Federal regulations as a conditional use subject to Kings County Planning Commission approval.

B. Article 14, Section 1402.D.2 of the Light Industrial (ML) District lists all uses in Section 1305.D of the CS Commercial Service District as conditional uses subject to Kings County Planning Commission approval.

C. The eight criteria outlined within Article 19, Section 1908.H of the Kings County Zoning Ordinance do not apply to this project since the proposed photovoltaic electrical generating facility is being sited on industrial zoned land and not agricultural zoned land.

STATEMENT OF FINDINGS OF CONSISTENCY:

1. LAND CONSERVATION (WILLIAMSON) ACT FINDINGS:

A. The project site is not located within an established agricultural preserve.

2. FLOOD PLAIN FINDINGS:

A. The site is within Other Areas Zone X as shown on the National Flood Insurance Program, Flood Insurance Rate Map (FIRM), Map Number 06031C0195C, dated June 16, 2009. There are no

development restrictions associated with Other Areas Zone X since these are areas determined to be outside the 0.2 percent annual chance floodplain.

3. ENTERPRISE ZONE FINDINGS:

A. The project site is located within the Kings County Enterprise Zone.

4. AIRPORT COMPATIBILITY ZONE FINDINGS:

A. The project site is located within Airport Compatibility Zone B2 (Extended Approach/Departure Zone) and the proposed project is consistent with the *Kings County Airport Compatibility Plan*.

a. Page LU-7, Section I.E.4 of the Land Use Element states that all land use decisions for projects located within the Airport Operational Area of Influence, as identified by Figure HS-22 and HS-23, will be subject to the criteria of Table HS 4 of the Health & Safety Element.

(1) According to Table HS4 of the *Kings County Airport Land Use Compatibility Plan*, Airport Compatibility Zone B2 is an Extended Approach/Departure Zone. Impact Elements include the following: 1) Moderate risk – aircraft commonly below 800 feet above ground level (AGL) and 2) Significant Noise. Normally acceptable uses include the following: 1) Uses in Zone A, 2) Agricultural uses except ones attracting birds, 3) Single-family residences on existing lots, 4) Warehousing, truck terminals, and low intensity manufacturing, 5) Single-story offices, and 6) Low-intensity retail (e.g. auto, furniture sales). Development conditions include the following: 1) Locate structures maximum distance from extended runway centerline, 2) Minimum Noise Level Reduction of 25 dBA in residential and office buildings, and 3) Dedication of avigation easement.

b. Page HS-34, Section VI.D of the "Health and Safety Element" of the *2035 Kings County General Plan* states that "Airport planning boundaries define areas near airports within which safety or noise restrictions are imposed. Only two airports within the County are identified for public use, the Hanford Municipal Airport and the Corcoran Airport." The Kings County Airport Land Use Compatibility Plan establishes procedures and criteria by which the County of Kings and the Cities of Corcoran and Hanford can address compatibility issues when making land use decisions within the operational areas of public use airports. The criteria is intended to ensure that local general plans, specific plans, and zoning ordinances take into account airport and surrounding land use compatibility.

(1) See Finding III.G.1.a.(1) above.

c. Page HS-51, HS Objective 3.2 of the "Health and Safety Element" of the *2035 Kings County General Plan* states that the County shall "Increase public safety by designating an "Airport Area of Influence" around public and implementing policies of the *Kings County Airport Land Use Compatibility Plan*."

(1) See Finding III.G.1.a.(1) above.

d. Page HS-51, Policy C3.2.2 of the "Health and Safety Element" of the *2035 Kings County General Plan* states that the County shall "Regulate properties adjacent to the Hanford

Municipal Airport and Corcoran Airport according to the Primary Compatibility Criteria of the Health and Safety Element, and Kings County Airport Land Use Compatibility Plan maps."

(1) See Finding III.G.1.a.(1) above.

5. SEPTIC SYSTEM FINDINGS:

A. The Project site is not located within an area requiring engineering for any new septic systems that are installed.

RECOMMENDATIONS:

It is recommended that the Commission approve Conditional Use Permit No. 13-05 as described above and adopt Resolution No. 14-01. Approval of this Resolution will:

1. Find that the proposed project may have significant adverse impacts on the environment; however, those impacts can be mitigated to an insignificant level by implementing the Mitigation Monitoring and Reporting Plan attached to the Planning Commission Resolution as Exhibit "A," and approves a ***Mitigated Negative Declaration***.

2. Find that the project is consistent with the *Kings County General Plan* and the *Kings County Zoning Ordinance*.

3. Approve the project with specified conditions of approval.

This permit shall become effective upon the expiration of eight (8) days following the date on which the permit was granted unless the Board of Supervisors shall act to review the decision of the Planning Commission.

For the information of the applicant, compliance with other adopted rules and regulations of any local or state regulatory agency shall be required by the Planning Commission. This includes but is not limited to the following:

KINGS COUNTY COMMUNITY DEVELOPMENT AGENCY – PLANNING DIVISION: Contact Dan Kassik of the Kings County Community Development Agency at (559) 852-2655 regarding the following requirements:

1. All proposals of the applicant shall be conditions of approval if not mentioned herein.

2. The site plan for the project is approved in concept. However, it is understood that during the actual design of the project that either of the following minor alterations to the site plan may be necessary: 1) structural alterations; and/or 2) alterations to the location of structures. Any minor alterations shall comply with the following requirements:

   A. The site shall be developed in substantial compliance with the conceptually approved site plan. Development of the site shall be considered substantially consistent with the approved conceptual site plan if any minor structural alteration is within ten (10) percent of the square footage shown on the conceptually approved site plan or up to a 2,500 square

foot increase in structural size, whichever is less, and the minor structural alteration complies with coverage standards.

B. A minor alteration of the location of a structure shall be considered substantially consistent with the approved conceptual site plan if the new location of the structure complies with all setback requirements for the zone district that the project site is located in.

C. Any minor alteration that would make it necessary to modify or change any condition of approval placed on the project would require resubmittal of the application to amend the approval of the Conditional Use Permit.

D. No expansion of use, regardless of size, which would increase the projected scale of operations beyond the scope and nature described in this Conditional Use Permit application, will be allowed. Any expansion that is a substantial change from the conceptually approved site plan, will require either an amendment to the approved Conditional Use Permit or a new zoning permit.

3. The development shall comply with all regulations of *Zoning Ordinance No. 269*, with particular reference to the Light Industrial (ML) Zone District standards contained in Article 14 and the standards contained in Article 19.

4. Pursuant to Section 1605.B.1.a.1 of the Kings County Zoning Ordinance, No solid fence, wall, hedge or shrub exceeding three (3) feet in height shall be erected, planted or maintained within a required Traffic Safety Visibility Area. Traffic Safety Visibility Area is defined as a space set aside on a lot in which all visual obstructions, such as structures, fences and plantings that inhibit visibility and thus have the potential to cause a hazard to traffic and pedestrian safety are prohibited, as follows:

a. **Area adjacent to a driveway on any lot** - the Traffic Safety Visibility Area is that area on the street side of a diagonal line connecting points, measured from the intersection of the driveway (located on the property or adjoining parcel) and the street right of way line, twenty (20) feet along the side of the driveway and twenty (20) feet along the street side of a lot.

b. **On a corner lot** - the Traffic Safety Visibility Area also includes that area of a corner lot on the street side of a diagonal line connecting points, measured from the property corner where the streets intersect, set back one (1) foot for every one (1) mile per hour of the posted speed limit along each street.

5. Pursuant to Section 1606.C.12 of the Kings County Zoning Ordinance unless otherwise stated, the following signs are allowed as permitted use and do not require a sign permit, site plan review or conditional use permit. All signs shall be located outside of the public right-of-way and shall not be located within a traffic safety visibility area if over three (3) feet in height. Unless a different setback is specified for a particular zone district, the minimum setback distance for all signs over three (3) feet in height shall be ten (10) feet from property lines.

a.

District	Maximum permitted aggregate structural area per use	Maximum permitted aggregate copy area per use
ML	12.5 feet by 25 feet	240 square feet on each side

b. Directional signs for off-street parking and loading facilities.

c. One real estate sign pertaining to the sale, lease, rental or display of a structure or land, not exceeding one hundred (100) square feet in area per Section 1606.B.2.a.
d. Any sign, when attached to a structure, which is directly across a street from property situated in any RR, R or RM District or which may be established on any lot facing directly across a street from property situated in any RR, R or RM District may not exceed sixty (60) square feet in aggregate area and shall not be directly illuminated, glaring or flashing.
e. No sign other than a directional sign shall project more than two (2) feet into a required rear yard or required interior side yard, or more than fifteen (15) feet into a required front yard.
f. No red, green, or amber lights or illuminated signs may be placed in such position that they could reasonably be expected to interfere with or be confused with any official traffic-control device or traffic signal or official directional guide signs.
g. Signs may have copy on both sides of the structure, provided that the copy area on each side does not exceed the maximum area specified above in Sections 1404.A.1. and 1404.B.1. for the zone district that the site is located in.
h. Non-illuminated temporary construction signs in accordance with Section 1606.B.2.c.
i. Political and Campaign Signs in accordance with Section 1606.B.3.
j. Murals
k. Temporary Advertising/Promotional Signs per Section 1606.B.2.b.
l. Temporary Special Event Signs per Section 1606.B.2.a.
m. Window signs shall cover no more than 15 percent of a single window's surface area.
n. All signs shall comply with the yard requirements of the districts in which they are located.

6. Exterior lighting shall be hooded so as to be directed only on site.

7. Off-street parking space shall be provided in accordance with Article 15, Section 1502.A.5 of the *Kings County Zoning Ordinance* and shall be maintained in accordance with *Kings County Improvement Standards* and the approved site plan.

8. All drive approaches, parking areas, aisles, and driveways (if not already existing) shall be provided prior to either: 1) initial occupancy of the site or 2) the final inspection (Note: The applicant is responsible for contacting the Building Division to request a final inspection of the structure prior to startup of the operation).

9. Pursuant to Section 303.G of the *Kings County Improvement Standards* all parking areas, aisles, and driveways shall be surfaced and maintained so as to provide a durable, dustless surface. Section 303.G. and Drawing 3036 of the *Kings County Improvement Standards* requires two (2) inches of Type "B" Asphalt Concrete over six (6) inches of R-70 Native @ 95% compaction under the "Heavy Use (Alternative Design)".

10. All open and unlandscaped portions of the lot shall be maintained in good condition, free from weeds, dust, trash and debris.

6. The minimum yard requirements from property line to a structure shall be as follows:

A. The minimum front yard shall be twenty-five (25) feet.

B. There are no rear yard or side yard requirements except as follows:

(1) The minimum year yard abutting a RR, R, or RM District shall be fifteen (15) feet.
(2) On a reversed corner lot adjoining a key lot in a RR, R, or RM District, the minimum side yard adjoining the street shall not be less than one-half (1/2) the required front yard on the key lot.
(3) The minimum side yard abutting a RR, R, or RM District shall be fifteen (15) feet.

11. The minimum distance between a dwelling unit and another structure shall be ten (10) feet. However, greater minimum distances between structures may be required if fire code regulations require greater separation between structures for safety and fire protection. Construction methods using higher fire ratings may be substituted to satisfy all or part of such fire-related separation requirements.

12. Prior to any ground-disturbing activities occurring within the Project area, the applicant shall follow the United States Fish and Wildlife Service's *"Standard Recommendations for Protection of the Endangered San Joaquin Kit Fox Prior to or During Ground Disturbance"* (USFWS 2011) and incorporate into the Project construction plan.

13. The applicant shall comply with all requirements of, and obtain any necessary permits from, the San Joaquin Valley Air Pollution Control District (SJVAPCD).

14. The applicant shall comply with all requirements of, and obtain any necessary permits from, the California Regional Water Quality Control Board (CRWQCB).

15. The applicant shall comply with all adopted rules and regulations of the Kings County Public Works Department, Fire Department, and the Environmental Heath Services Division of the Health Department, and all other local and state regulatory agencies.

16. Pursuant to Section 14-38(d) of the *Kings County Code of Ordinances*, a "Notice of Disclosure and Acknowledgment of Agricultural Land Use Protection and Right to Farm Policies of the County of Kings" shall be signed, notarized, and recorded.

17. Pursuant to Section 66020(d)(1) of the *California Government Code*, the owner is hereby notified that the 90-day approval period in which the applicant may protest the imposition of fees, dedications, reservations, or other exactions, begins on the date that Planning Commission Resolution No. 13-05 is adopted.

18. Sales or use tax may apply to business activities on the site. The applicant may seek written advice regarding the application of tax to your particular business by writing to the nearest State Board of Equalization office. For general information, please call the Board of Equalization at 1-800-400-7115.

19. Additional annual service impact fees affecting the Kings County Fire and Sheriff departments will not be billed to the applicant. Instead, the applicant will be responsible to pay for services rendered by the two departments during times of emergency when services are provided.

20. All mitigation measures in the Initial Study/Mitigated Negative Declaration and the Mitigation

Monitoring and Reporting Plan that pertain to CUP No. 13-05 are adopted as conditions of this approval, and included in the Conditional Use Permit.

21. Within eight (8) days following the date of the decision of the Kings County Planning Commission, the decision may be appealed to the Kings County Board of Supervisors. The appeal shall be filed with the Clerk of the Board of Supervisors.

23. This Conditional Use Permit shall lapse and shall become null and void three (3) years following the date that the Conditional Use Permit became effective, unless prior to the expiration of three (3) years the proposed use has been established. A Conditional Use Permit involving construction shall lapse and shall become null and void three (3) years following the date that the Conditional Use Permit became effective, unless prior to the expiration of three (3) year a building permit is issued by the Building Official and construction is commenced and diligently pursued toward completion on the site that was subject of the Conditional Use Permit application.

24. This Conditional Use Permit may be renewed for additional periods of time, if an application (by letter) for renewal of the Conditional Use Permit is filed with the Planning Commission prior to the permit's expiration date.

OTHER AGENCY'S COMMENTS, STANDARDS, AND REGULATIONS:

The following departments and agencies have provided comments, standards, and regulations concerning the proposed project. The Planning Commission has no authority to modify, amend, or delete any of these comments, standards, and regulations but lists them here as information to the applicant. Appeals for relief of other agency's standards and regulations must be made through that department's or agency's procedures, not through the Zoning Ordinance procedures. However, the applicant shall comply with all adopted rules and regulations of the Kings County Public Works Department, Fire Department, and the Environmental Heath Services Division of the Health Department, and all other local and state regulatory agencies. Failure of the applicant to comply with all adopted standards and regulations of all other local and state regulatory agencies is a violation of this conditional use permit (see Condition No. 14 above) and could result in revocation of this conditional use permit.

KINGS COUNTY COMMUNITY DEVELOPMENT AGENCY - BUILDING DIVISION Contact Darren Verdegaal at the Kings County Community Development Agency - Building Division at (559) 852-2683, regarding the following comments:

1. Building permits must be obtained from the Building Division of the Kings County Community Development Agency for any structures, plumbing, electrical, or mechanical work.

2. Failure to obtain a building permit for any structure, prior to commencing construction, which requires a building permit, will result in the payment of a double fee. Payment of such double fee shall not relieve any person from fully complying with the requirements of Kings County Code of Ordinances, Chapter 5 in the execution of the work or from any other penalties prescribed therein.

3. A minimum of (2) sets of plans and calculations signed by an architect or engineer licensed to practice in the Sate of California shall be required for the proposed work.

4. All special inspection reports shall be provided to the Building Division prior to requesting a final inspection.

5. The applicant is responsible for contacting the Building Division to request a final inspection of the structures prior to occupying the structures and prior to startup of the operation. No building or structure shall be used or occupied until the Building Division has issued a Certificate of Occupancy.

6. All drive approaches and durable dustless surfaces shall be installed prior to the final inspection and maintained as per County Standards.

7. If the facility will have employees on-site for maintenance of the system an accessible restroom shall be provided and shall comply with Section 1115B of the *California Building Code*. This may be accomplished by either construction of a permanent structure or use of a chemical toilet with a regular maintenance schedule.

8. Pursuant to Section 1129B of the *California Building Code* one (1) van accessible parking space, allowing room for individuals in wheelchairs, on braces or crutches to get in and out of an automobile onto a level surface, suitable for wheeling and walking shall be provided. The parking space shall be 9' x 20' with an 8' wide loading and unloading aisle placed on the side opposite the driver's side. The surfacing of the parking space, loading and unloading aisle and the accessible path from the space to the entrance of the building shall be either asphalt concrete or concrete.

9. The development shall comply with all applicable *Americans with Disability's Act* (*ADA*) requirements, especially Section 1127B of the *California Building Code,* which states that site development and grading shall be designed to provide access to all entrances and exterior ground-floor exits, and access to normal paths of travel. The accessible route of travel shall be the most practical direct route between accessible building entrances, accessible site facilities and the accessible entrance to the site, including but not limited to access from the accessible parking space to accessible building entrances.

10. A soils report, prepared by a qualified soils engineer, shall be provided to the Building Division prior to issuance of building permits.

11. The facility shall meet the requirements of the State of California Model Water Efficient Landscape Ordinance. Landscape and irrigation plans shall be provided to the Community Development Agency for review and approval prior to building permit issuance.

12. All construction shall conform to the 2010 California Code of Regulations Title 24 which consist of the California Building Code, California Electrical Code, California Mechanical Code, California Plumbing Code, and California Energy Code, California Fire Code and California Green Building Standards Code.

KINGS COUNTY PUBLIC WORKS DEPARTMENT: Contact Mike Hawkins of the Kings County Public Works Department at (559) 852-2708 for the following comments:

1. That all requirements hereafter conform to the Kings County Improvement Standards.

2. That all other alternatives to Public Works requirements must be approved by the Kings County Public Works Department.

3. Additional right-of-way shall be dedicated and constructed for a turn around area capable of accommodating fire apparatus at the terminus of 9 ¾ Avenue. Surfacing shall match the existing roadway in which it connects. Orchard Drive shall be dedicated to a 40-foot width. Fencing within the right-of-way shall be removed. No building permits or zoning permit shall be issued until right-of-way has been dedicated and if the dedication is not made within 30 days of approval of any zoning permits, then said permit(s) shall be revoked.

4. Right-of-way, access lanes, and easements shall be cleared of all obstructions. The clearing of all right-of-way obstructions shall be at the expense of the owner.

5. An encroachment permits shall be secured prior to any work within the County right-of-way.

6. Asphalt concrete approaches shall be provided.

7. All drainage shall be contained on-site.

8. Trees along Orchard Drive are the responsibility of the property owner. Trees shall be maintained and trimmed as to not interfere with traffic on Orchard Drive.

9. The gate access from Orchard Drive shall be identified to allow for unobstructed traffic flow when trucks access site.

KINGS COUNTY FIRE DEPARTMENT: Contact Bill Lynch of the Kings County Fire Department at (559) 852-2880 for the following comments:

1. Rows of solar panels shall not exceed 300 feet in length.

2. There shall be a minimum of 4 feet of separation between rows to allow access for fire suppression personnel.

3. There shall be access roads of an all-weather surface capable of supporting heavy fire apparatus between the 300 foot sections of solar panels to allow fire apparatus access to the panels so that no portion of any panel is greater than 150 feet from fire suppression access. The access roads shall be maintained and completely surround the solar panels to allow access from any side or end. Access roads shall not be less than 20’ in width and provide vertical clearance of not less than 13’6”.

4. The solar field shall be kept clear of combustible weeds and debris.

5. The solar fields shall be protected to prevent public access.

6. Fire Department requires a Knox box or other approved system to store and secure keys for any fence or buildings within the property.

7. Applicant shall provide training for fire personnel to be able to interrupt electrical power safely for emergency incidents requiring fire suppression or rescue activities.

8. Architects, Engineers and Designers shall provide detailed plans for review of the project and shall meet with the Fire Marshal in a timely manner upon his request for clarification of any issues.

9. Any fire suppression systems or fire flow requirements will be dependent upon project facilities and review of the project specifications.
10. Solar fields shall comply with the California Fire Code.

11. Fire Department reserves the right to add additional comments or requirements depending upon the hazards involved with the project.

KINGS COUNTY HEALTH DEPARTMENT: Contact Lee Johnson of the Kings County Department of Environmental Health Services at (559) 852-2631 regarding the following comments:

1. If hazardous materials at or above threshold reporting quantities (55 gallons of a liquid, 500 pounds of a solid, or 200 cubic feet of a gas) will be kept on site, the facility must file a Hazardous Materials Business Plan online at http://cers.calepa.ca.gov within 30 days of beginning operations. Hazardous materials are broadly defined, and include fuel, lubricants, antifreeze, motor vehicle batteries, welding gases, paints, solvents, glues, agricultural chemicals, etc. Please contact our office if you require assistance with the online registration process.

2. Any quantities of hazardous wastes generated by the facility operation must be managed in accordance with Federal, State, and local laws and regulations. Hazardous wastes cannot be disposed of into the municipal waste stream or onsite sewage disposal system. The owner/operator must contact our office at with any questions regarding proper management and reporting of any hazardous wastes associated with this operation.

3. The fungus that causes valley fever, a serious, potentially long-term respiratory illness, is present in soils in Kings County. Construction activities that disturb soils containing the fungus can put workers and the nearby public at risk. Effective dust control must be maintained on the job site at all times in order to reduce the risk of valley fever to workers and to residents of the neighborhood immediately to the south of the job site. More information regarding the prevention of work related valley fever is available at www.cdph.ca.gov/programs/hesis/Documents/CocciFact.pdf. Contact the San Joaquin Valley Air Pollution Control District for more information on dust control techniques.

4. Given the proximity of the Hanford airport and frequent air traffic over the site, as well as adjacent highway and road traffic, the sites must be designed and constructed so as to minimize light reflectivity that might be hazardous for aircraft or vehicles.

SAN JOAQUIN VALLEY AIR POLLUTION CONTROL DISTRICT Contact Jessica Willis of the SJVAPCD at (559) 230-5818 regarding the following comments:

1. Based on information provided in the MND, project specific criteria pollutant emissions are not expected to exceed District significance thresholds of 10 tons/year NOx, 10 tons/year ROG, and 15 tons/year PM10. Therefore, the District concludes that project specific criteria pollutant emissions would have a less than significant adverse impact on air quality.

2. As indicated in the MND, the project is subject to District Rule 9510 (Indirect Source Review). Any applicant subject to District Rule 9510 is required to submit an Air Impact Assessment (AIA) application to the District no later than applying for final discretionary approval, and to pay any applicable off-site mitigation fees before issuance of the first building permit. The District received AIA Application C-20130039 on February 12, 2013. The District approved the application on March 1, 2013. For more information about District Rule 9510, please visit the District's website at: http://www.valleyair.org/ISR/ISRHome.htm.

3. The proposed project may be subject to District Rules and Regulations, including: Regulation VIII (Fugitive PM10 Prohibitions), Rule 4102 (Nuisance), and Rule 4601 (Architectural Coatings). The above list of rules is neither exhaustive nor exclusive. Certain equipment on the project site may be subject to District permitting requirement (e.g. generators). To identify other District rules or regulations that apply to this project or to obtain information about District permit requirements, the applicant is strongly encouraged to contact the District's Small Business Assistance Office at (559) 230-5888. Current District rules can be found on the District's website at: www.valleyair.org/rules/1ruleslist.htm.

PREPARATION:

Prepared by the Kings County Community Development Agency (Dan Kassik) on December 10, 2013. Copies are available for review at the Kings County Community Development Department, Government Center, Hanford, California, or at the Kings County Clerk's Office, Government Center, Hanford, California.

Attachments to the Staff Report:

1. Comments on the IS/MND
2. Responses to Comments
3. Modifications to the IS/MND
4. Updated MMRP

State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
Central Region
1234 East Shaw Avenue
Fresno, California 93710
(559) 243-4005
www.wildlife.ca.gov

EDMUND G. BROWN, JR., Governor
CHARLTON H. BONHAM, Director

Attachment No. 1

December 12, 2013

Dan Kassik
Kings County Community
Development Agency
1400 West Lacey Boulevard, Building #6
Hanford, California 93230

Subject: Notice of Intent to Adopt a Mitigated Negative Declaration (MND) for the Hanford 12 Project (State Clearinghouse number 2013111049)

Dear Mr. Kassik:

The California Department of Fish and Wildlife (CDFW) has reviewed the MND submitted by Kings County (Lead Agency) for the Hanford 12 Project (Project) located adjacent to the north side of Orchard Drive, immediately south of 9¾ Avenue and east of 10th Avenue in Kings County, California. The Project includes the approval of a conditional use permit to allow the construction and operation of a solar facility that would generate 3-megawatts (MW) of solar energy, on approximately 18 acres of vacant land surrounded by rural residences. Power generation facilities associated with the Project include the installation of photovoltaic (PV) modules, module mounting systems, inverters and transformers, Southern California Edison (SCE) interconnection and distribution upgrades, electrical collection and distribution systems, energy storage systems, data monitoring equipment, access roads and perimeter fencing.

Specifically, the Project has the potential to impact several special status species, including but not limited to, the State Threatened and federally Endangered San Joaquin kit fox (*Vulpes macrotis mutica*, SJKF), the State Threatened Swainson's hawk (*Buteo swainsoni*, SWHA), the State Species of Special Concern burrowing owl (*Athene cunicularia*, BUOW) and hoary bat (*Lasiurus cinereus*, LACI). All the species listed above are known to occur or could potentially occur on the proposed Project site and within the vicinity of the Project area. CDFW has reviewed the MND and our recommendations on measures to avoid, minimize, and mitigate Project-related impacts to special status biological resources should be included as enforceable mitigation measures in a revised MND for this Project. Our comments follow.

Department Jurisdiction

Trustee Agency Authority: CDFW is a Trustee Agency with the responsibility under the California Environmental Quality Act (CEQA) for commenting on projects that could impact plant, fish and wildlife resources. Pursuant to Fish and Game Code Section 1802, CDFW has jurisdiction over the conservation, protection and management of fish, wildlife, native plants and habitat necessary for biologically sustainable populations of those species. As a Trustee Agency for plant, fish and wildlife resources, CDFW is responsible for providing, as available,

biological expertise to review and comment on environmental documents and impacts arising from project activities, as those terms are used under CEQA.

Responsible Agency Authority: CDFW has regulatory authority over projects that could result in "take" of any species listed or is a candidate for listing by the State (State-listed) as threatened or endangered, pursuant to the California Endangered Species Act (CESA). For this or any other project which impacts listed species, an ITP is the mechanism for providing take authorization under CESA. CEQA requires a Mandatory Finding of Significance if a project is likely to substantially impact threatened or endangered species (sections 21001{c}, 21083, Guidelines sections 15380, 15064, 15065). Impacts must be avoided or mitigated to less than significant levels unless the CEQA Lead Agency makes and supports a Statement of Overriding Consideration (SOC). A CEQA Lead Agency's SOC would not preclude the Project proponent's obligation to comply with CESA.

Bird Protection: CDFW has jurisdiction over actions which may result in the disturbance or destruction of active nest sites or the unauthorized take of birds. Sections of the Fish and Game Code that protect birds, their eggs and nests include Section 3503 (regarding unlawful take, possession or needless destruction of the nest or eggs of any bird), 3503.5 (regarding the take, possession or destruction of any birds-of-prey or their nests or eggs), and 3513 (regarding unlawful take of any migratory non-game bird).

Potential Impacts and Recommendations

Swainson's Hawk: The Project is located within 2 miles of a documented SWHA nest (CNDDB 2013). If ground-disturbing activities are to occur at the site during the nesting season (January 1 through September 15), CDFW recommends that a qualified biologist conduct surveys for nesting SWHAs following the survey method developed by the Swainson's Hawk Technical Advisory Committee (SWHA TAC, 2000) prior to commencing Project-related activities. These surveys, the parameters of which were designed to optimize detectability, must be conducted to reasonably assure CDFW that take of this species will not occur as a result of disturbance associated with Project implementation. Additional pre-construction surveys for active nests should be conducted by a qualified biologist no more than 10 days prior to the start of construction and during the appropriate timing to maximize detectability. Should an active nest be found, a minimum no-disturbance buffer of ½ mile should be observed until the nesting season has ended or until a qualified biologist has determined that the birds have fledged and are no longer reliant upon the nest or parental care for survival.

CDFW considers removal of known raptor nest trees, even outside of the nesting season, to be a significant impact under CEQA, and in the case of SWHA could also result in take under CESA since the species exhibits high site fidelity to their nest and nest trees year after year. Impacts to known nest trees should be avoided at all times of year. If avoidance of a known nest tree is not feasible, the acquisition of an ITP, pursuant to Section 2081(b) of the Fish and Game Code, may be warranted and consultation with CDFW should occur well in advance of ground-disturbing activities.

Regardless of nesting status, trees that must be removed should be replaced with an appropriate native tree species planting at a ratio of 3:1. This mitigation is needed to offset potential impacts to the loss of potential nesting habitat. Removal of SWHA nest trees will require replanting on Habitat Management (HM) land that will be protected in perpetuity.

SWHA generally forage within 10 miles of their nest tree. CDFW's Staff Report Regarding Mitigation for Impacts to Swainson's Hawks (CDFG, 1994) recommends the following:

- Projects within 1 mile of an active nest tree should provide a minimum of one acre of HM land for each acre of development authorized.
- Projects within 5 miles of an active nest but greater than 1 mile should provide a minimum of 0.75 acres of HM land for each acre of urban development authorized.
- Projects within 10 miles of an active nest tree but greater than 5 mile from an active nest tree should provide a minimum of 0.5 acres of HM land for each acre of urban development authorized.

Funding of a sufficient long-term endowment for the management of the protected properties should be paid by the Project applicant. In addition to fee title acquisition of grassland habitat, mitigation could occur by the purchase of conservation or suitable agricultural easements. Suitable agricultural easements would include areas limited to production of crops such as alfalfa, dry land and irrigated pasture, and cereal grain crops. Vineyards, orchards, cotton fields, and other dense vegetation do not provide adequate foraging habitat. Additionally, nest trees are an extremely limited resource in the southern San Joaquin Valley; CDFW recommends that lands protected as foraging habitat for SWHA be no more than 10 miles from a SWHA nest in order to be beneficial to the species. Mitigation measures for SWHA should be fully addressed in a revised MND.

San Joaquin Kit Fox: SJKF has been documented within the vicinity of the Project site (CNDDB 2013) and even though the project site is bordered on three sides by chain-link fencing, there is a potential for SJKF to access the Project site by going through and/or digging under unsecured areas in the existing fencing. Therefore, CDFW recommends the Lead Agency require the developer follow the United States Fish and Wildlife Service's (USFWS) *Standard Recommendations for Protection of the Endangered San Joaquin Kit Fox Prior to or During Ground Disturbance* (USFWS 2011) before starting Project-related activities likely to impact SJKF. If Project-related activities are delayed or suspended for more than 30 days, we recommend that the area be resurveyed. If SJKF dens are identified, establishment and implementation of exclusion zones in accordance with the USFWS protocol is warranted. If impacts to SJKF or SJKF dens cannot be avoided, then the acquisition of an ITP prior to construction would be warranted to comply with CESA.

Burrowing Owl: CDFW recommends the Lead Agency require that pre-construction surveys for BUOW be conducted by a qualified biologist no more than 30 days prior to the beginning of ground disturbance and/or construction activities or any project activity likely to impact the

BUOW, as outlined in the *Staff Report on Burrowing Owl Mitigation* (CDFG 2012). The staff report can be found on our website at www.dfg.ca.gov/wildlife/nongame/docs/BUOWStaffReport.pdf. Per the CDFW staff report, if Project activities are delayed or suspended for more than 30 days, we recommend that the area be resurveyed.

Raptors and Migratory Birds: For the protection of raptors and migratory song birds and to assist in avoiding take of avian species as required by Fish and Game Code sections 3503, 3503.5 and 3513, CDFW encourages Project implementation to occur during the non-nesting bird season. However, if ground-disturbing activities must occur during the breeding season (January 1 through September 15), the Project applicant is responsible for ensuring that implementation of the Project does not result in any violation of the Migratory Bird Treaty Act or relevant Fish and Game Codes as referenced above. Prior to work commencing; including staging, clearing, and grubbing, CDFW recommends surveys for active nests be conducted by a qualified wildlife biologist no more than 10 days prior to the start of the of the Project commencing and that the surveys be conducted in a sufficient area around the work site to identify any nests that are present and to determine their status. A sufficient area means any nest within an area that could potentially be affected by the Project. In addition to direct impacts, such as nest destruction, nests might be affected by noise, vibration, odors, and movement of workers or equipment. Identified nests should be continuously surveyed for the first 24 hours prior to any construction-related activities to establish a behavioral baseline. Once work commences, all nests should be continuously monitored to detect any behavioral changes as a result of the Project. If behavioral changes are observed, the work causing that change should cease and CDFW consulted for additional avoidance and minimization measures. If continuous monitoring of identified nests by a qualified wildlife biologist is not feasible, CDFW also recommends a minimum no-disturbance buffer of 250 feet around active nests of non-listed bird species, a 500-foot no-disturbance buffer around the nests of unlisted raptors, and a 2,640-foot no-disturbance buffer around the nests of listed raptors until the breeding season has ended, or until a qualified biologist has determined that the birds have fledged and are no longer reliant upon the nest or parental care for survival. Variance from these no-disturbance buffers may be implemented when there is compelling biological or ecological reason to do so, such as when the Project area would be concealed from a nest site by topography. Any variance from these buffers is advised to be supported by a qualified wildlife biologist, and it is recommended CDFW be notified in advance of implementation of a no-disturbance buffer variance.

Bats: LACI has been documented within 1 mile of the Project site (CNDDB 2013) and may roost in the eucalyptus trees located on the Project site. To minimize potential Project-related impacts to this species, CDFW recommends the Lead Agency require the developer conduct preconstruction surveys to establish areas of occupancy the year prior to the start of construction and that surveys be conducted by a minimum of two CDFW-approved biologists with bat survey experience. We recommend that surveys consist of the following:

- Two spring surveys (April through June) and two winter surveys (November through January)

- Each survey consists of one dusk emergence survey (start one hour before sunset and last for three hours), followed by one pre-dawn re-entry survey (start one hour before sunrise and last for two hours), and one daytime visual inspection of all potential roosting habitat on the Project site
- Conduct each survey within one 24-hour period
- Focus visual inspections on the identification of bat sign (i.e., individuals, guano, urine staining, corpses, feeding remains, scratch marks and bats squeaking and chattering)
- Use bat detectors, bat call analysis and visual observations during all dusk emergence and pre-dawn re-entry surveys

Data Collection for Each Survey:

- Whether bats are, or have been, present on the Project site
- Assemblage of species using the site
- Frequency of site use (including seasonal changes)
- Type of roost (i.e., maternity roost, day roost, night roost, feeding perch, mating roost, satellite roost, transitional roost or winter hibernaculum)
- Location, ambient temperature and the aspect and orientation of the roost
- Spatial and temporal distribution of bat activity
- Flight paths, exit and entrance points
- Intensity of bat usage (i.e., number of bats, time and duration of use)
- Identification of any survey constraints

If bats are found to occupy the Project site, CDFW recommends the Lead Agency require the Project developer implement the general bat avoidance, minimization and mitigation measures outlined below. CDFW is available to discuss and refine these measures with the Lead Agency and the Project developer:

- Avoid direct and indirect impacts to roosting sites by establishing a no-disturbance buffer of 100 feet around roost sites.
- Prohibit clearing and grubbing adjacent to the roost site and lighting use near the roost site where it would shine on the roost or interfere with bats entering or leaving the roost. Prohibit the operation of internal combustion equipment, such as generators, pumps and vehicles within 100 feet of the roost site. Prohibit the use of bird netting.
- If avoidance of roost sites is infeasible, maintain portions of the features that provide naturalized habitat to the greatest extent possible and improve existing roost sites

and/or provide new roost sites on the Project site. Implement these measures only after consultation with CDFW.

- New roost sites must be in place prior to the initiation of Project-related activities to allow enough time for bats to relocate.
- Design and locate new and enhanced roost sites to be compatible with the bats' search image and habitat requirements (i.e., thermal regulation, interior size, ventilation, etc.). Design new and enhanced roost sites in consultation with CDFW.
- Exclude bats from directly affected work areas selectively and only to the extent necessary to prevent morbidity or mortality to the colony. Use one-way bat exclusion devices, installed in a bat-safe way, to exclude bats and then use expandable foam, steel wool or other method to block the entrance, after the bats have gone. Exclude bats only after consultation with CDFW, at a time that is compatible with the species' normal behavior patterns (i.e., breeding, feeding, hibernating, etc.). In general, exclusions shall not occur during the maternity/pup-rearing season nor during the hibernation season, as determined by conditions at the Project site.

SCE Interconnection and Distribution Upgrades: The MND states that "...the SCE interconnection scope of work will consist of and not be limited to: primary riser poles, approximately 2 x 250' 1/OJCN UG 12kV lines; and automation controls including remote controlled switches, metering, associated wiring and new 3-way pad-mounted gas switches."

If interconnection and distribution upgrades will be completed, CDFW recommends the Lead Agency include the complete scope of work of the SCE interconnection and distribution upgrades as part of the Project description and disclose all potential biological impacts associated with these upgrades in a revised MND.

Project Boundary Fencing: The Project site currently contains chain-link perimeter fencing. However, the MND states that 6-foot tall fencing with privacy slats and security wire will be installed around the perimeter of the Project site. Based on this description it is unclear if the existing chain-link fencing will be replaced and new fencing installed or only modified to accommodate the privacy slats. CDFW recommends the Lead Agency revise the MND to clarify this discrepancy in the Project description. CDFW also recommends the Lead Agency require that all fencing installed on the Project site have a five- to seven-inch separation between the bottom of the fence and the ground, along the entire length of the fence, and wrap back the bottom of the fence edges to form a smooth edge to aid in the movement of wildlife through the Project site.

Night Work and Lighting: For the protection of special status species, CFDW recommends that construction be limited to daylight hours only and that artificial nighttime lighting on the Project site be shielded, directed downward and minimized at night, since night work and artificial night lighting can alter foraging, migration and breeding behaviors of special status species and increase their potential susceptibility to predation.

Vertical Tubes: Vertical tubes such as solar mount poles and chain link fencing poles can result in the entrapment and death of a variety of bird species. CDFW recommends that all hollow vertical tubes such as solar mount poles and chain link fencing poles be permanently capped at the time of installation to prevent avian fatalities.

Environmental Training Program: CDFW recommends that environmental training is provided to all persons working on the Project site prior to the initiation of Project-related activities and training materials and briefings include all biological resources that may be found on or in the vicinity of the Project site, the laws and regulations that protect those resources, the consequences of non-compliance with those laws and regulations and a contact person in the event that protected biological resources are discovered on the Project site.

Cumulative Impacts: Cumulative impacts are changes in the environment that result from the incremental impact of the Project when added to other closely related past, present, and reasonably foreseeable, probable future impacts. CDFW recommends that the MND for the Project be revised to adequately address and quantify cumulative impacts to the State-listed species addressed above and include impacts from other solar projects within the vicinity of the Project site.

Thank you for the opportunity to comment on the Hanford 12 Project MND. If you have any questions regarding these comments, please contact Lori Bono, Senior Environmental Scientist Specialist, at (559) 243-4014, extension 350, or lori.bono@wildlife.ca.gov.

Sincerely,

Jeffrey R. Single, Ph.D.
Regional Manager

cc: Thomas Leeman
United States Fish and Wildlife Service
2800 Cottage Way, Room W-2805
Sacramento, California 95825-1846

ec: Julie Vance
California Department of Fish and Wildlife

Literature Cited

CDFG. 1994. Staff Report Regarding Mitigation for Impacts to Swainson's Hawks (*Buteo swainsoni*) in the Central Valley of California. California Department of Fish and Game.

CDFG. 2012. Staff Report on Burrowing Owl Mitigation. California Department of Fish and Game. Report available at: www.dfg.ca.gov/wildlife/nongame/docs/BUOWStaffReport.pdf

CNDDB. 2013. California Natural Diversity Database. Department of Fish and Game, Sacramento, California.

SWHA TAC. 2000. Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley. Swainson's Hawk Technical Advisory Committee.

USFWS. 2011. Standard Recommendations for Protection of the San Joaquin Kit Fox Prior to or During Ground Disturbance. United States Fish and Wildlife Service, Sacramento, California.

SATE OF CALIFORNIA Edmund G. Brown, Jr., Governor

NATIVE AMERICAN HERITAGE COMMISSION
1550 Harbor Boulevard, Suite 100
West Sacramento, CA 95691
(916) 373-3715
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Ds_nahc@pacbell.net
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December 16, 2013

Mr. Dan Kassik, Project Planner
Kings County Community Development Agency
1400 West Lacey Boulevard
Hanford, CA 93230

RE: SCH#2013111049; CEQA Notice of Completion; proposed Mitigated Negative Declaration for the **"Conditional Use Permit, 13-05; for the Hanford 12 Project;"** located in the City of Hanford; Kings County, California

Dear Mr. Kassik:

The Native American Heritage Commission (NAHC) has reviewed the above-referenced environmental document. This project is also subject to California Government Code Section 65040.2, 65352.3 *et seq.*

The California Environmental Quality Act (CEQA) states that any project which includes archeological resources, is a significant effect requiring the preparation of an EIR (CEQA guidelines 15064.5(b). To adequately comply with this provision and mitigate project-related impacts on archaeological resources, the Commission recommends the following actions be required:

Contact the appropriate Information Center for a record search to determine :If a part or all of the area of project effect (APE) has been previously surveyed for cultural places(s), The NAHC recommends that known traditional cultural resources recorded on or adjacent to the APE be listed in the draft Environmental Impact Report (DEIR).

If an additional archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey. We suggest that this be coordinated with the NAHC, if possible. The final report containing site forms, site significance, and mitigation measurers should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum, and not be made available for pubic disclosure pursuant to California Government Code Section 6254.10.

A list of appropriate Native American Contacts for consultation concerning the project site has been provided and is attached to this letter to determine if the proposed active might impinge on any cultural resources. Lack of surface evidence of archeological resources does not preclude their subsurface existence.

California Government Code Section 65040.12(e) defines "environmental justice" to provide "fair treatment of People...with respect to the development, adoption, implementation, and enforcement of environmental laws, regulations and policies" and Executive Order B-10-11 requires consultation with Native American tribes their elected officials and other representatives of tribal governments to provide meaningful input into the development of legislation, regulations, rules, and policies on matters that may affect tribal communities.

Lead agencies should include in their mitigation plan provisions for the identification and evaluation of accidentally discovered archeological resources, pursuant to California Environmental Quality Act (CEQA) §15064.5(f). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American, with knowledge in cultural resources, should monitor all ground-disturbing activities. Also, California Public Resources Code Section 21083.2 require documentation and analysis of archaeological items that meet the standard in Section 15064.5 (a)(b)(f).

Lead agencies should consider first, avoidance for sacred and/or historical sites, pursuant to CEQA Guidelines 15370(a). Then if the project goes ahead then, lead agencies include in their mitigation and monitoring plan provisions for the analysis and disposition of recovered artifacts, pursuant to California Public Resources Code Section 21083.2 in consultation with culturally affiliated Native Americans.

Lead agencies should include provisions for discovery of Native American human remains in their mitigation plan. Health and Safety Code §7050.5, CEQA §15064.5(e), and Public Resources Code §5097.98 mandates the process to be followed in the event of an accidental discovery of any human remains in a location other than a dedicated cemetery.

Sincerely,

Dave Singleton
Program Analyst

CC: State Clearinghouse

Attachment: Native American Contacts list

Native American Contacts
Kings County California
December 16, 2013

Tule River Indian Tribe
Neil Peyron, Chairperson
P.O. Box 589 Yokuts
Porterville , CA 93258
chairman@tulerivertribe-nsn.
(559) 781-4271
(559) 781-4610 FAX

Wuksache Indian Tribe/Eshom Valley Band
Kenneth Woodrow, Chairperson
1179 Rock Haven Ct. Foothill Yokuts
Salinas , CA 93906 Mono
kwood8934@aol.com Wuksache
831-443-9702

Table Mountain Rancheria
Michael Russell, Tribal Administrator
P.O. Box 410 Yokuts
Friant , CA 93626-0177
(559) 822-2587
(559) 822-2693 FAX

Kings River Choinumni Farm Tribe
Stan Alec
642 West Barstow Ave. #E Foothill Yokuts
Clovis , CA 93612 Choinumni

559-647-3227 - cell

Table Mountain Rancheria
Bob Pennell, Cultural Resources Director
P.O. Box 410 Yokuts
Friant , CA 93626-0177
(559) 325-0351
(559) 217-9718 - cell
(559) 325-0394 FAX

Santa Rosa Tachi Rancheria
Lalo Franco, Cultural Coordinator
P.O. Box 8 Tachi
Lemoore , CA 93245 Tache
(559) 924-1278 - Ext. 5 Yokut
(559) 924-3583 - FAX

Kings River Choinumni Farm Tribe
John Davis, Chairman
1064 Oxford Avenue Foothill Yokuts
Clovis , CA 93612-2211 Choinumni
(559) 307-6430

Tule River Indian Tribe
Kerri Vera, Environmental Department
P.O. Box 589 Yokuts
Porterville , CA 93258
(559) 783-8892

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of the statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

his list s only applicable for contacting local Native Americans with regard to cultural resources for the proposed SSCH#2013111049; CEQA Notice of Completion; proposed Mitigated Negative declaration flro the CUP 13-05 for the Hanford 12 Project; located in the City of Hanford; Kings County, California.

Native American Contacts
Kings County California
December 16, 2013

Tule River Indian Tribe
Joey Garfield, Tribal Archeological
P.O. Box 589 Yokuts
Porterville , CA 93258
(559) 783-8892

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of the statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

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Attachment No. 2

COUNTY OF KINGS
1400 W. LACEY BOULEVARD
HANFORD, CA 93230

RESPONSE TO PUBLIC COMMENTS

Initial Study/Mitigated Negative Declaration (State Clearinghouse Number 2013111049)

December 2013

Prepared by:

KINGS COUNTY COMMUNITY DEVELOPMENT AGENCY

EST. 1968 PROVOST & PRITCHARD CONSULTING GROUP
An Employee Owned Company

The following are staff's responses to comments received during the public review period for the Initial Study/Mitigated Negative Declaration (IS/MND), dated November 2013, prepared for the Hanford 12 Project (Project). The IS/MND was circulated for public review from November 15, 2013 through December 17, 2013. Two sets of comments were received; one set of comments from the State of California – Natural Resources Agency, Department of Fish and Wildlife and one set of comments from the Native American Heritage Commission.

While these comments resulted in minor changes to the IS/MND, none of the comments identified a new, unavoidable significant effect, nor did they result in a finding that the proposed mitigation measures in the IS/MND will not reduce potential effects to less than significant. Instead, the minor changes serve merely to clarify, amplify and make insignificant modifications to the IS/MND. Accordingly, pursuant to CEQA Guidelines § 15073.5, recirculation of the IS/MND is not required.

LETTER 1

State of California – Natural Resources Agency
Department of Fish and Wildlife (December 12, 2013)

Response 1/1

The commenter states that a SWHA nest has been documented within 2.0 miles of the Project. This nest is apparently a new CNDDB record that entered the database after the CNDDB search for the IS/MND in July of 2013. The County acknowledges that SWHA have the potential to nest in eucalyptus trees occurring along the Project boundary in future years, despite the fact that no raptor nesting activity was observed during the reconnaissance survey of the site on June 24, 2013.

Given the increased documentation of SWHAs in the vicinity of the Project site a SWHA nesting survey based on the survey method developed by the Swainson's Hawk Technical Advisory Committee (SWHA TAC, 2000) should be conducted by a qualified biologist prior to commencing Project-related activities. Please refer to revised mitigation measure BIO-2.

Response 1/2

There is no scientific basis for the notion that the removal of a raptor nest tree in the Hanford area outside the nesting season or within the nesting season if such nest(s) are unoccupied would significantly impact the regional populations of common raptors or result in raptor mortality. The Hanford area contains thousands of trees and similar eucalyptus trees as those slated for removal will remain along the northern border of the Project site and on surrounding lands. No known raptor nest trees occur on the Project site. Three stick nests were observed in eucalyptus trees along the boundary of the site, but no evidence of use was observed during the height of the raptor nesting season. As CDFW points out in their comments, SWHAs have a high fidelity to nest trees and nest sites, so if SWHA were not found nesting during the 2013 survey, there is a high probability that SWHAs will not be nesting on the Project site in future years. Nonetheless preconstruction surveys for nesting raptors, including a protocol level SWHA nest survey will be conducted and raptor nests will be avoided until the young have fledged. Please refer to revised mitigation measure BIO-2.

Response 1/3

There is no scientific basis to support the notion that Project removal of unoccupied eucalyptus trees in the Hanford area would result in a significant impact to regional populations of common raptors. However, should a known SWHA nest be discovered in a tree on the Project site, the tree should be left standing. If avoiding the tree is not practicable, the tree should be replaced, onsite and at a 3:1 ratio, with a species of tree known to be used for nesting by local SWHAs (please refer to mitigation measure BIO-5).

Response 1/4

The Project site consists of low value SWHA foraging habitat. In fact, developed lands such as the Project site are generally considered unsuitable for SWHA (Estep 2011). Central Valley SWHAs principal prey is the meadow vole (Microtus californicus). The pocket gopher (Thomomys bottae) is also another important prey item. Other prey items taken are mice, small birds, reptiles, and insects (Estep 1989). The Project site is mostly devoid of vegetation with compacted and sulfur contaminated soil. The meadow vole, the principle SWHA prey item, requires herbaceous vegetation for food and for cover during its daytime activities; therefore the meadow vole population on the site is expected to be extremely low. In fact, evidence of rodent activity during the biologist's field survey found little evidence of rodent activity. Fields lacking adequate prey populations are rarely used (Estep 1989, Babcock 1995, and Swolsgard 2003). What rodent activity that existed was found primarily along the narrow vegetated margins of the Project site and consisted mainly of California ground squirrel (Otospermophilus beecheyi) burrows. While ground squirrels can be taken by SWHAs they are a minor component of the SWHA diet. Given the unsuitability of the site for the SWHAs main prey item, the vole, and the lack of rodent activity and vegetation on the site, the Project site provides extremely low value foraging habitat for the SWHA. Suitable foraging habitat consists of hay fields, grain crops, certain row crops, and lightly grazed pasturelands. The Project would result in the loss of 18 acres of very low value to unsuitable foraging habitat in an area surrounded by abundant low value and high value foraging habitat. The loss of such a small area of very low value to unsuitable foraging habitat is considered a less than significant impact to regional populations of SWHA, regardless of nearby SWHA nesting activity.

Response 1/5

Since the Project site contains very low to unsuitable foraging habitat. Impacts to SWHA foraging habitat is considered less than significant and mitigation is not required to reduce impacts to regional populations of SWHAs.

Response 1/6

The CDFW recommends the implementation of the *Standardized Recommendations for Protection of the San Joaquin Kit Fox Prior to or During Ground Disturbance* (USFWS 2011) that include preconstruction surveys.

The County believes the Project site to be the unlikely destination for SJKF for the following reasons:

- Recent SJKF sightings in the Hanford area are rare.

- There are no known populations of kit fox in the Hanford area (Smith et al. 2006).

- SJKF habitat analysis of the San Joaquin Valley has found the Hanford area to contain low to unsuitable SJKF habitat (Cypher et al. 2013).

- The Project site contains a scant prey base for SJKF.

- The Project site is completely encompassed by a chainlink security fence within an industrial zone of the Hanford area that would greatly restrict SJKF access to the site.

- Evidence of this species occupying the site was absent during Live Oak Associates June 2013 biological field investigation. Furthermore, numerous domestic dogs were observed on neighboring properties which would further discourage use of the site by the SJKF.

Therefore, the County finds it highly unlikely that the SJKF would occur on the site and find that Project impacts will result in a less than significant impact to SJKF.

Response 1/7

The CDFW requests that pre-construction surveys be conducted for burrowing owls and that Project construction avoid disturbance of active nest burrows by maintaining a disturbance-free buffer around them.

The Project site contains little vegetation and a resulting low prey base for burrowing owls. Surrounding lands also provide low value or unsuitable foraging habitat. The few ground squirrel burrows observed on the site offer potential denning habitat; however, no evidence of borrowing owl habitation was found during Live Oak Associates June 2013 field survey. Furthermore, use of onsite burrows is unlikely due to the poor foraging habitat available on site.

Despite the unlikely presence of burrowing owls on the site, a take avoidance survey will be conducted within 14 days of ground disturbance, as described in the Staff Report of Burrowing Owl Mitigation (CDFG 2012), to assure that no take of burrowing owls will occur. A no disturbance buffer will be maintained around any borrowing owl dens during the nesting season (Feb. 1 to Aug. 31). Outside of the nesting season the owls will be passively relocated.

Response 1/8

Comment noted. The IS/MND, as currently written, calls for preconstruction avian surveys during the nesting season and species and circumstantial appropriate buffers around active nests, if found. These measures will assure the protection of nesting raptors and migratory birds.

Response 1/9

The CDFW has noted the potential presence of the hoary bat (Lasiurus cinereus) on the Project site and has recommended a long list of protection measures for this species. The County finds these protective measures unprecedented, especially for a bat species that is not even a CDFW species of special concern. The hoary bat, while potentially roosting in onsite trees that are slated for removal does not form colonial roosts but roosts individually, commonly in tree foliage. Therefore, the Project related

removal of trees will not result in the mortality of a large number of hoary bats, if any, and that regional populations of hoary bat would not be significantly impacted by tree removal activity. Numerous eucalyptus trees will remain on and adjacent to the Project site for roosting after Project completion.

Response 1/10

Comment noted. Please see page 2-4 of the IS/MND. SCE conducted a System Impact Study (SIS) for the project and concluded that only a standard interconnection between the existing distribution line be constructed which consists of tapping the existing line and running a service line from an existing pole to a new riser pole on site next to the project's transformers and switchgears. The only SCE Distribution System upgrades proposed would consist of reprogramming equipment in the substation which requires no upgrade which require construction.

Response 1/11

The Project site is currently surrounded by a chainlink security fence similar to the fence that is proposed for the Project. While leaving a gap at the bottom of the proposed fence will allow easier access to the site by wildlife and domestic animals. Running the fence to the ground will not result in any significant impediment to native wildlife movements over the baseline circumstances that currently exist on the site. However, the current fence will be removed and replaced with a new fence that will have a five to seven inch opening at the base. The text on page 2-3, 3-5 in the IS/MND will be amended to read "For public safety and national security, 8 feet tall fencing with razor wire will be installed around the perimeter of the proposed Project. The fence will be constructed with a five to seven inch opening at the base to allow San Joaquin kit fox and other small animal species movement at the site."

Response 1/12

Comment noted. The text on page 3-67 will be amended to read, "Construction activities would take place during daylight hours between 6am and 7pm on weekdays and 7am and 5pm on weekends".

Response 1/13

The CDFW is concerned that uncapped vertical pipes could cause avian mortality. Upon researching this issue, the County concurs with CDFW that vertical pipes should be capped to avoid undue mortality to birds and other wildlife and has added mitigation measure BIO-4.

Response 1/14

Comment noted. The CDFW recommends that an environmental training of construction personnel that covers all sensitive biological resources with the potential to occur on or near the Project site. Given the overall low habitat value of the Project site and the unlikely occurrence of special status species on the site, an environmental training will only be required if sensitive biological resources are found to occur on or in the near vicinity of the Project site during preconstruction SWHA surveys and burrowing owl surveys.

Response 1/15

The CDFW would like a cumulative impact assessment for the SJKF and the SWHA. As discussed in Responses to Comments 1/2 through 1/6, above. The Project site provides extremely low quality to

unsuitable foraging habitat for the SWHA and SJKF. Therefore, the loss of 18 acres of industrial land would not significantly contribute to cumulative impacts to foraging habitat for these species. SJKF are highly unlikely to den on the site due to reasons stated in the Response to Comment 1/6. Therefore, no loss of suitable denning habitat will occur as a result of Project development. The loss of potential nesting habitat for SWHAs is questionable due to the nature of the trees to be removed and the surrounding land use. The trees to be removed are medium to small eucalyptus trees some of which have sparse foliage. SWHA generally prefer mature trees with abundant foliage to conceal their nest but will use younger or less vigorous trees if nest trees are scarce (Bradbury 2012). The lands surrounding these trees contain very low to unsuitable SWHA foraging habitat, which includes an industrial lot (a portion of which is the Project site), urban residential, and vineyard. An agricultural field offering suitable SWHA foraging habitat occurs on a large parcel southeast of the trees to be removed. Data on the amount of trees that would be required to be removed from solar projects in the Hanford area is unavailable. However, the Hanford area contains numerous trees analogous to the trees on the Project site that potentially provide nesting habitat for SWHA. Additionally, numerous trees occur in more desirable nearby locations such as Cross Creek to the east and along the Kings River to the north, as well as small groves or isolated trees in agricultural areas surrounding Hanford. Moreover, should a SWHA nest be found in a tree to be removed by the Project, replacement plantings are required at a 3:1 ratio if the tree is unable to be avoided. Therefore, cumulative impacts to the loss of potential SWHA nest trees are also considered less than significant.

LETTER 2

State of California – Native American Heritage Commission (December 16, 2013)

Response 2/1

The comment letter received from the Native American Heritage Commission is duly noted.

State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
Central Region
1234 East Shaw Avenue
Fresno, California 93710
(559) 243-4005
www.wildlife.ca.gov

EDMUND G. BROWN, JR., Governor
CHARLTON H. BONHAM, Director

Letter 1

December 12, 2013

Dan Kassik
Kings County Community
Development Agency
1400 West Lacey Boulevard, Building #6
Hanford, California 93230

Subject: Notice of Intent to Adopt a Mitigated Negative Declaration (MND) for the Hanford 12 Project (State Clearinghouse number 2013111049)

Dear Mr. Kassik:

The California Department of Fish and Wildlife (CDFW) has reviewed the MND submitted by Kings County (Lead Agency) for the Hanford 12 Project (Project) located adjacent to the north side of Orchard Drive, immediately south of 9¾ Avenue and east of 10th Avenue in Kings County, California. The Project includes the approval of a conditional use permit to allow the construction and operation of a solar facility that would generate 3-megawatts (MW) of solar energy, on approximately 18 acres of vacant land surrounded by rural residences. Power generation facilities associated with the Project include the installation of photovoltaic (PV) modules, module mounting systems, inverters and transformers, Southern California Edison (SCE) interconnection and distribution upgrades, electrical collection and distribution systems, energy storage systems, data monitoring equipment, access roads and perimeter fencing.

Specifically, the Project has the potential to impact several special status species, including but not limited to, the State Threatened and federally Endangered San Joaquin kit fox (*Vulpes macrotis mutica*, SJKF), the State Threatened Swainson's hawk (*Buteo swainsoni*, SWHA), the State Species of Special Concern burrowing owl (*Athene cunicularia*, BUOW) and hoary bat (*Lasiurus cinereus*, LACI). All the species listed above are known to occur or could potentially occur on the proposed Project site and within the vicinity of the Project area. CDFW has reviewed the MND and our recommendations on measures to avoid, minimize, and mitigate Project-related impacts to special status biological resources should be included as enforceable mitigation measures in a revised MND for this Project. Our comments follow.

Department Jurisdiction

Trustee Agency Authority: CDFW is a Trustee Agency with the responsibility under the California Environmental Quality Act (CEQA) for commenting on projects that could impact plant, fish and wildlife resources. Pursuant to Fish and Game Code Section 1802, CDFW has jurisdiction over the conservation, protection and management of fish, wildlife, native plants and habitat necessary for biologically sustainable populations of those species. As a Trustee Agency for plant, fish and wildlife resources, CDFW is responsible for providing, as available,

biological expertise to review and comment on environmental documents and impacts arising from project activities, as those terms are used under CEQA.

Responsible Agency Authority: CDFW has regulatory authority over projects that could result in "take" of any species listed or is a candidate for listing by the State (State-listed) as threatened or endangered, pursuant to the California Endangered Species Act (CESA). For this or any other project which impacts listed species, an ITP is the mechanism for providing take authorization under CESA. CEQA requires a Mandatory Finding of Significance if a project is likely to substantially impact threatened or endangered species (sections 21001{c}, 21083, Guidelines sections 15380, 15064, 15065). Impacts must be avoided or mitigated to less than significant levels unless the CEQA Lead Agency makes and supports a Statement of Overriding Consideration (SOC). A CEQA Lead Agency's SOC would not preclude the Project proponent's obligation to comply with CESA.

Bird Protection: CDFW has jurisdiction over actions which may result in the disturbance or destruction of active nest sites or the unauthorized take of birds. Sections of the Fish and Game Code that protect birds, their eggs and nests include Section 3503 (regarding unlawful take, possession or needless destruction of the nest or eggs of any bird), 3503.5 (regarding the take, possession or destruction of any birds-of-prey or their nests or eggs), and 3513 (regarding unlawful take of any migratory non-game bird).

Potential Impacts and Recommendations

1

Swainson's Hawk: The Project is located within 2 miles of a documented SWHA nest (CNDDB 2013). If ground-disturbing activities are to occur at the site during the nesting season (January 1 through September 15), CDFW recommends that a qualified biologist conduct surveys for nesting SWHAs following the survey method developed by the Swainson's Hawk Technical Advisory Committee (SWHA TAC, 2000) prior to commencing Project-related activities. These surveys, the parameters of which were designed to optimize detectability, must be conducted to reasonably assure CDFW that take of this species will not occur as a result of disturbance associated with Project implementation. Additional pre-construction surveys for active nests should be conducted by a qualified biologist no more than 10 days prior to the start of construction and during the appropriate timing to maximize detectability. Should an active nest be found, a minimum no-disturbance buffer of ½ mile should be observed until the nesting season has ended or until a qualified biologist has determined that the birds have fledged and are no longer reliant upon the nest or parental care for survival.

2

CDFW considers removal of known raptor nest trees, even outside of the nesting season, to be a significant impact under CEQA, and in the case of SWHA could also result in take under CESA since the species exhibits high site fidelity to their nest and nest trees year after year. Impacts to known nest trees should be avoided at all times of year. If avoidance of a known nest tree is not feasible, the acquisition of an ITP, pursuant to Section 2081(b) of the Fish and Game Code, may be warranted and consultation with CDFW should occur well in advance of ground-disturbing activities.

3 Regardless of nesting status, trees that must be removed should be replaced with an appropriate native tree species planting at a ratio of 3:1. This mitigation is needed to offset potential impacts to the loss of potential nesting habitat. Removal of SWHA nest trees will require replanting on Habitat Management (HM) land that will be protected in perpetuity.

4 SWHA generally forage within 10 miles of their nest tree. CDFW's Staff Report Regarding Mitigation for Impacts to Swainson's Hawks (CDFG, 1994) recommends the following:

- Projects within 1 mile of an active nest tree should provide a minimum of one acre of HM land for each acre of development authorized.
- Projects within 5 miles of an active nest but greater than 1 mile should provide a minimum of 0.75 acres of HM land for each acre of urban development authorized.
- Projects within 10 miles of an active nest tree but greater than 5 mile from an active nest tree should provide a minimum of 0.5 acres of HM land for each acre of urban development authorized.

5 Funding of a sufficient long-term endowment for the management of the protected properties should be paid by the Project applicant. In addition to fee title acquisition of grassland habitat, mitigation could occur by the purchase of conservation or suitable agricultural easements. Suitable agricultural easements would include areas limited to production of crops such as alfalfa, dry land and irrigated pasture, and cereal grain crops. Vineyards, orchards, cotton fields, and other dense vegetation do not provide adequate foraging habitat. Additionally, nest trees are an extremely limited resource in the southern San Joaquin Valley; CDFW recommends that lands protected as foraging habitat for SWHA be no more than 10 miles from a SWHA nest in order to be beneficial to the species. Mitigation measures for SWHA should be fully addressed in a revised MND.

6 **San Joaquin Kit Fox:** SJKF has been documented within the vicinity of the Project site (CNDDB 2013) and even though the project site is bordered on three sides by chain-link fencing, there is a potential for SJKF to access the Project site by going through and/or digging under unsecured areas in the existing fencing. Therefore, CDFW recommends the Lead Agency require the developer follow the United States Fish and Wildlife Service's (USFWS) *Standard Recommendations for Protection of the Endangered San Joaquin Kit Fox Prior to or During Ground Disturbance* (USFWS 2011) before starting Project-related activities likely to impact SJKF. If Project-related activities are delayed or suspended for more than 30 days, we recommend that the area be resurveyed. If SJKF dens are identified, establishment and implementation of exclusion zones in accordance with the USFWS protocol is warranted. If impacts to SJKF or SJKF dens cannot be avoided, then the acquisition of an ITP prior to construction would be warranted to comply with CESA.

7 **Burrowing Owl:** CDFW recommends the Lead Agency require that pre-construction surveys for BUOW be conducted by a qualified biologist no more than 30 days prior to the beginning of ground disturbance and/or construction activities or any project activity likely to impact the

7 cont'd

BUOW, as outlined in the *Staff Report on Burrowing Owl Mitigation* (CDFG 2012). The staff report can be found on our website at www.dfg.ca.gov/wildlife/nongame/docs/BUOWStaffReport.pdf. Per the CDFW staff report, if Project activities are delayed or suspended for more than 30 days, we recommend that the area be resurveyed.

8

Raptors and Migratory Birds: For the protection of raptors and migratory song birds and to assist in avoiding take of avian species as required by Fish and Game Code sections 3503, 3503.5 and 3513, CDFW encourages Project implementation to occur during the non-nesting bird season. However, if ground-disturbing activities must occur during the breeding season (January 1 through September 15), the Project applicant is responsible for ensuring that implementation of the Project does not result in any violation of the Migratory Bird Treaty Act or relevant Fish and Game Codes as referenced above. Prior to work commencing; including staging, clearing, and grubbing, CDFW recommends surveys for active nests be conducted by a qualified wildlife biologist no more than 10 days prior to the start of the of the Project commencing and that the surveys be conducted in a sufficient area around the work site to identify any nests that are present and to determine their status. A sufficient area means any nest within an area that could potentially be affected by the Project. In addition to direct impacts, such as nest destruction, nests might be affected by noise, vibration, odors, and movement of workers or equipment. Identified nests should be continuously surveyed for the first 24 hours prior to any construction-related activities to establish a behavioral baseline. Once work commences, all nests should be continuously monitored to detect any behavioral changes as a result of the Project. If behavioral changes are observed, the work causing that change should cease and CDFW consulted for additional avoidance and minimization measures. If continuous monitoring of identified nests by a qualified wildlife biologist is not feasible, CDFW also recommends a minimum no-disturbance buffer of 250 feet around active nests of non-listed bird species, a 500-foot no-disturbance buffer around the nests of unlisted raptors, and a 2,640-foot no-disturbance buffer around the nests of listed raptors until the breeding season has ended, or until a qualified biologist has determined that the birds have fledged and are no longer reliant upon the nest or parental care for survival. Variance from these no-disturbance buffers may be implemented when there is compelling biological or ecological reason to do so, such as when the Project area would be concealed from a nest site by topography. Any variance from these buffers is advised to be supported by a qualified wildlife biologist, and it is recommended CDFW be notified in advance of implementation of a no-disturbance buffer variance.

9

Bats: LACI has been documented within 1 mile of the Project site (CNDDB 2013) and may roost in the eucalyptus trees located on the Project site. To minimize potential Project-related impacts to this species, CDFW recommends the Lead Agency require the developer conduct preconstruction surveys to establish areas of occupancy the year prior to the start of construction and that surveys be conducted by a minimum of two CDFW-approved biologists with bat survey experience. We recommend that surveys consist of the following:

- Two spring surveys (April through June) and two winter surveys (November through January)

- Each survey consists of one dusk emergence survey (start one hour before sunset and last for three hours), followed by one pre-dawn re-entry survey (start one hour before sunrise and last for two hours), and one daytime visual inspection of all potential roosting habitat on the Project site
- Conduct each survey within one 24-hour period
- Focus visual inspections on the identification of bat sign (i.e., individuals, guano, urine staining, corpses, feeding remains, scratch marks and bats squeaking and chattering)
- Use bat detectors, bat call analysis and visual observations during all dusk emergence and pre-dawn re-entry surveys

Data Collection for Each Survey:

- Whether bats are, or have been, present on the Project site
- Assemblage of species using the site
- Frequency of site use (including seasonal changes)
- Type of roost (i.e., maternity roost, day roost, night roost, feeding perch, mating roost, satellite roost, transitional roost or winter hibernaculum)
- Location, ambient temperature and the aspect and orientation of the roost
- Spatial and temporal distribution of bat activity
- Flight paths, exit and entrance points
- Intensity of bat usage (i.e., number of bats, time and duration of use)
- Identification of any survey constraints

9 cont'd

If bats are found to occupy the Project site, CDFW recommends the Lead Agency require the Project developer implement the general bat avoidance, minimization and mitigation measures outlined below. CDFW is available to discuss and refine these measures with the Lead Agency and the Project developer:

- Avoid direct and indirect impacts to roosting sites by establishing a no-disturbance buffer of 100 feet around roost sites.
- Prohibit clearing and grubbing adjacent to the roost site and lighting use near the roost site where it would shine on the roost or interfere with bats entering or leaving the roost. Prohibit the operation of internal combustion equipment, such as generators, pumps and vehicles within 100 feet of the roost site. Prohibit the use of bird netting.
- If avoidance of roost sites is infeasible, maintain portions of the features that provide naturalized habitat to the greatest extent possible and improve existing roost sites

and/or provide new roost sites on the Project site. Implement these measures only after consultation with CDFW.

- New roost sites must be in place prior to the initiation of Project-related activities to allow enough time for bats to relocate.
- Design and locate new and enhanced roost sites to be compatible with the bats' search image and habitat requirements (i.e., thermal regulation, interior size, ventilation, etc.). Design new and enhanced roost sites in consultation with CDFW.
- Exclude bats from directly affected work areas selectively and only to the extent necessary to prevent morbidity or mortality to the colony. Use one-way bat exclusion devices, installed in a bat-safe way, to exclude bats and then use expandable foam, steel wool or other method to block the entrance, after the bats have gone. Exclude bats only after consultation with CDFW, at a time that is compatible with the species' normal behavior patterns (i.e., breeding, feeding, hibernating, etc.). In general, exclusions shall not occur during the maternity/pup-rearing season nor during the hibernation season, as determined by conditions at the Project site.

9 cont'd

SCE Interconnection and Distribution Upgrades: The MND states that "…the SCE interconnection scope of work will consist of and not be limited to: primary riser poles, approximately 2 x 250' 1/OJCN UG 12kV lines; and automation controls including remote controlled switches, metering, associated wiring and new 3-way pad-mounted gas switches."

10

If interconnection and distribution upgrades will be completed, CDFW recommends the Lead Agency include the complete scope of work of the SCE interconnection and distribution upgrades as part of the Project description and disclose all potential biological impacts associated with these upgrades in a revised MND.

Project Boundary Fencing: The Project site currently contains chain-link perimeter fencing. However, the MND states that 6-foot tall fencing with privacy slats and security wire will be installed around the perimeter of the Project site. Based on this description it is unclear if the existing chain-link fencing will be replaced and new fencing installed or only modified to accommodate the privacy slats. CDFW recommends the Lead Agency revise the MND to clarify this discrepancy in the Project description. CDFW also recommends the Lead Agency require that all fencing installed on the Project site have a five- to seven-inch separation between the bottom of the fence and the ground, along the entire length of the fence, and wrap back the bottom of the fence edges to form a smooth edge to aid in the movement of wildlife through the Project site.

11

Night Work and Lighting: For the protection of special status species, CFDW recommends that construction be limited to daylight hours only and that artificial nighttime lighting on the Project site be shielded, directed downward and minimized at night, since night work and artificial night lighting can alter foraging, migration and breeding behaviors of special status species and increase their potential susceptibility to predation.

12

13 **Vertical Tubes:** Vertical tubes such as solar mount poles and chain link fencing poles can result in the entrapment and death of a variety of bird species. CDFW recommends that all hollow vertical tubes such as solar mount poles and chain link fencing poles be permanently capped at the time of installation to prevent avian fatalities.

14 **Environmental Training Program:** CDFW recommends that environmental training is provided to all persons working on the Project site prior to the initiation of Project-related activities and training materials and briefings include all biological resources that may be found on or in the vicinity of the Project site, the laws and regulations that protect those resources, the consequences of non-compliance with those laws and regulations and a contact person in the event that protected biological resources are discovered on the Project site.

15 **Cumulative Impacts:** Cumulative impacts are changes in the environment that result from the incremental impact of the Project when added to other closely related past, present, and reasonably foreseeable, probable future impacts. CDFW recommends that the MND for the Project be revised to adequately address and quantify cumulative impacts to the State-listed species addressed above and include impacts from other solar projects within the vicinity of the Project site.

Thank you for the opportunity to comment on the Hanford 12 Project MND. If you have any questions regarding these comments, please contact Lori Bono, Senior Environmental Scientist Specialist, at (559) 243-4014, extension 350, or lori.bono@wildlife.ca.gov.

Sincerely,

Jeffrey R. Single, Ph.D.
Regional Manager

cc: Thomas Leeman
United States Fish and Wildlife Service
2800 Cottage Way, Room W-2805
Sacramento, California 95825-1846

ec: Julie Vance
California Department of Fish and Wildlife

Literature Cited

CDFG. 1994. Staff Report Regarding Mitigation for Impacts to Swainson's Hawks (*Buteo swainsoni*) in the Central Valley of California. California Department of Fish and Game.

CDFG. 2012. Staff Report on Burrowing Owl Mitigation. California Department of Fish and Game. Report available at: www.dfg.ca.gov/wildlife/nongame/docs/BUOWStaffReport.pdf

CNDDB. 2013. California Natural Diversity Database. Department of Fish and Game, Sacramento, California.

SWHA TAC. 2000. Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley. Swainson's Hawk Technical Advisory Committee.

USFWS. 2011. Standard Recommendations for Protection of the San Joaquin Kit Fox Prior to or During Ground Disturbance. United States Fish and Wildlife Service, Sacramento, California.

SATE OF CALIFORNIA Edmund G. Brown, Jr., Governor

NATIVE AMERICAN HERITAGE COMMISSION
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Letter 2

December 16, 2013

Mr. Dan Kassik, Project Planner
Kings County Community Development Agency
1400 West Lacey Boulevard
Hanford, CA 93230

RE: SCH#2013111049; CEQA Notice of Completion; proposed Mitigated Negative Declaration for the **"Conditional Use Permit, 13-05; for the Hanford 12 Project;"** located in the City of Hanford; Kings County, California

Dear Mr. Kassik:

The Native American Heritage Commission (NAHC) has reviewed the above-referenced environmental document. This project is also subject to California Government Code Section 65040.2, 65352.3 *et seq.*

The California Environmental Quality Act (CEQA) states that any project which includes archeological resources, is a significant effect requiring the preparation of an EIR (CEQA guidelines 15064.5(b). To adequately comply with this provision and mitigate project-related impacts on archaeological resources, the Commission recommends the following actions be required:

Contact the appropriate Information Center for a record search to determine :If a part or all of the area of project effect (APE) has been previously surveyed for cultural places(s), The NAHC recommends that known traditional cultural resources recorded on or adjacent to the APE be listed in the draft Environmental Impact Report (DEIR).

If an additional archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey. We suggest that this be coordinated with the NAHC, if possible. The final report containing site forms, site significance, and mitigation measurers should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum, and not be made available for pubic disclosure pursuant to California Government Code Section 6254.10.

A list of appropriate Native American Contacts for consultation concerning the project site has been provided and is attached to this letter to determine if the proposed active might impinge on any cultural resources. Lack of surface evidence of archeological resources does not preclude their subsurface existence.

California Government Code Section 65040.12(e) defines "environmental justice" to provide "fair treatment of People...with respect to the development, adoption, implementation, and enforcement of environmental laws, regulations and policies" and Executive Order B-10-11 requires consultation with Native American tribes their elected officials and other representatives of tribal governments to provide meaningful input into the development of legislation, regulations, rules, and policies on matters that may affect tribal communities.

Lead agencies should include in their mitigation plan provisions for the identification and evaluation of accidentally discovered archeological resources, pursuant to California Environmental Quality Act (CEQA) §15064.5(f). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American, with knowledge in cultural resources, should monitor all ground-disturbing activities. Also, California Public Resources Code Section 21083.2 require documentation and analysis of archaeological items that meet the standard in Section 15064.5 (a)(b)(f).

Lead agencies should consider first, avoidance for sacred and/or historical sites, pursuant to CEQA Guidelines 15370(a). Then if the project goes ahead then, lead agencies include in their mitigation and monitoring plan provisions for the analysis and disposition of recovered artifacts, pursuant to California Public Resources Code Section 21083.2 in consultation with culturally affiliated Native Americans.

Lead agencies should include provisions for discovery of Native American human remains in their mitigation plan. Health and Safety Code §7050.5, CEQA §15064.5(e), and Public Resources Code §5097.98 mandates the process to be followed in the event of an accidental discovery of any human remains in a location other than a dedicated cemetery.

Sincerely,

Dave Singleton
Program Analyst

CC: State Clearinghouse

Attachment: Native American Contacts list

Native American Contacts
Kings County California
December 16, 2013

Tule River Indian Tribe
Neil Peyron, Chairperson
P.O. Box 589 Yokuts
Porterville , CA 93258
chairman@tulerivertribe-nsn.
(559) 781-4271
(559) 781-4610 FAX

Wuksache Indian Tribe/Eshom Valley Band
Kenneth Woodrow, Chairperson
1179 Rock Haven Ct. Foothill Yokuts
Salinas , CA 93906 Mono
kwood8934@aol.com Wuksache
831-443-9702

Table Mountain Rancheria
Michael Russell, Tribal Administrator
P.O. Box 410 Yokuts
Friant , CA 93626-0177
(559) 822-2587
(559) 822-2693 FAX

Kings River Choinumni Farm Tribe
Stan Alec
642 West Barstow Ave. #E Foothill Yokuts
Clovis , CA 93612 Choinumni

559-647-3227 - cell

Table Mountain Rancheria
Bob Pennell, Cultural Resources Director
P.O. Box 410 Yokuts
Friant , CA 93626-0177
(559) 325-0351
(559) 217-9718 - cell
(559) 325-0394 FAX

Santa Rosa Tachi Rancheria
Lalo Franco, Cultural Coordinator
P.O. Box 8 Tachi
Lemoore , CA 93245 Tache
(559) 924-1278 - Ext. 5 Yokut
(559) 924-3583 - FAX

Kings River Choinumni Farm Tribe
John Davis, Chairman
1064 Oxford Avenue Foothill Yokuts
Clovis , CA 93612-2211 Choinumni
(559) 307-6430

Tule River Indian Tribe
Kerri Vera, Environmental Department
P.O. Box 589 Yokuts
Porterville , CA 93258
(559) 783-8892

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of the statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

his list s only applicable for contacting local Native Americans with regard to cultural resources for the proposed SSCH#2013111049; CEQA Notice of Completion; proposed Mitigated Negative declaration flro the CUP 13-05 for the Hanford 12 Project; located in the City of Hanford; Kings County, California.

Native American Contacts
Kings County California
December 16, 2013

Tule River Indian Tribe
Joey Garfield, Tribal Archeological
P.O. Box 589 Yokuts
Porterville , CA 93258
(559) 783-8892

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wired to a 500-750 kW inverter. The variation in number of blocks will be dependent on the PV module size of which will range in size from 240 Wp to 305 Wp.

Three inverter/switch gear/transformer pads will be centrally located on each of the parcels. These inverter pads will be approximately 15 feet by 30 feet. Equipment may also be mounted on concrete pads with shade enclosures.

The proposed Project will include the installation of real-time telemetry to provide Watt and VAR flow from the generation facility to the SCE distribution system. Telemetry will be installed in the existing ROW and include a Remote Terminal Unit and a T1 line from the phone company to the proposed Project location. This T1 line may be provide by a direct line or by microwave. Telemetry may be accomplished through a dedicated or a centralized RTU. Communications lines will also be used for the Applicant's on-site security and monitoring/control system. The facility will be designed and operated with the Applicant's proprietary Supervisory Control and Data Acquisition (SCADA) system to allow remote monitoring of facility operation and/or remote control of critical components. Within the site, the cabling required for the monitoring system will typically be installed in buried conduit, leading to a centrally located (or series of appropriately located) SCADA system electronic cabinets in one of the control rooms, to be designated as the primary control room. External telecommunications connections to the SCADA system cabinets may be through either wireless or hard wired connections to locally available commercial service providers.

A weather station will also be configured to collect meteorological data such as solar resources, temperature, humidity, precipitation, pressure, and wind direction. The meteorological instruments are mounted 10 feet high on a pole at one of the control rooms well inside the property perimeter.

Preferred access to the site will be from Orchard Drive from a common access onto Orchard Drive using the existing road easement for an extension to 9 ¾ Avenue which is being proposed to be vacated. The Applicant is concurrently requesting that Kings County vacate approximately 680' of a 50' road easement for an extension to Avenue 9 ¾. An alternative access would be for each site to have a separate access along Orchard Drive.

Interior service driveways will be 18- 20 feet wide and consist of crushed aggregate. The 10-14 feet space between the rows will be compacted and will provide service access to vehicles for maintenance, repair and cleaning. Though four designated gravel parking spaces will be provided on-site, there will be no employees stationed at the site on a permanent basis.

For public safety and security, six feet tall fencing with privacy slats and security wire will be installed around the perimeter of the proposed Project consistent with County requirements under the building permit. The fence will be constructed with a five to seven inch opening at the base to allow wildlife movement through the site.

A motion-activated security lighting system may be installed with the lights hooded and directionally aligned to interior to minimize off-site light and glare. The motion sensor will be calibrated to moving objects greater than 50 pounds. If the lights are motion-triggered, a signal would go to the Applicant's off-site security service and/or to central off-site control room to remotely control multiple projects. An off-site security services and/or monitoring

electrical generating facilities that commercially produce power for sale as a conditional use in the Commercial Service (CS) zone district. The Ordinance requires that solar photovoltaic electrical generating facilities that commercially produce power for sale to comply with all local, regional, State, and Federal regulations.

IMPACT ASSESSMENT

I-a) Have a substantial adverse effect on a scenic vista?

Less Than Significant Impact. The predominant open space landscape in the Project area includes associated industrial facilities along with agricultural land located in the City of Hanford and several adjacent parcels in the County. The site is flat and there are no designated scenic resources or scenic vistas within the proposed Project vicinity. The Project will modify the existing character of the 18 acre subject site through the conversion of vacant fields that are used to store cotton, to a solar energy generation facility. The solar panel modules will be a maximum of 13 feet high and inverter station enclosures will be located away from the edges of the site separated by an 18-foot wide gravel access road. A 6' - 8' foot tall chain link fence will surround the site, limiting visibility of the facility from passing vehicles. The fence will be constructed with a five to seven inch opening at the base to allow wildlife movement through the site. Construction activities will occur over 4 - 6 months and will be visible from the adjacent roadsides for the first 2-3 weeks until the perimeter fence is constructed and the vinyl lath privacy barrier is installed. Due to the low heights of the proposed Project features and Project fencing, the Project would not degrade the visual quality of the site. The impact will be less than significant

I-b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

No Impact. The Scenic Highway Program protects and enhances California's natural scenic beauty by allowing county and city governments to apply to the California Department of Transportation (CalTrans) to establish a scenic corridor protection program. According to CalTrans, there is one eligible state scenic highway located in Kings County: State Route 41; however this scenic highway segments is located approximately 37 miles southwest of the Project site. As there are currently no designated scenic highways in the County and due to the distance of the eligible Scenic Highways, there would be no impact[3].

I-c) Substantially degrade the existing visual character or quality of the site and its surroundings?

Less Than Significant Impact. The proposed Project site is a fallow field, currently storing cotton. The Project site is primarily surrounded by rural neighborhoods to the north and south, a vacant lot to the west and row crops to the east. The solar energy generation facility will be similar in visual character to the existing landscape and viewshed, as electrical substations are found throughout rural and urban parts of the Central Valley. The Project will not degrade the existing visual character or quality of the area or its surroundings. The impact will be less than significant.

I-d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

[3] 2035 Kings County General Plan EIR, Section 4.1 Aesthetics

available following development of the project. Furthermore, the project is not expected to result in direct harm to any individuals of these species. Therefore, project development will result in a less than significant impact on these species and no mitigation is required (see Appendix C).

Active Raptors and birds protected under the federal Migratory Bird Treaty Act.

In addition to the Swainson's hawk, other raptor species such as northern harriers, American kestrels and red-tailed hawks could potentially forage over the project site. Additionally, the site provides nesting habitat for a number of migratory bird species. Nearly all native bird species are protected by the federal Migratory Bird Treaty Act. Nearby trees and the sparse onsite vegetation could provide potential nesting habitat for these species. Several ground-nesting bird species could nest on site as well. If birds were to nest in these areas in the future prior to construction, such project-related activities could result in the abandonment of active nests or direct mortality to these birds. Construction activities that adversely affect the nesting success of raptors or result in mortality of individual birds constitute a violation of state and federal laws and would be considered a significant impact under CEQA. Implementation of the following measures will reduce any impacts to protected nesting birds including Swainson's hawk to less than significant.

BIO-1 (avoidance). In order to avoid impacts to all nesting raptors and other migratory birds from tree removal, grading, and construction, these activities shall occur between September 1 and January 31. This will ensure that construction does not coincide with the nesting season (February 1 to August 31).

BIO-2 (pre-construction surveys). If brushing, grading, or construction must occur between February 1 and August 31, a qualified biologist shall conduct pre-construction surveys for active raptor and migratory bird nests within 30 days of the onset of these activities. Pre-construction surveys for Swainson's Hawk shall be based on the method developed by the Swainson's Hawk Technical Advisory Committee.

BIO-3 (establish buffers). Should any active nests be discovered in or near proposed construction zones, the biologist shall identify a suitable construction-free buffer around the nest. This buffer shall be identified on the ground with flagging or fencing, and will be maintained until the biologist has determined that the young have fledged.

BIO-4 (prevent entrapment). Should any vertical tubes, such as solar mount poles, chain link fencing poles, or any other hollow poles be utilized on site, the vertical pole shall be capped immediately after installation to prevent avian fatalities.

BIO-5 Should a known Swainson's Hawk nest be discovered in a tree on the Project site, the tree should be left standing. If avoiding the tree is not practicable, the tree should be replaces, onsite at a 3:1 ratio, with a species of tree known to be used for nesting by local Swainson's Hawk.

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

No Impact. Riparian habitat is absent from the site. Rural residential lands constitute the majority of the types of habitat on the site and surrounding vicinity and are not considered habitats of special

Table 6
Typical Construction Noise Levels[49]

Type of Equipment	dBA at 50 ft	
	Without Feasible Noise Control	With Feasible Noise Control[1]
Dozer or Tractor	80	75
Excavator	88	80
Scraper	88	80
Front End Loader	79	75
Backhoe	85	75
Grader	85	75
Truck	91	75

[1] Feasible noise control includes the use of intake mufflers, exhaust mufflers and engine shrouds operating in accordance with manufacturers specifications.

According to the 2035 Kings County General Plan "Noise level allowances for various types of land uses reflect the varying noise sensitivities associated with those uses. Residences, hotels/motels, hospitals, schools, and libraries are some of the most sensitive land uses to noise intrusion and therefore have more stringent noise level allowances than most commercial or agricultural uses that are not subject to impacts such as sleep disturbance"[50]. However, residences and schools located adjacent to major high-volume roadways as well as State Routes such as 41, 43, and 198, and other State Routes within the vicinity within Kings County may experience elevated noise levels.

The nearest sensitive receptors are 38 rural residences located within a 300 foot radius north and south of the Project site along Orchard Drive. Three additional rural residential units are located north of the Project site along 9¾ Avenue. Although the Project will not affect a hospital facility, Hanford Community Medical Facility is approximately 2.10 miles northwest of the Project site at the intersection of W. Lacey Boulevard and Greenfield Avenue in Hanford. Construction of the proposed Project is anticipated to last four to six months. All related construction activities and Project operations will comply with the standards set forth by the Noise Standards in the Noise Element of the 2035 Kings County General Plan. Construction activities would take place during daylight hours between 6 a.m. and 7 p.m. on weekdays and 7 a.m. and 5 p.m. on weekends, except as necessary for safety reasons or to perform specific construction activities when electrical clearances are available. Construction activities will comply with Noise Standards in the Noise Element of the 2035 Kings County General Plan and be conducted during day light hours, Monday through Friday, excluding holidays.

Post construction activities will include site system testing, commissioning and site clean-up. The Project would adhere to the following Noise Element Policy:

N Policy B1.1.3: Noise associated with construction activities shall be considered temporary, but will still be required to adhere to applicable County Noise Element standards.

Adherence to the General Plan policy would ensure that any potential impacts related to noise levels would remain less than significant.

[49] US Environmental Protection Agency 1971
[50] 2035 Kings County General Plan EIR, p. 4.10-1

4 MITIGATION MONITORING AND REPORTING PROGRAM

This Mitigation Monitoring and Reporting Program (MMRP) has been formulated based upon the findings of the Initial Study/Mitigated Negative Declaration (IS/MND) for the Hanford 12 Project (proposed Project) in Kings County (County). The MMRP lists mitigation measures recommended in the IS/MND for the proposed Project and identifies monitoring and reporting requirements.

Table 8 presents the mitigation measures identified for the proposed Project. Each mitigation measure is numbered with a symbol indicating the topical section to which it pertains, a hyphen, and the impact number. For example, AIR-2 would be the second mitigation measure identified in the Air Quality analysis of the IS/MND.

The first column of Table 8 identifies the mitigation measure. The second column, entitled "When Monitoring is to Occur," identifies the time the mitigation measure should be initiated. The third column, "Frequency of Monitoring," identifies the frequency of the monitoring of the mitigation measure. The fourth column, "Agency Responsible for Monitoring," names the party ultimately responsible for ensuring that the mitigation measure is implemented. The last columns will be used by the County to ensure that individual mitigation measures have been complied with and monitored.

Table 8

Mitigation Monitoring Plan

Mitigation Measure/Condition of Approval	When Monitoring is to Occur	Frequency of Monitoring	Agency Responsible for Monitoring	Method to Verify Compliance	Verification of Compliance		
Biological Resources:							
BIO-1: (avoidance). In order to avoid impacts to all nesting raptors and other migratory birds from tree removal, grading, and construction, these activities shall occur between September 1 and January 31. This will ensure that construction does not coincide with the nesting season (February 1 to August 31).	Prior to construction	During construction and closure	Kings County	Field inspection			
BIO-2: (pre-construction surveys). If brushing, grading, or construction must occur between February 1 and August 31, a qualified biologist shall conduct pre-construction surveys for active raptor and migratory bird nests within 30 days of the onset of these activities. Pre-construction surveys for Swainson's Hawk shall be based on the method developed by the Swainson's Hawk Technical Advisory Committee.	Prior to construction	Monthly monitoring during construction	Kings County	Field Inspection			
BIO-~~2~~3: (establish buffers). Should any active nests be discovered in or near proposed construction zones, the biologist shall identify a suitable construction-free buffer around the nest. This buffer shall be identified on the ground with flagging or fencing, and will be maintained until the biologist has determined that the young have fledged.	Prior to construction	Monthly monitoring during construction	Kings County	Field Inspection			
BIO-4: (prevent entrapment). Should any vertical tubes, such as solar mount poles, chain link fencing poles, or any other hollow poles be utilized on site, the vertical pole shall be capped immediately after installation to prevent avian fatalities.	Prior to and during construction	Monthly monitoring during construction	Kings County	Field Inspection			

Mitigation Measure/Condition of Approval	When Monitoring is to Occur	Frequency of Monitoring	Agency Responsible for Monitoring	Method to Verify Compliance	Verification of Compliance		
BIO – 5: Should a known Swainson's Hawk nest be discovered in a tree on the Project site, the tree should be left standing. If avoiding the tree is not practicable, the tree should be replaces, onsite at a 3:1 ratio, with a species of tree known to be used for nesting by local Swainson's Hawk.	Prior to construction	During construction and reclamation	Kings County	Field Inspection			
Cultural Resources:							
CUL-1: If, in the course of Project construction or operation, any archaeological or historical resources are uncovered, discovered, or otherwise detected or observed, activities within fifty (50) feet of the find shall be ceased. A qualified archaeologist shall be contacted and advise the County of the site's significance. If the findings are deemed significant by the Kings County Community Development Agency, appropriate mitigation measures shall be required prior to any resumption of work in the affected area of the Project.	During construction	During construction	Kings County	Field inspection			
CUL-2: If cultural resource remains are encountered during construction or land modification activities work shall stop and the County shall be notified at once to assess the nature, extent, and potential significance of any cultural remains. If such remains are determined to be significant, appropriate actions shall be determined. Depending upon the nature of the find, mitigation could involve avoidance, documentation, or other appropriate actions to be determined by a qualified archaeologist. For example, activities within 50 feet of the find shall be ceased.	Ongoing	During construction	Kings County	Field inspection			

Mitigation Measure/Condition of Approval	When Monitoring is to Occur	Frequency of Monitoring	Agency Responsible for Monitoring	Method to Verify Compliance	Verification of Compliance		
Hazards and Hazardous Materials:							
HAZ-1 The constructor and operator of the Project shall develop an Injury and Illness Prevention Program and project-specific health and safety plans. These plans should include but not be limited to the following: • Compliance with the SJVAPCD's Regulation VIII and SJVAPCD-approved Dust Control Plan; • Train workers and supervisors on how to recognize symptoms of illness related to Valley Fever; • Provide pre-construction training and instruction regarding requirements for on-site construction pursuant to the approved Dusts Control Plan; • Limit workers' exposure to outdoor dust in disease-endemic areas; • When soil will be disturbed by heavy equipment or vehicles, wet the soil with water or other permitted soil stabilizer before disturbing it and continuously wet it while digging to keep dust levels down; • Heavy equipment, trucks, and other vehicles generating heavy dust should have enclosed cabs equipped with air filters; and • When exposure to dust is unavoidable, provide NIOSH-approved respiratory protection to all employees.	Prior to construction	During construction and closure	Kings County	Field inspection			

KINGS COUNTY COMMUNITY
DEVELOPMENT AGENCY
1400 WEST LACEY BOULEVARD
HANFORD, CA 93230

HANFORD 12 PROJECT

Conditional Use Permit No. 13-05

Initial Study &
Mitigated Negative Declaration

November 2013

Prepared by:

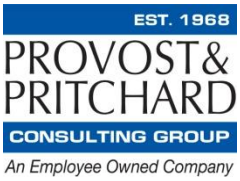


TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

APPENDICES

CHAPTER 1

INTRODUCTION

CHAPTER 1-INTRODUCTION

The Kings County Community Development Agency (Agency) has prepared this Initial Study/Mitigated Negative Declaration (IS/MND) for Conditional Use Permit No. 13-05 to address the environmental effects of the ImMODO California 1, LLC Solar Project (Project). This document has been prepared in accordance with the California Environmental Quality Act (CEQA), Public Resources Code §21000 et.seq. The Kings County Community Development Agency is the CEQA lead agency for this proposed Project.

The proposed Project involves the construction and operation of a three megawatt alternating current solar photovoltaic power generating facility. The Project would also include an interconnection to an existing Southern California Edison 12 kilovolt distribution line immediately south of the site, as well as the installation of low-impact lighting and fencing for safety purposes. The proposed Project is described in detail in Chapter 2, Project Description.

Regulatory Information

An Initial Study (IS) is a document conducted by a lead agency to determine if a project may have a significant effect on the environment. In accordance with the California Code of Regulations Title 14 (Chapter 3, §15000 et seq.)-- also known as the CEQA Guidelines-- Section 15064 (a)(1) states an environmental impact report (EIR) must be prepared if there is substantial evidence in light of the whole record that the proposed project under review may have a significant effect on the environment and should be further analyzed to determine mitigation measures or project alternatives that might avoid or reduce project impacts to less than significant. A negative declaration may be prepared instead, if the lead agency finds that there is *no* substantial evidence, in light of the whole record that the project may have a significant effect on the environment. A negative declaration is a written statement describing the reasons why a proposed project, not exempt from CEQA pursuant to §15300 et seq. of Article 19 of the Guidelines, would not have a significant effect on the environment and, therefore, why it would not require the preparation of an EIR (CEQA Guidelines Section 15371). According to CEQA Guidelines Section 15070, a negative declaration shall be prepared for a project subject to CEQA when either:

a) The IS shows there is no substantial evidence, in light of the whole record before the agency, that the proposed project may have a significant effect on the environment, or

b) The IS identified potentially significant effects, but:

(1) Revisions in the project plans or proposals made by or agreed to by the applicant before the proposed negative declaration and initial study is released for public review would avoid the effects or mitigate the effects to a point where clearly no significant effects would occur is prepared, and

(2) There is no substantial evidence, in light of the whole record before the agency, that the proposed project *as revised* may have a significant effect on the environment. If revisions are adopted by the Lead Agency into the proposed project in accordance with the CEQA Guidelines Section 15070(b), a *Mitigated Negative Declaration (MND)* is prepared.

Document Format

This IS/MND contains five chapters, and five technical appendices. Chapter 1, Introduction, provides an overview of the proposed Project and the CEQA environmental documentation process. Chapter 2, Project Description, provides a detailed description of proposed Project objectives and components. Chapter 3, Impact Analysis, presents the CEQA checklist and environmental analysis for all impact areas, mandatory findings of significance, and feasible mitigation measures. If the proposed Project does not have the potential to significantly impact a given issue area, the relevant section provides a brief discussion of the reasons why no impacts are expected. If the proposed Project could have a potentially significant impact on a resource, the issue area discussion provides a description of potential impacts, and appropriate mitigation measures and/or permit requirements that would reduce those impacts to a less than significant level. Chapter 4, Mitigation Monitoring and Reporting Program (MMR&P), provides the proposed mitigation measures, completion timeline, and person/agency responsible for implementation and Chapter 5, List of Preparers, provides a list of key personnel involved in the preparation of the IS/MND.

Site photos, the NRCS Custom Soil Resource Report, CalEEMod Output Files, Biological Reconnaissance Survey Report and Cultural Resources Records Search are provided as technical appendices at the end of this document.

Environmental impacts are separated into the following categories:

Potentially Significant Impact. This category is applicable if there is substantial evidence that an effect may be significant, and no feasible mitigation measures can be identified to reduce impacts to a less than significant level. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

Less Than Significant After Mitigation Incorporated. This category applies where the incorporation of mitigation measures would reduce an effect from a "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measure(s), and briefly explain how they would reduce the effect to a less than significant level (mitigation measures from earlier analyses may be cross-referenced).

Less Than Significant Impact. This category is identified when the proposed Project would result in impacts below the threshold of significance, and no mitigation measures are required.

No Impact. This category applies when a project would not create an impact in the specific environmental issue area. "No Impact" answers do not require a detailed explanation if they are adequately supported by the information sources cited by the lead agency, which show that the impact does not apply to the specific project (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis.)

Acronyms Used in this Document

CalEEMod	California Emissions Estimator Model
CEQA	California Environmental Quality Act
EIR	Environmental Impact Report
IS	Initial Study
LLC	Limited Liability Corporation
MMR&P	Mitigation Monitoring & Reporting Program
MND	Mitigated Negative Declaration
MW	Megawatt
NRCS	Natural Resources Conservation Service
PV	Photovoltaic
RMA	Resources Management Agency
USDA	United States Department of Agriculture

CHAPTER 2

PROJECT DESCRIPTION

CHAPTER 2-PROJECT DESCRIPTION

Project Background and Objectives

1. Project Title:

Conditional Use Permit No. 13-05 for the Hanford 12 Project

2. Lead Agency Name and Address:

Kings County Community Development Agency
1400 W. Lacey Blvd.
Hanford, CA 93230

3. Contact Person and Phone Number:

Proponent
Sandy Roper, Principal Planner
(559) 852-2670

CEQA Consultant
Provost & Pritchard Consulting Group
Dawn Marple, Project Manager
(559) 636-1166

4. Project Location:

The Project is located in northeastern Kings County, central California, approximately 185 miles southeast of Sacramento and 72 miles northwest of Bakersfield (see Figure 1). The Project site is located west of State Route (SR) 43 and south of SR 198 and more specifically, immediately north of Orchard Drive and east of 10th Avenue. The Project can be found within the Hanford, CA, United States Geological Survey (USGS) 7.5 minute quadrangle, in Section 6, Township 19 South, Range 22 East, M. D. B & M. The Project site is located on Assessor Parcel Number 016-160-069 and -024.

5. Latitude and Longitude:

N 36° 18’ 23.5146”, W 119° 37’ 49.2306”

6. General Plan Designation:

Light Industrial (see Figure 2)

7. Zoning:

Light Industrial District (ML) (See Figure 3)

8. Description of Project:

Project Objectives:

The 18-acre Project would provide Kings County as well as the State of California with a renewable energy source that would assist the State of California in complying with the Renewables Portfolio Standard (RPS) under Senate Bill 1078, which requires that 33 percent of all electricity sold in the state to be generated from renewable energy sources by the year 2020. The applicant is proposing to construct the project to meet the following objectives:

- Provide up to a 3-MW project generating electricity through the optimization of renewable solar energy sources
- Stimulate the local economy through job creation
- Support California's efforts to reduce greenhouse gas (GHG) emissions consistent with the timeline established by California Assembly Bill 32, the Global Warming Solutions Act of 2006
- Support California's aggressive RPS goal of 33 percent renewable energy generation by 2020
- Meet obligations under a proposed Power Purchase Agreement with a utility to assist it in meeting its RPS mandate
- Develop an economically feasible and commercially financeable project
- Provide solar-generated electricity to the California Independent System Operator grid
- Provide property tax revenues to Kings County

The 3 MW Solar Generation Facility (Project) will include the installation of approximately 16,700 to 23,750 solar modules, depending on the final module selection and their corresponding size ranging generally from 240-305 watts per module. This Project will generate approximately 6,049 MWh of electricity in the first year which is enough energy to power 100% of the electricity usage of 660 households in Kings County. Also included in the Project is the interconnection of the Solar Generation Facility to the existing Southern California Electric (SCE) 12 kV distribution line that runs north along Orchard Drive and ultimately connects to the Hanford Substation.

Project Components

The Applicant will install PV modules upon a fixed-mount racking system which will generally consist of arrays of 12-18 modules installed in 2-4 rows of modules approximately 12 feet tall and 20-30 feet long. Each array will have generally 3-5 ram-post supports which will be pile-driven into the ground to depths of 6-10 feet. The arrays will be generally tilted at approximately 10-50 degrees facing south. The maximum height of the arrays is not more than 13 feet and the ground clearance at the lowest point of the array is about 2 feet. The arrays are aligned in generally even length rows with the centerline of each row approximately 18-28 feet apart. The clear space between rows of modules will be 10-16 feet providing enough space for service and cleaning vehicles.

The solar generator will consist of 500-750 kW groups. Electrically the modules will connect into strings of modules which will be generally configured into 550-680 blocks which will then be

wired to a 500-750 kW inverter. The variation in number of blocks will be dependent on the PV module size of which will range in size from 240 Wp to 305 Wp.

Three inverter/switch gear/transformer pads will be centrally located on each of the parcels. These inverter pads will be approximately 15 feet by 30 feet. Equipment may also be mounted on concrete pads with shade enclosures.

The proposed Project will include the installation of real-time telemetry to provide Watt and VAR flow from the generation facility to the SCE distribution system. Telemetry will be installed in the existing ROW and include a Remote Terminal Unit and a T1 line from the phone company to the proposed Project location. This T1 line may be provide by a direct line or by microwave. Telemetry may be accomplished through a dedicated or a centralized RTU. Communications lines will also be used for the Applicant's on-site security and monitoring/control system. The facility will be designed and operated with the Applicant's proprietary Supervisory Control and Data Acquisition (SCADA) system to allow remote monitoring of facility operation and/or remote control of critical components. Within the site, the cabling required for the monitoring system will typically be installed in buried conduit, leading to a centrally located (or series of appropriately located) SCADA system electronic cabinets in one of the control rooms, to be designated as the primary control room. External telecommunications connections to the SCADA system cabinets may be through either wireless or hard wired connections to locally available commercial service providers.

A weather station will also be configured to collect meteorological data such as solar resources, temperature, humidity, precipitation, pressure, and wind direction. The meteorological instruments are mounted 10 feet high on a pole at one of the control rooms well inside the property perimeter.

Preferred access to the site will be from Orchard Drive from a common access onto Orchard Drive using the existing road easement for an extension to 9 ¾ Avenue which is being proposed to be vacated. The Applicant is concurrently requesting that Kings County vacate approximately 680' of a 50' road easement for an extension to Avenue 9 ¾. An alternative access would be for each site to have a separate access along Orchard Drive.

Interior service driveways will be 18- 20 feet wide and consist of crushed aggregate. The 10-14 feet space between the rows will be compacted and will provide service access to vehicles for maintenance, repair and cleaning. Though four designated gravel parking spaces will be provided on-site, there will be no employees stationed at the site on a permanent basis.

For public safety and security, six feet tall fencing with privacy slats and security wire will be installed around the perimeter of the proposed Project consistent with County requirements under the building permit.

A motion-activated security lighting system may be installed with the lights hooded and directionally aligned to interior to minimize off-site light and glare. The motion sensor will be calibrated to moving objects greater than 50 pounds. If the lights are motion-triggered, a signal would go to the Applicant's off-site security service and/or to central off-site control room to remotely control multiple projects. An off-site security services and/or monitoring technician/operator will control on-site, web-based video cameras to identify the nature of the intrusion alert and respond accordingly.

Interconnection

The proposed Project will interconnect to a SCE 12 kv distribution on the north side of Orchard Drive which connects to the Hanford Substation. On-site the feeds from the inverter/transformer pads will run to a switchgear and production meter at the point-of-ownership change (POC) at the perimeter fence line. Everything past the meter is owned by SCE and is considered to be on the "utility-side" of the meter.

Based upon SCE's System Impact Studies conducted for interconnection of this project, the SCE interconnection scope of work will consist of and not be limited to: primary riser poles, approximately 2 x 250' 1/0JCN UG 12kV Lines; and automation controls including remote controlled switches, metering, associated wiring and new 3-Way pad-mounted gas switches. SCE also will conduct 12kV Distribution Upgrades which may include the reprograming of a transducer.

Operation and Maintenance

The solar facility will be remotely operated and require no on-site daily operating staff. Occasional service employees may be on-site for scheduled, preventive maintenance as well as unscheduled service.

Combustible vegetation on and around the proposed Project boundary will be managed by the Applicant, and the proposed Project will include fire breaks around the proposed Project boundary in accordance with County and/or state standards. The Applicant will also coordinate with the County and state fire officials as necessary to provide photovoltaic training to fire responders and to construction, operational, and maintenance staff. The intent of this training will be to familiarize both responders and workers of the codes, regulations, associated hazards, and mitigation processes related to solar electricity. This training will include techniques for fire suppression of PV systems.

Primary water use by the proposed Project will be for solar module washing. The water will be provided by a third party from an off-site location and delivered by water trucks. Module washing is expected to require approximately 13,000 gallons, or 0.05 acre-feet per year will be used for the twice a year cleaning.

Construction

The project will require a County Building Permit and the construction period is anticipated to be approximately 4-6 months.

Each construction phase is expected to have the following stages and general durations:

- Site preparation including grading fencing, underground trenching. One month duration.
- Installation of PV structures, panels and control room equipment. Three month duration.
- System testing, commissioning, interconnection and clean up. One month duration.

Construction equipment will include the use of graders, compacters, trenchers, backhoes, forklifts, pile drivers, skid steers, front end loaders, and materials hauling trucks.

General hours during the construction phase will be conducted during day light hours, Monday through Friday, excluding holidays. The proposed Project construction will also include the installation of the PV panels and control rooms. Post construction activities will include site system testing, commissioning and site clean-up. The types of construction equipment and duration of each construction stage are detailed in Table 1.

Table 1
Proposed Project Construction Equipment

	No. Units	Duration Months	Period
Site preparation, grading, fencing, trenching		1	1 month
Water Truck 2,500 gal	1	1	
Grader	1	1	
Compactor	2	1	
Trencher	2	1	
Pick-up Truck	2	1	
5-kW Generator	2	1	
Equipment Transport Trucks (Delivery)	1	0.5	
Flat-Bed Trucks (Freight, Delivery)	2	3	
Installation PV structure, panels and control room equipment			3 months
Water Truck 2,500 gal	1	3	
Compactor	1	3	
Trencher	1	3	
Backhoe	2	3	
Skid Steers	2	3	
Forklifts	2	3	
Front-End Loaders	1	3	
Pile Driver	2	3	
20-Ton Dump Truck (Gravel Delivery)	1	0.5	
5-Cubic Yard Dump Truck	1	3	
5-kW Generator	2	3	
20-kW Generator	2	3	
Ready-Mix Trucks (Concrete Delivery)	1	0.5	
Flat-Bed Trucks (Freight, Delivery)	2	3	
Pick-Up Trucks	2	3	
Equipment Transport Trucks (Delivery)	1	0.5	
System testing, commissioning, clean-up			1 month
Water Truck 2,500 gal	1	1	
5-Cubic Yard Dump Truck	2	1	
Front-End Loaders	1	1	
Forklifts	1	1	
Backhoe	1	1	
5-kW Generator	1	1	
20-kW Generator	1	1	
Equipment Transport Trucks (Delivery)	1	0.5	
Pick-Up Trucks	2	1	

It is anticipated that proposed Project construction will require 65-80 construction workers. Approximately 10 daily construction equipment delivery trucks are anticipated and 60 construction worker trips per day are anticipated during the five months of construction, totaling an average of 70 construction vehicle round trips per day.

Construction will require temporary staging and storage areas for the proposed Project materials and equipment. The materials staging and storage will be located onsite in areas that will not be used for modules. Approximately 1.75 acre-feet of water will be needed for dust control during the construction period which equates to approximately 250 gallons per acre per day.

Only non-hazardous waste will be generated during proposed Project construction. The following wastes are anticipated: vegetative debris from site clearing, common household trash, cardboard, wood pallets, copper wire, scrap metal and wood wire spools most of which will be recycled. Although proposed Project construction is not expected to generate hazardous waste, field equipment used during construction has the potential to contain various hazardous materials such as diesel fuel, hydraulic oil, grease, solvents, adhesives, paints, and other petroleum-based products. These items will be separated, placed in secure bins or drums, and removed from the proposed Project site for disposal consistent with applicable local and state regulations.

9. Surrounding Land Uses and Setting:

Kings County is located in the south-central portion of the Central Valley and is 1,391 square miles in size. The Central Valley is a large, asymmetrical, northwestwardly-trending, structural trough formed between the uplands of the California Coast Ranges to the west and the Sierra Nevada to the east. The Central Valley is over 400 miles long and approximately 50 to 60 miles wide in area. The Valley is subdivided into the Sacramento Valley (north of the Sacramento-San Joaquin Delta) and the San Joaquin Valley (south of the Delta). The southern part of the Valley (including most of Kings County) internally drains into the Tulare Lake Bed, with flows derived from the distributaries of the Kings, Tule, and Kaweah rivers. Cross Creek is the lower reaches of the Kaweah River within Kings County. North of the Kings River, runoff is directed into the San Joaquin River, which flows northward[1].

The proposed Project is just south of the City of Hanford and immediately north of the census-designated place of Home Garden. Immediately to the north of the site is vacant land and a rural residential subdivision. Several of these residences are within a 300 feet radius of the site. There are 38 residences within 300 feet of the site which do not have direct views into the proposed Project site as their view is blocked by eucalyptus trees that boarder the residences to the north, south and west. The Hanford Municipal Airport and the Kings County Fairgrounds are also located north of the Project site. Farmland is immediately east of the Project site while vacant land is immediately to the west. The Project site itself is currently a vacant lot (See Figure 4)

[1] 2035 Kings County General Plan EIR (SCH#2008121020). Page 3-1.

10. Other Public Agencies Whose Approval May Be Required:

Discretionary approvals that may be required:

- State Water Resources Control Board – NPDES Construction General Permit
- Regional Water Quality Control Board, Central Valley Region – Waste Discharge Requirements
- San Joaquin Valley Air Pollution Control District – rules and regulations (Regulation VIII, Rule 9510, Rule 4641)
- California Public Utilities Commission – approval for utility upgrades (not anticipated to be necessary)

Ministerial approvals and agreements that may be required:

- Kings County – Franchise Route Agreement
- Kings County – building permits

Figure 1 - Regional Location

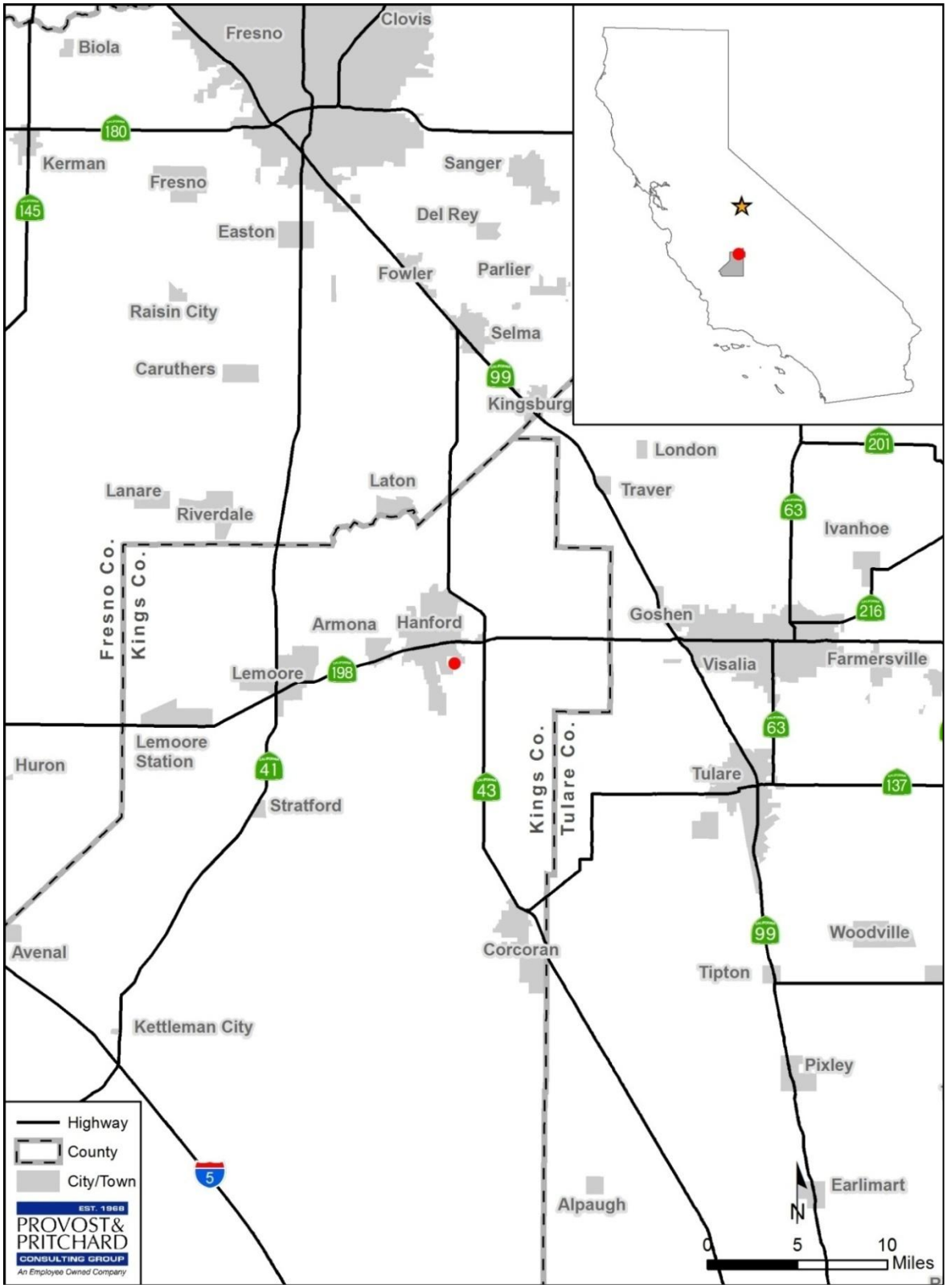


Figure 2 - General Plan Designation

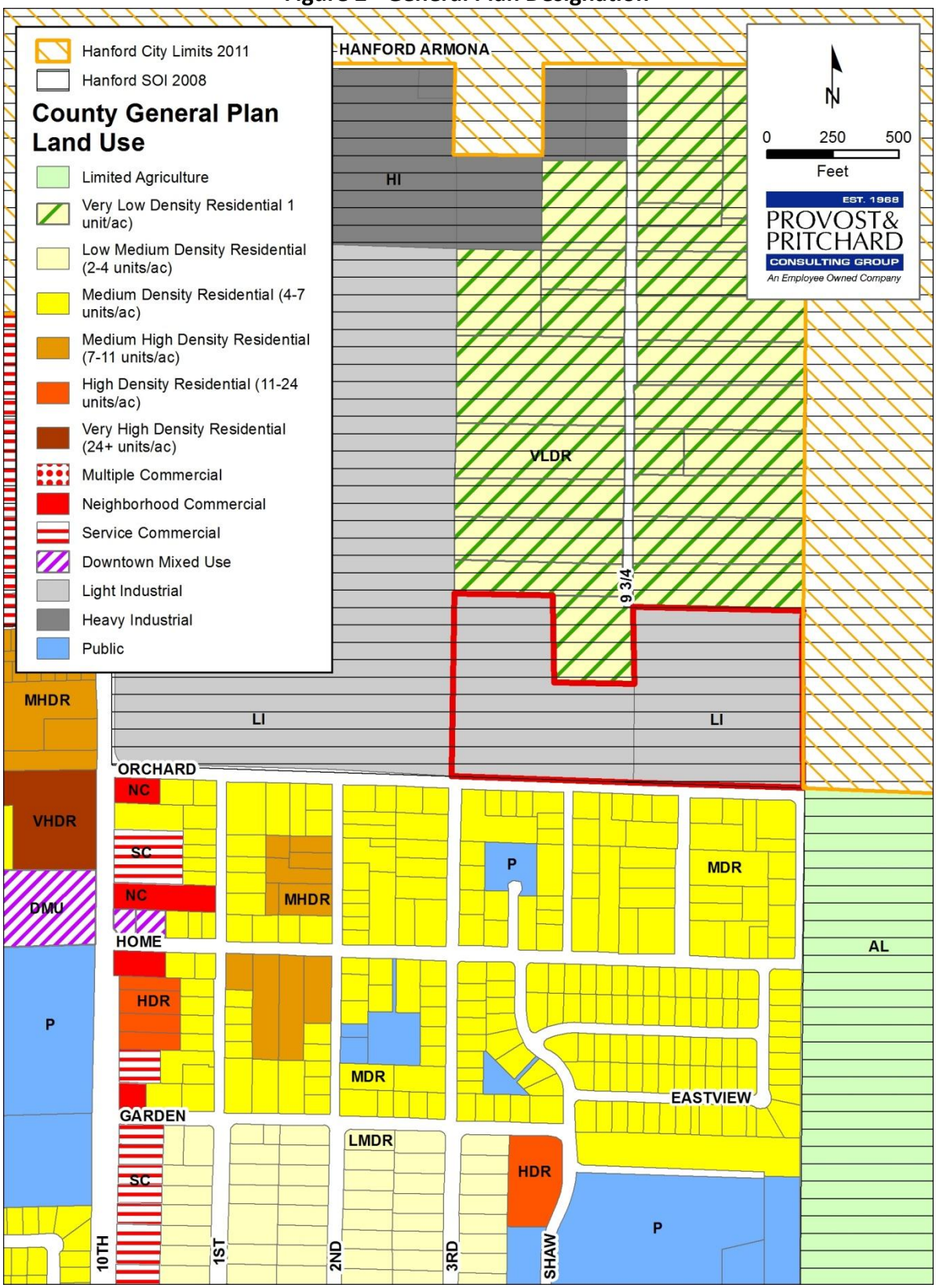


Figure 3 - Zoning

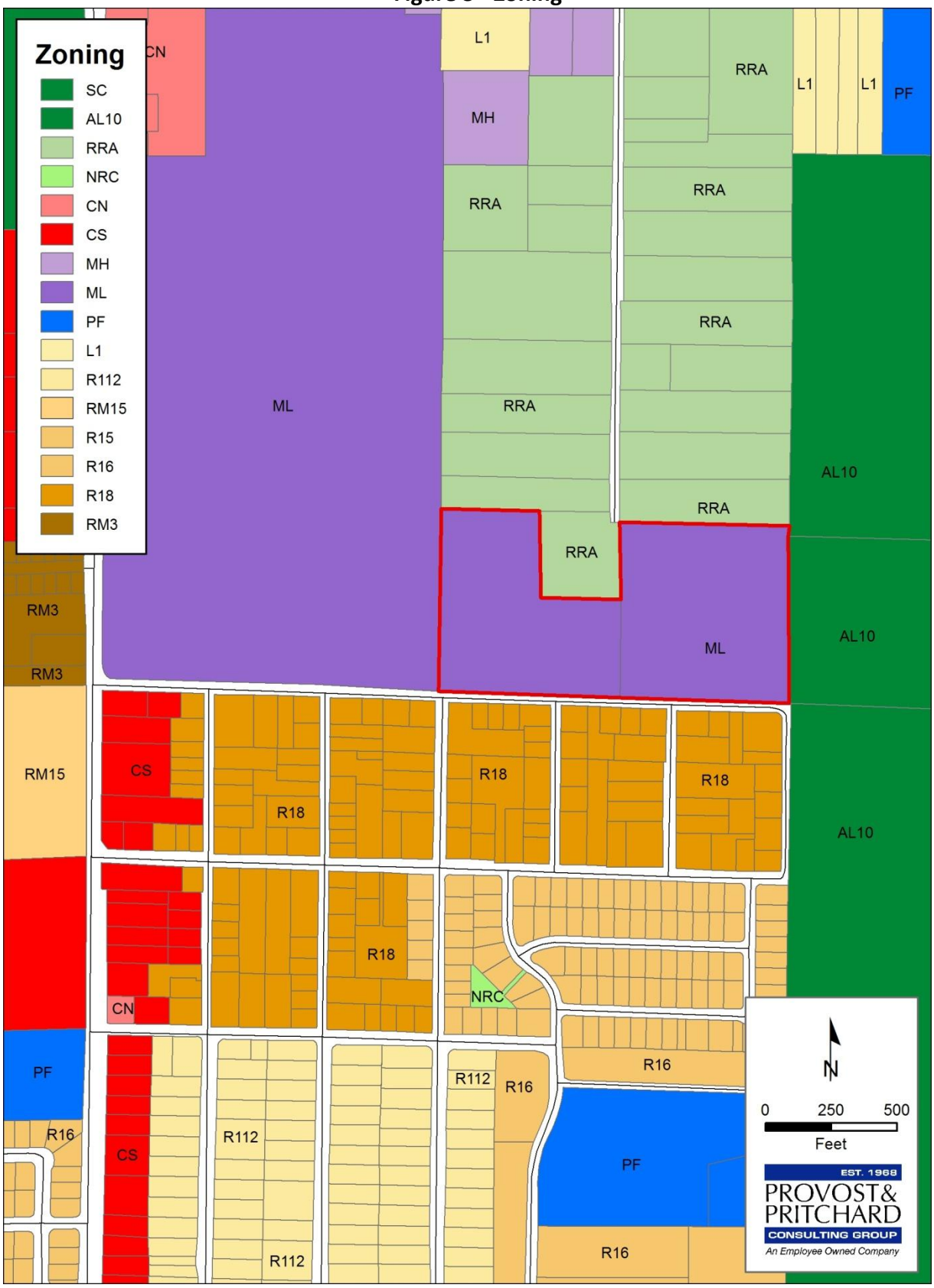
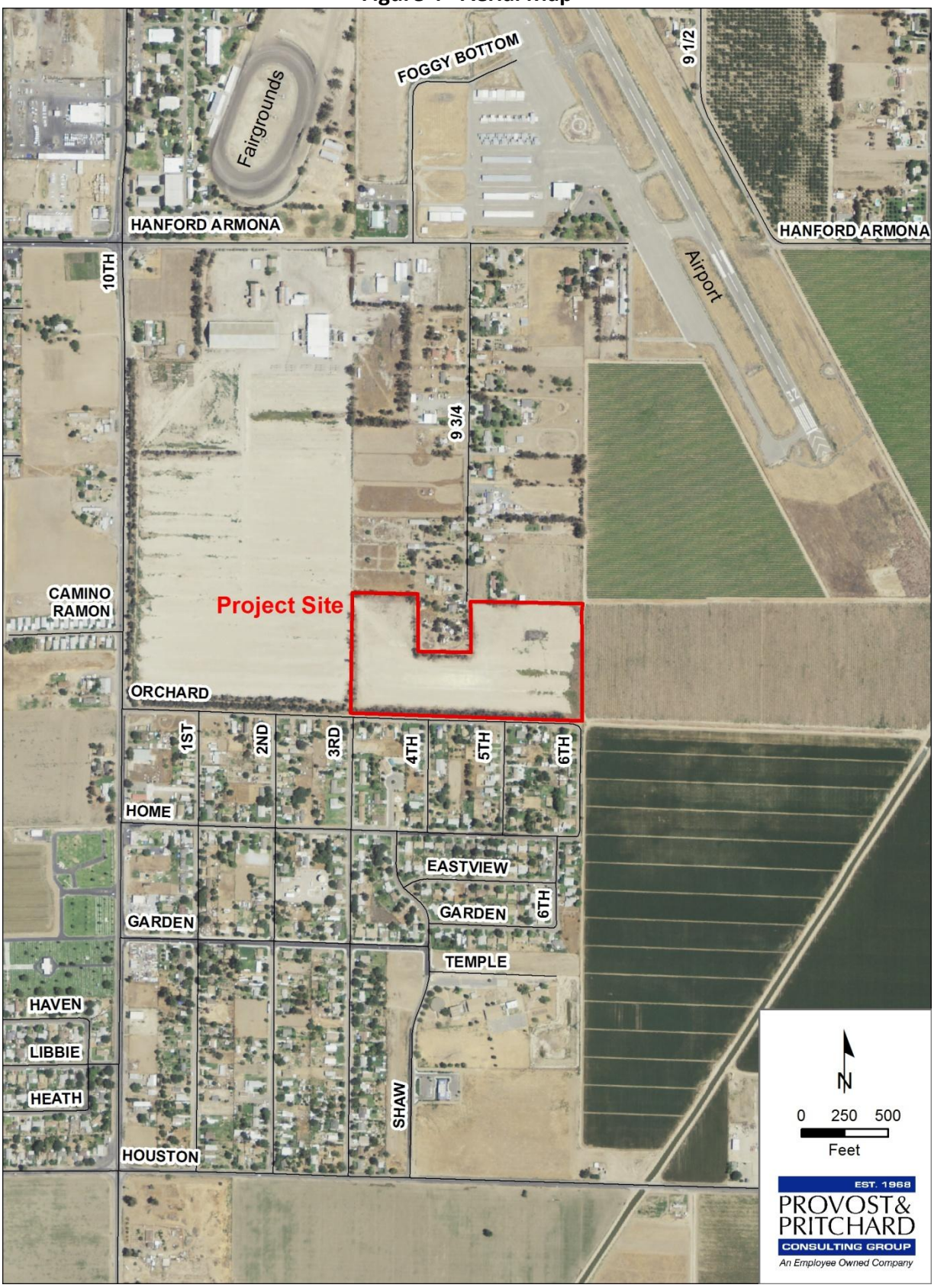


Figure 4 - Aerial Map



ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, as indicated by the checklist and subsequent discussion on the following pages.

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

DETERMINATION: (To be completed by the Lead Agency)
On the basis of this initial evaluation:

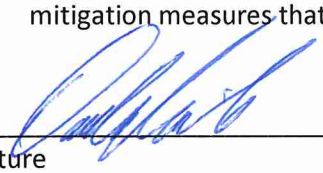
☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

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

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

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

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



Signature

11/12/13
Date

DAN KASSIK
Printed name

For

CHAPTER 3

IMPACT ANALYSIS

CHAPTER 3-IMPACT ANALYSIS

I. AESTHETICS

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

BASELINE CONDITIONS

Environmental Setting

Agricultural land within Kings County is the predominant open space landscape, representing approximately 91 percent of all unincorporated land within the County[1]. The Kings River is the closest scenic resource to the project site and is approximately 8.7 miles to the northwest.

In the vicinity of the Project site are local roads, other agricultural and grazing fields, rural residences, the unincorporated community of Home Garden, Kings County Fairgrounds, Hanford Municipal Airport, and eucalyptus trees. The Project site is disturbed industrially-zoned land with the east boundary of the property next to the City of Hanford. The parcel is currently vacant and has been used for storing cotton. The site is relatively flat with no remarkable elevation contours or geologic features.

There are residences both north and south of the Project site, a suburban neighborhood to the south and scattered suburban residences to the north. Several of these residences are within a 300 feet radius of the site. There are 38 residences within 300 feet of the site which do not have direct views into the proposed Project site as their view is blocked by eucalyptus trees that border the residences to the north, south and west.

[1] 2035 Kings County General Plan, 2010 (SCH#2008121020)

Regulatory Setting

Federal

Aesthetic resources are protected by several federal regulations, none of which are relevant to this project because it will not be located on lands administered by a federal agency, and the project applicant is not requesting federal funding or a federal permit.

State

Nighttime Sky – Title 24 Outdoor Lighting Standards: The Energy Commission adopted changes to Title 24, Parts 1 and 6, Building Energy Efficiency Standards (Standards), on November 5, 2003. These new Standards become effective on October 1, 2005. Included in the changes to the Standards are new requirements for outdoor lighting. The requirements vary according to which "Lighting Zone" the equipment is in. The Standards contain lighting power allowances for newly installed equipment and specific alterations that are dependent on which Lighting Zone the project is located in. Existing outdoor lighting systems are not required to meet these lighting power allowances. However, alterations that increase the connected load, or replace more than 50% of the existing luminaires, for each outdoor lighting application that is regulated by the Standards, must meet the lighting power allowances for newly installed equipment.

An important part of the Standards is to base the lighting power that is allowed on how bright the surrounding conditions are. The eyes adapt to darker surrounding conditions, and less light is needed to properly see; when the surrounding conditions get brighter, more light is needed to see. The least power is allowed in Lighting Zone 1 and increasingly more power is allowed in Lighting Zones 2, 3, and 4.

The Energy Commission defines the boundaries of Lighting Zones based on U.S. Census Bureau boundaries for urban and rural areas as well as the legal boundaries of wilderness and park areas (see Standards Table 10-114-A). By default, government designated parks, recreation areas and wildlife preserves are Lighting Zone 1; rural areas are Lighting Zone 2; and urban areas are Lighting Zone 3. Lighting Zone 4 is a special use district that may be adopted by a local government[2]. The proposed Project site is located in a rural area as designated by the U.S. Census Bureau and is therefore in Lighting Zone 2.

California Scenic Highway Program: The Scenic Highway Program allows county and city governments to apply to the California Department of Transportation (Caltrans) to establish a scenic corridor protection program and was created by the Legislature in 1963. Its purpose is to protect and enhance the natural scenic beauty of California highways and adjacent corridors, through special conservation treatment. The state laws governing the Scenic Highway Program are found in the Streets and Highways Code, Sections 260 through 263.

In addition, this project is being evaluated pursuant to CEQA.

[2] California Department of Energy. Title 24 Standards Table 10-114-, Lighting Zone Characteristics and Rules for Amendments by Local Jurisdictions. http://www.energy.ca.gov/title24/2005standards/outdoor_lighting/2004-09-30_LIGHTING_ZONES.PDF. Site accessed April 2012.

Local

2035 Kings County General Plan: Scenic resources, as designated by the County, primarily include the Coast Ranges to the southwest, with formations of the Chalk Buttes-Reef Ridge portion of the Kreyenhagen Hills, the Pyramid Hills, Cottonwood Pass, and Sunflower Valley. Other scenic resources include the various ridgelines located west of the County in adjacent Fresno County, which are visible along State Route 41 from the northern county line to Kettleman City.

As one of the agricultural Counties in the Central San Joaquin Valley, Kings County agricultural land serves a significant role in the County's agricultural based economy, and production of food and fiber for the rest of the Country. In addition to their economic value and commodity production, the vast stretches of green field crops, orchards and vineyards are also valued for their scenic beauty and representation of Kings County's identity.

General Plan goals, objectives, and policies pertaining to aesthetics:

LU Policy D1.3.4: Preserve the existing nighttime environment by limiting the illumination of areas surrounding new development. New lighting that is part of residential, commercial, industrial, or recreational development shall be oriented away from sensitive uses, and should be hooded, shielded, and located to direct light pools downward and prevent glare.

RC OBJECTIVE D3.1: Ensure that, in development decisions affecting riparian environments, the conservation of fish and wildlife habitat and the protection of scenic qualities are balanced with other purposes representing basic health, safety, and economic needs.

OS GOAL B1: Maintain and protect the scenic beauty of Kings County.

OS OBJECTIVE B1.1: Protect and enhance views from roadways which cross scenic areas or serve as scenic entranceways to cities and communities.

OS Policy B1.1.1: Coordinate with the Kings County Association of Governments to explore designation of State Route 41, between State Route 33 and the Kern County line, as an Official State Scenic Highway through the Caltrans Transportation Enhancement program.

OS OBJECTIVE B1.2 Preserve roadside landscapes which have high visual quality and contribute to the local environment.

OS Policy B1.2.1: Review new development and utility projects for compatibility and potential for impacting scenic view sheds along highly traveled scenic routes.

OS OBJECTIVE B1.3: Protect the scenic qualities of human-made and natural landscapes and prominent view sheds.

OS Policy B1.3.1: Require new development to be designed so that it does not significantly impact or block views of Kings County's natural landscape or other important scenic features.

Discretionary permit applications will be evaluated against this requirement as part of the development review process. New developments may be required, as appropriate to:

- Minimize obstruction of views from public lands and rights-of-way.
- Reduce visual prominence by keeping development and structures below ridgelines.
- Limit the impact of new roadways and grading on natural settings. Such limits shall be within design safety guidelines.

OS Policy B1.3.2: Protect the visual access to Kings River and other prominent watercourses by locating and designing new development to minimize visual impacts and obstruction of views of scenic watercourses from public lands and rights-of-way.

OS GOAL C1: Preserve the visual identities of Community Districts by maintaining open space separations between urban areas.

OS OBJECTIVE C1.1: Preserve open spaces, maintain rural character, and limit development in community separator areas.

OS Policy C1.1.1: Preserve the agricultural open space buffer between the Community of Armona and City of Hanford to maintain community separation between Lacey Boulevard and Front Street along the west side of 13th Avenue.

OS Policy C1.1.2: Preserve the Open Space land use buffer around the Armona Community Services District waste water treatment facility to include territory between 13th and 14th Avenues, and north of Houston Avenue.

OS Policy C1.1.3: Preserve the agricultural open space buffer between the Community of Armona and City of Lemoore to maintain community separation between State Route 198 and Hanford Armona Road along the east side of 15th Avenue.

Kings County Zoning Ordinance: The Kings County Zoning Ordinance establishes setback, parking and sign standards, building height limits, and building densities. Article 14 of the Kings County Zoning Ordinance includes the guidelines for permits for conditional uses, which allow the planning commission to make a finding that a proposed development is in conformity with the intent and provisions of the ordinance and as a guide for the issuance of building permits. Permits for conditional uses are also intended to protect the public welfare by ensuring that there will be no adverse effects of a project on surrounding property. It applies to any use listed within a particular zoning district as a conditional use subject to planning commission approval. It includes considerations relative to neighborhood compatibility, setbacks, building height, location of service, landscaping, fences and walls, views and obstructions, signs, and lighting. Specifically, permits for conditional uses ensure that proposed lighting is so arranged as to reflect the light away from adjoining properties.

King County Zoning Ordinance, Article 14 section 1402.D.2 include uses permitted in the ML District which are also identified by reference in section 1305.D. of the CS Commercial Service District. Solar photovoltaic electrical generating facilities are permitted subject to a Conditional Use Permit and planning commission approval within the ML Zone district. Proposed solar facilities within the ML Zone are subject to King County Zoning Ordinance section 1305.D.7 which permits solar photovoltaic

electrical generating facilities that commercially produce power for sale as a conditional use in the Commercial Service (CS) zone district. The Ordinance requires that solar photovoltaic electrical generating facilities that commercially produce power for sale to comply with all local, regional, State, and Federal regulations.

IMPACT ASSESSMENT

I-a) Have a substantial adverse effect on a scenic vista?

Less Than Significant Impact. The predominant open space landscape in the Project area includes associated industrial facilities along with agricultural land located in the City of Hanford and several adjacent parcels in the County. The site is flat and there are no designated scenic resources or scenic vistas within the proposed Project vicinity. The Project will modify the existing character of the 18 acre subject site through the conversion of vacant fields that are used to store cotton, to a solar energy generation facility. The solar panel modules will be a maximum of 13 feet high and inverter station enclosures will be located away from the edges of the site separated by an 18-foot wide gravel access road. A 6' - 8' foot tall chain link fence will surround the site, limiting visibility of the facility from passing vehicles. Construction activities will occur over 4 - 6 months and will be visible from the adjacent roadsides for the first 2-3 weeks until the perimeter fence is constructed and the vinyl lath privacy barrier is installed. Due to the low heights of the proposed Project features and Project fencing, the Project would not degrade the visual quality of the site. The impact will be less than significant.

I-b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

No Impact. The Scenic Highway Program protects and enhances California's natural scenic beauty by allowing county and city governments to apply to the California Department of Transportation (CalTrans) to establish a scenic corridor protection program. According to CalTrans, there is one eligible state scenic highway located in Kings County: State Route 41; however this scenic highway segments is located approximately 37 miles southwest of the Project site. As there are currently no designated scenic highways in the County and due to the distance of the eligible Scenic Highways, there would be no impact[3].

I-c) Substantially degrade the existing visual character or quality of the site and its surroundings?

Less Than Significant Impact. The proposed Project site is a fallow field, currently storing cotton. The Project site is primarily surrounded by rural neighborhoods to the north and south, a vacant lot to the west and row crops to the east. The solar energy generation facility will be similar in visual character to the existing landscape and viewshed, as electrical substations are found throughout rural and urban parts of the Central Valley. The Project will not degrade the existing visual character or quality of the area or its surroundings. The impact will be less than significant.

I-d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

[3] 2035 Kings County General Plan EIR, Section 4.1 Aesthetics

Less Than Significant Impact. The photovoltaic panels will have a maximum height of 13 feet from ground level and the entire site will be surrounded by six foot fencing with security wire, consistent with County requirements under the building permit. The photovoltaic panels are designed to be light-absorbing and will have an anti-reflective coating to reduce the reflectivity to less than that of water or glass[4]. The Project will include on-site lighting for safety, security, and emergency purposes. The lighting will be hooded and directed down to ensure that the lighting will only be visible from the ground. Any impact from the proposed Project to day or night-time glare will be less than significant.

[4] SunPower. 2009. SunPower Solar Module Glare and Reflectance. Technical Notification. September 29, 2009.

II. AGRICULTURE AND FOREST RESOURCES

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

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

BASELINE CONDITIONS

Environmental Setting

In 2010, Kings County was ranked 9th among California counties in agricultural production. The County is ranked 1st among California counties in cotton lint and cotton seed production; 2nd in the production of processing tomatoes; 3rd in the production of apricots and nectarines; and is ranked 4th among California counties in the production of the following commodities: milk and cream, plums, silage, turkeys, and wheat[5].

A review of the "Important Farmlands" mapping by the California Department of Conservation's (DOC's) Farmland Mapping and Monitoring Program (FMMP) shows that the proposed Project site is designated as Vacant or Disturbed Land. The FMMP provides statistics on conversion of farmland to nonagricultural uses for Kings County, where the project site is located. Of the total land area that was inventoried (890,784 acres), in 2006, Kings County had approximately 594,484 acres of Important Farmlands (including Prime Farmland, Farmland of Statewide Importance, Unique Farmland, and Farmland of Local Importance) and an additional 243,183 acres of grazing land. The remaining 53,117 acres of land were Urban and Built-up Land, Other Land, and Water Area. In the period between 2004 and 2006, Important Farmlands had shown a net decrease of 12,677 acres (2.1 percent) within the County[6]. Pursuant to Kings County's Priority Agricultural Land Model[7], the Project site is not identified as being within a designated classification of established priority agricultural land.

Historically, land use at the Project site has been used to store cotton; however, it is now vacant. The site is zoned by Kings County as ML - Light Industrial and Land adjacent to the site is developed into suburban residential neighborhoods to the north and south, vacant industrial property to the west, and agricultural land uses to the east which is located in the City of Hanford. No forest or timber land is present at the Project site or in the Project vicinity.

Regulatory Setting

Federal

Farmland Protection Policy Act: The Natural Resources Conservation Service, a federal agency within the U.S. Department of Agriculture, is the agency primarily responsible for implementation of the Farmland Protection Policy Act (FPPA). The FPPA was enacted after the 1981 Congressional report, Compact Cities: Energy-Saving Strategies for the Eighties indicated that a great deal of urban sprawl was the result of programs funded by the federal government. The purpose of the FPPA is to minimize federal programs' contribution to the conversion of farmland to non-agricultural uses by ensuring that federal programs are administered in a manner that is compatible with state, local, and private programs designed to protect farmland. Federal agencies are required to develop and review their policies and procures to implement the FPPA every two years[8].

[5] Kings County Department of Agriculture, 2011
[6] California Department of Conservation, 2006 - http://redirect.conservation.ca.gov/dlrp/fmmp/county_info_results.asp
[7] 2035 Kings County General Plan, Resource Conservation Element, Figure RC-13
[8] USDA, Natural Resource Conservation Service, 2011

Farm and Ranch Land Protection Program: The Farm and Ranch Land Protection Program (FRPP) provides matching funds to help purchase development rights to keep productive farm and ranchland in agricultural uses. Working through existing programs, USDA partners with state, tribal, or local governments and non-governmental organizations to acquire conservation easements or other interests in land from landowners. USDA provides up to 50 percent of the fair market easement values of the conservation easement. The FRPP is managed by NRCS.

To qualify, farmland must be part of a pending offer from a state, tribe, or local farmland protection program; be privately owned; have a conservation plan for highly erodible land; be large enough to sustain agricultural production; be accessible to markets for what the land produces; have adequate infrastructure and agricultural support services; have surrounding parcels of land that can support long-term agricultural production[8].

Land Evaluation and Site Assessment: The Land Evaluation and Site Assessment (LESA) system ranks lands for suitability and inclusion in the Farmland Protection Policy (FPP). LESA evaluates several factors, including soil potential for agricultural use, location, market access, and adjacent land use. These factors are used to numerically rank the suitability of parcels based on local resource evaluation and site considerations[8].

State

California Environmental Quality Act (CEQA) Definition of Agricultural Lands: Public Resources Code Section 21060.1 defines "agricultural land" for the purposes of assessing environmental impacts using the FMMP. The FMMP was established in 1982 to assess the location, quality, and quantity of agricultural lands and the conversion of these lands. The FMMP provides analysis of agricultural land use and land use changes throughout California.

California Department of Conservation, Division of Land Resource Protection: The California Department of Conservation (DOC) applies the Natural Resources Conservation Service (NRCS) soil classifications to identify agricultural lands, and these agricultural designations are used in planning for the present and future of California's agricultural land resources. Pursuant to the DOC's FMMP, these designated agricultural lands are included in the Important Farmland Maps (IFM) used in planning for the present and future of California's agricultural land resources. The FMMP was established in 1982 to assess the location, quality, and quantity of agricultural lands and the conversion of these lands. The FMMP provides analysis of agricultural land use and land use changes throughout California. The DOC has a minimum mapping unit of 10 acres, with parcels that are smaller than 10 acres being absorbed into the surrounding classifications.

The list below provides a comprehensive description of all the categories mapped by the DOC. Collectively, lands classified as Prime Farmland, Farmland of Statewide Importance, and Unique Farmland is referred to as Farmland[9].

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

[9] California Department of Conservation. FMMP – Important Farmland Map Categories. http://www.consrv.ca.gov/dlrp/fmmp/mccu/Pages/map_categories.aspx. Site accessed August 2013.

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

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

- Farmland of Local Importance. Land of importance to the local agricultural economy as determined by each county's board of supervisors and a local advisory committee.

- Grazing Land. Land on which the existing vegetation is suited to the grazing of livestock. This category was developed in cooperation with the California Cattlemen's Association, University of California Cooperative Extension, and other groups interested in the extent of grazing activities. The minimum mapping unit for Grazing Land is 40 acres.

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

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

California Land Conservation Act (Williamson Act): The California Land Conservation Act of 1965, commonly referred to as the Williamson Act, is promulgated in California Government Code Section 51200-51297.4, and therefore is applicable only to specific land parcels within the State of California. The Williamson Act enables local governments to enter into contracts with private landowners for the purpose of restricting specific parcels of land to agricultural or related open space uses in return for reduced property tax assessments. Private land within locally designated agricultural preserve areas is eligible for enrollment under Williamson Act contracts. However, an agricultural preserve must consist of no less than 100 acres. However, in order to meet this requirement two or more parcels may be combined if they are contiguous, or if they are in common ownership.

The Williamson Act program is administered by the DOC, in conjunction with local governments, which administer the individual contract arrangements with landowners. The landowner commits the parcel to a 10-year period, or a 20-year period for property restricted by a Farmland Security Zone Contract, wherein no conversion out of agricultural use is permitted. Each year the contract automatically renews unless a notice of non-renewal or cancellation is filed. In return, the land is taxed at a rate based on the actual use of the land for agricultural purposes, as opposed to its unrestricted market value. An application for immediate cancellation can also be requested by the landowner, provided that the proposed immediate cancellation application is consistent with the cancellation criteria stated in the California Land Conservation Act and those adopted by the affected county or city. Non-renewal or

immediate cancellation does not change the zoning of the property. Participation in the Williamson Act program is dependent on county adoption and implementation of the program and is voluntary for landowners[10].

Forestry Resources: State regulations regarding forestry resources are not relevant to the proposed project because no forestry resources exist at the project site.

Local

2035 Kings County General Plan: The Resource Conservation Element of the 2035 Kings County General Plan describes how agricultural resources continue to remain one of the highest valued assets within Kings County. Since 1969, the County has implemented several programs, ordinances, and policies to sustain agriculture. Recently, Kings County has developed the "Priority Agricultural Land Model" by using geographic information system (GIS) data and other relevant information resources to evaluate farmland resources throughout the County. The model established a "highest to lowest" priority designation of all agricultural growing areas (Kings County, 2010).

Kings County Zoning Ordinance: The Kings County Zoning Ordinance establishes the basic regulations under which land within the county unincorporated areas is developed. This includes allowable or conditional uses, building setback requirements, and development standards. Pursuant to State law, the zoning ordinance must be consistent with the Kings County General Plan. The basic intent of the Kings County Zoning Ordinance is to preserve, promote and protect the public health, safety, comfort, convenience, prosperity and general welfare via the orderly regulation of land uses throughout the unincorporated area of the County.

Zoning District
Light Industrial (ML)

The purpose of the ML zone is to designate areas for less intensive industrial and manufacturing operations that may be located within closer proximity to residential and commercial areas. Light Industrial is designated primarily within Community Districts and Urban Fringe areas. Solar photovoltaic electrical generating facilities are allowable with the approval of a Conditional Use Permit (CUP).

IMPACT ASSESSMENT

II-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?

No Impact. The proposed Project will encompass the 18-acre site (APNs 016-016-069 and 016-016-024). Pursuant to CEQA Statute §21060.1, "Agricultural land" means prime farmland, farmland of statewide importance, or unique farmland, as defined by the United States Department of Agriculture land inventory and monitoring criteria. The Project is on land classified as Vacant or Disturbed Land and is not zoned for agricultural use by the County. As such, there will be no potential impact to farmland conversion.

[10] California Department of Conservation. Williamson Act Program. http://www.conservation.ca.gov/dlrp/lca/Pages/Index.aspx. Site accessed August 2013.

II-b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?

No Impact. The proposed Project site is located just north of the Census Designated Place of Home Garden within Kings County. It is located within the Sphere of Influence of the City of Hanford. Currently, the Project site is designated as Light Industrial and is zoned Light Industrial (ML). The parcels surrounding the Project site are zoned Light Industrial (ML), Rural Residential Agricultural District (RRA), Limited Agriculture (AL-10) and Residential (R-1-8).

Dispersed solar energy generation facilities are fundamentally compatible with adjacent agricultural uses and do not compromise the agricultural integrity of farms in their vicinity. In many respects, maintaining a solar energy generation facility will be similar to maintaining an orchard: vegetation and stormwater management will be similar and the labor involved in routine maintenance of the panels will be similar to that required in pruning and maintaining trees. Facility operation will not significantly increase traffic on rural roads nor produce noise, light, odors or other nuisances that might disrupt the rural environment. The facilities will not introduce incompatible urban uses or expose sensitive populations to agricultural operations, nor will they require urban infrastructure such as streets, sewer and water lines that could lead to urban encroachment into agricultural areas.

The proposed Project is not on land under a Williamson Act contract (see Figure 6). There is no conflict with the existing zoning as it is an allowable conditional use under the existing ML zone district. Therefore, there would be no impacts to any Williamson Act Contract nor will there be any zoning conflicts.

II-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))?

No Impact. The Project site is zoned ML, and a Conditional Use Permit has been submitted to allow for the development of a solar energy generation facility. The Project will not require an amendment to the Kings County General Plan or a zone change. The proposed solar energy generation facility is permitted on areas zoned for Light Industrial uses subject to a Conditional Use Permit. As discussed in Impacts II-a and II-b no farmland will be converted. No forest or timberland is located on or near the Project. There will be no impact.

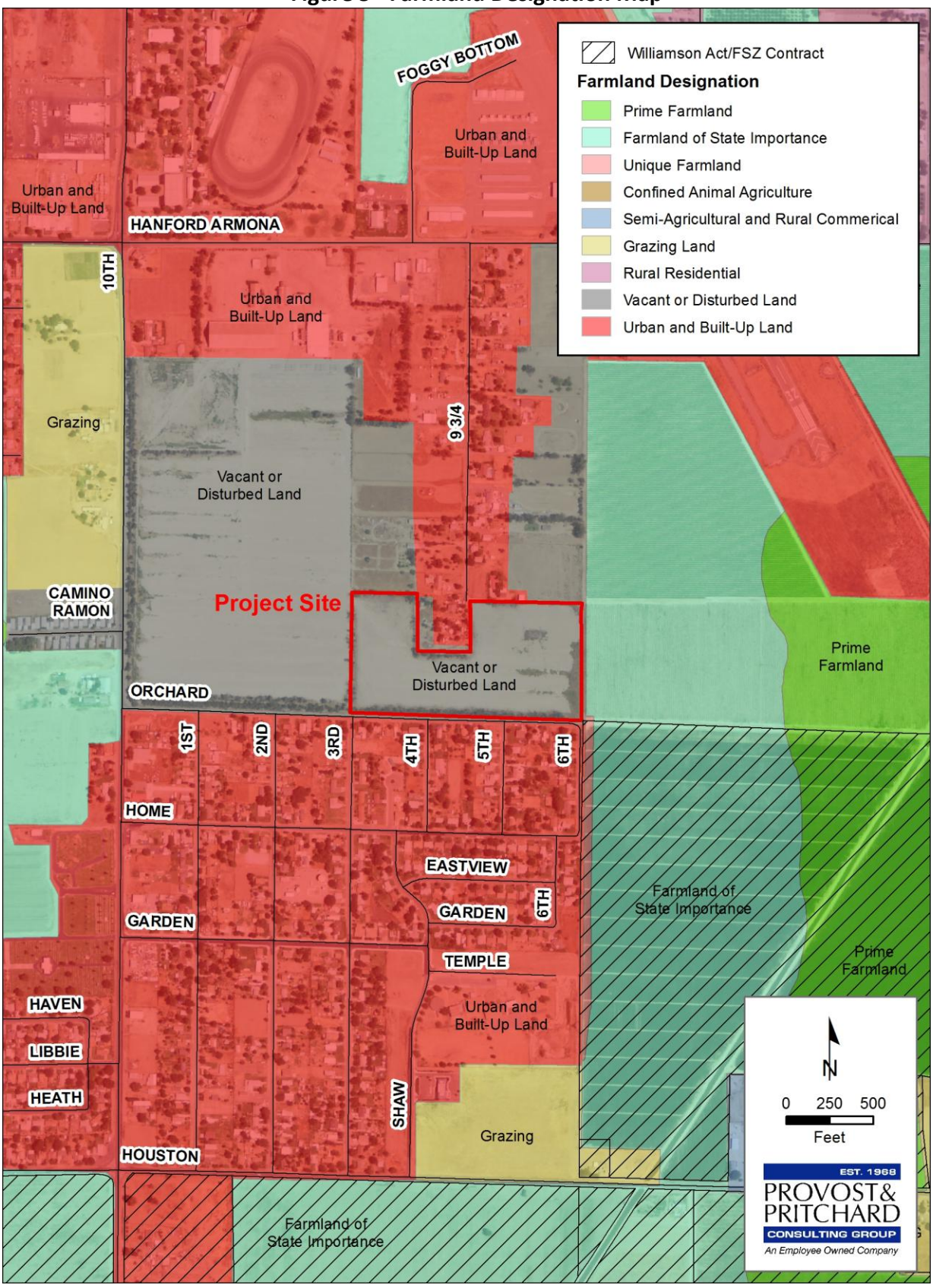
II-d) Result in the loss of forest land or conversion of forest land to non-forest use?

No Impact. As the Project lies on the Central Valley floor, no forest land is on or near the site. There will be no impact to forest land.

II-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?

No Impact. The solar energy generation facility will be restricted to the 18-acre site described. Although further solar and other development could take place in Kings County and in the general area of the proposed Project, implementation of the proposed Project will not cause other land use changes that will convert farmland to a non-agricultural use. Therefore there will be no impact.

Figure 5 - Farmland Designation Map



III. AIR QUALITY

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

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

BASELINE CONDITIONS

Environmental Setting

Climate

The climate of the San Joaquin Valley is characterized by long, hot summers and stagnant, foggy, winters. Precipitation is low and temperature inversions are common. These characteristics are conducive to the formation and retention of air pollutants. These characteristics are in part influenced by the surrounding mountains which intercept precipitation and also act as a barrier to the passage of cold air and air pollutants.

The Project lies within the San Joaquin Valley Air Basin, which is managed by the San Joaquin Valley Air Pollution Control District (SJVAPCD or Air District). National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) have been established for the following criteria pollutants: carbon monoxide (CO), ozone (O_3), sulfur dioxide (SO_2), nitrogen dioxide (NO_2), particulate matter (PM_{10} and $PM_{2.5}$), and lead (Pb). The CAAQS also set standards for sulfates, hydrogen sulfide, and visibility.

Air quality plans or attainment plans are used to bring the applicable air basin into attainment with all state and federal ambient air quality standards designed to protect the health and safety of residents within that air basin. Areas are classified under the Federal Clean Air Act as either “attainment”, “non-attainment”, or “extreme non-attainment” areas for each criteria pollutant based on whether the NAAQS have been achieved or not. Attainment relative to the State standards is determined by the California Air Resources Board (CARB). The San Joaquin Valley is

designated as a State and Federal extreme non-attainment area for O_3, a State and Federal non-attainment area for $PM_{2.5}$, a State non-attainment area for PM10, and Federal and State attainment area for CO, SO_2, NO_2, and Pb[11].

Regulatory Setting

Federal

Clean Air Act: The federal Clean Air Act of 1970 (as amended in 1990) required the U.S. Environmental Protection Agency (EPA) to develop standards for pollutants considered harmful to public health or the environment. Two types of National Ambient Air Quality Standards (NAAQS) were established. Primary standards protect public health, while secondary standards protect public welfare, by including protection against decreased visibility, and damage to animals, crops, landscaping and vegetation, or buildings. NAAQS have been established for six "criteria" pollutants: carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), ozone (O_3), particulate matter (PM_{10} and $PM_{2.5}$), and lead (Pb).

State

California Air Resources Board: The California Air Resources Board (CARB) is the state agency responsible for implementing the federal and state Clean Air Acts. CARB has established California Ambient Air Quality Standards (CAAQS), which include all criteria pollutants established by the NAAQS, but with additional regulations for Visibility Reducing Particles, sulfates, hydrogen Sulfide (H_2S), and vinyl chloride.

The Project is located within the San Joaquin Valley Air Basin, which includes San Joaquin, Stanislaus, Merced, Madera, Fresno, Kings, Tulare, and parts of Kern counties and is managed by the San Joaquin Valley Air Pollution Control District (SJVAPCD or Air District).

Air basins are classified as attainment, nonattainment, or unclassified. Attainment is achieved when monitored ambient air quality data is in compliance with the standards for a specified pollutant. Non-compliance with an established standard will result in a nonattainment designation and an unclassified designation indicates insufficient data is available to determine compliance for that pollutant.

Standards and attainment status for listed pollutants in the Air District can be found in Table 2. Note that both state and federal standards are presented.

[11] San Joaquin Valley Air Pollution Control District. Ambient Air Quality Standards and Valley Attainment Status. http://www.valleyair.org/aqinfo/attainment.htm. Site accessed August 2013.

Table 2
State and Federal Attainment Status and Standards

San Joaquin Valley Attainment Status for Criteria Pollutants[12] Criteria Pollutants				SJVAB - Air Quality Attainment Status		Primary Sources of Criteria Pollutants
Contaminant and Averaging Period		National Standard	State Standard	National Standards	State Standards	
Ozone (O_3)	1-Hour	------	0.09 ppm	----------	Nonattainment	Ozone is not emitted directly into the atmosphere, but is formed by a complex series of photochemical reactions between VOC and NOx (primarily NO).
	8 Hour	0.08 ppm	0.07 ppm	Nonattainment	Nonattainment	
NO_2	1-Hour	-----	0.25 ppm	Attainment/ Unclassified	Attainment	NO2 is a member of a family of gaseous nitrogen compounds (NOx) and is a precursor to ozone formation. NO2 results primarily from combustion of fossil fuels.
	Annual	.053 ppm	-----	Attainment/ Unclassified	Attainment	
CO	1-Hour	35 ppm	20 ppm	Attainment/ Unclassified	Attainment/ Unclassified	CO is formed by the incomplete combustion of fuels. Under most conditions CO does not persist in the atmosphere. Most CO emissions come from motor vehicles.
	8-Hour	9 ppm	9.0 ppm	Attainment/ Unclassified	Attainment/ Unclassified	
PM 10	24-Hour	150 ug/m^3	50 ug/m^3	----------	Nonattainment	PM10 is comprised of dust, sand, salt spray, metallic, and mineral particles, pollen, smoke, mist, and acid fumes. PM10 may also include sulfate and nitrate aerosols.
	Annual	50 ug/m^3	20 ug/m^3	Attainment	Nonattainment	
PM 2.5	24-Hour	35 ug/m^3	-----	Nonattainment	----------	PM2.5 is typically emitted from combustion sources. PM2.5 also includes aerosols that may be formed in the atmosphere.
	Annual	12 ug/m^3	12 ug/m^3	Nonattainment	Nonattainment	
SO_2	1-Hour	75 ppb	0.25 ppm	Attainment	Attainment	Sulfur dioxide (SO2) is formed primarily by the combustion of sulfur-containing fossil fuels. SO2 concentrations in the SJVAB are only about 4 percent of the standard.
	24-Hour	0.14 ppm	0.04 ppm	Attainment	Attainment	
	Annual	0.03 ppm	------	Attainment	Attainment	
Lead (Pb)	Month	-----	1.5 ug/m^3	Attainment	Attainment	Primary sources of lead are smelters and battery manufacturing and recycling. In the past, combustion of leaded gasoline contributed to ambient concentrations.
	Quarter	1.5 ug/m^3	-----	Attainment	Attainment	

ppb = parts per billion; ppm = parts per million; ug/m^3 = micrograms per cubic meter

[12] California Air Resources Board, SJVAPCD, 2013

Additional State regulations include:

CARB Portable Equipment Registration Program: This program was designed to allow owners and operators of portable engines and other common construction or farming equipment to register their equipment under a statewide program so they may operate it statewide without the need to obtain a permit from the local air district.

U.S. EPA/CARB Off-Road Mobile Sources Emission Reduction Program: The California Clean Air Act (CCAA) requires CARB to achieve a maximum degree of emissions reductions from off-road mobile sources to attain State Ambient Air Quality Standards (SAAQS); off- road mobile sources include most construction equipment. Tier 1 standards for large compression-ignition engines used in off-road mobile sources went into effect in California in 1996. These standards, along with ongoing rulemaking, address emissions of nitrogen oxides (NO_X) and toxic particulate matter from diesel engines. CARB is currently developing a control measure to reduce diesel PM and NO_X emissions from existing off-road diesel equipment throughout the state.

California Global Warming Solutions Act: Established in 2006, Assembly Bill 32 (AB 32) requires that California's GHG emissions be reduced to 1990 levels by the year 2020. This will be implemented through a statewide cap on GHG emissions, which will be phased in beginning in 2012. AB 32 requires CARB to develop regulations and a mandatory reporting system to monitor global warming emissions levels.

In addition, this project is being evaluated pursuant to CEQA.

Regional

San Joaquin Valley Air Pollution Control District: The San Joaquin Valley Air Pollution Control District (SJVAPCD or Air District) is the local agency charged with preparing, adopting, and implementing mobile, stationary, and area air emission control measures and standards. The Air District has several rules and regulations that may apply to the Project:

- Rule 3135 (Dust Control Plan Fees): This rule requires the project applicant to submit a fee in addition to a Dust Control Plan. The purpose of this rule is to recover the Air District's cost for reviewing these plans and conducting compliance inspections.

- Rules 4101 and 4102 (Visible Emissions and Nuisance): This rule applies to any source of air contaminants and prohibits the visible emissions of air contaminants or any activity which creates a public nuisance.

- Rule 4601 (Architectural Coatings): This rule limits volatile organic compounds (VOC) from architectural coatings. This rule specifies architectural coatings storage, clean up, and labeling requirements. It is applicable to any person who supplies, sells, offers for sale, applies, or solicits the application of any architectural coating, or who manufactures any architectural coating for use within the district.

- Rule 4641 (Cutback, Slow Cure, and Emulsified Asphalt, Paving and Maintenance Operations): This rule applies to use of asphalt for paving new roadways or restoring existing roadways disturbed by project activities.

- Rules 8011 and 8081 (Regulation VIII, Fugitive PM_{10} Prohibitions): This regulation is designed to reduce PM_{10} emissions by reducing fugitive dust. Regulation VIII requires implementation of control measures to ensure that visible dust emissions are substantially reduced. The Regulation VIII control measures are provided in Table 3.

Table 3
San Joaquin Valley Air Pollution Control District
Regulation VIII Control Measures for Construction Emissions of PM_{10}

The following are required to be implemented at all construction sites:
All disturbed areas, including storage piles, which are not actively utilized for construction purposes, shall be effectively stabilized of dust emissions using water, chemical stabilizers/suppressants, covered with a tarp or other similar cover, or vegetative ground cover.
All on-site unpaved roads and off-site unpaved access roads shall be effectively stabilized of dust emissions during construction using water or chemical stabilizer suppressant.
All land clearing, grubbing, scraping, excavation, land leveling, grading cut and fill, and demolition activities during construction shall be effectively controlled of fugitive dust emissions utilizing application of water or pre-soaking.
When materials are transported off-site, all material shall be covered, or effectively wetted to limit visible dust emissions, and at least six inches of freeboard space from top of container shall be maintained.
All operations shall limit, or expeditiously remove the accumulation of mud or dirt from adjacent public streets at the end of each workday. The use of dry rotary brushes is expressly prohibited except where preceded or accompanied by sufficient wetting to limit the visible dust emissions. Use of blower devices is expressly forbidden.
Following the addition of materials to, or the removal of materials from, the surface of outdoor storage piles, said piles shall be effectively stabilized of fugitive dust emissions utilizing sufficient water or chemical stabilizer/suppressant.
Within urban areas, trackout shall be immediately removed when it extends 50 or more feet from the site at the end of each workday.
Any site with 150 or more vehicle trips per day shall prevent carryout and trackout.

Local

2035 Kings County General Plan

The Kings County General Plan Air Quality Element includes the following objectives and policies that address air quality:

AQ OBJECTIVE C1.1: Accurately assess and mitigate potentially significant local and regional air quality and climate change impacts from proposed projects within the County.

AQ Policy C1.1.1: Assess and mitigate project air quality impacts using analysis methods and significance thresholds recommended by the SJVAPCD and require that projects do not exceed established SJVAPCD thresholds.

AQ Policy C1.1.3: Ensure that air quality and climate change impacts identified during CEQA review are minimized and consistently and fairly mitigated at a minimum, to levels as required by CEQA.

AQ OBJECTIVE E1.1: Increase the use of energy conservation features, renewable sources of energy, and low-emissions equipment in new and existing development projects within the County.

IMPACT ASSESSMENT

III-a) Conflict with or obstruct implementation of the applicable air quality plan?

Less Than Significant Impact. The Project lies within the San Joaquin Valley Air Basin, which is managed by the San Joaquin Valley Air Pollution Control District (SJVAPCD). National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) have been established for the following criteria pollutants: carbon monoxide (CO), ozone (O_3), sulfur dioxide (SO_2), nitrogen dioxide (NO_2), particulate matter (PM_{10} and $PM_{2.5}$), and lead (Pb). The CAAQS also set standards for sulfates, hydrogen sulfide, and visibility. These standards set by these State and federal agencies relating to the Project would continue to apply.

Air quality plans or attainment plans are used to bring the applicable air basin into attainment with all state and federal ambient air quality standards designed to protect the health and safety of residents within that air basin. Areas are classified under the Federal Clean Air Act as either "attainment", "non-attainment", or "extreme non-attainment" areas for each criteria pollutant based on whether the NAAQS have been achieved or not. Attainment relative to the State standards is determined by the California Air Resources Board (CARB). The San Joaquin Valley is designated as a State and Federal extreme non-attainment area for O_3, a State and Federal non-attainment area for $PM_{2.5,}$ a State non-attainment area for $PM_{10,}$ and Federal and State attainment area for CO, SO_2, NO_2, and Pb[13].

The Project would not conflict with or obstruct the implementation of the air quality management standards (Appendix B). The Project would not increase population of the air basin nor substantially increase employment or traffic volumes. Additionally, the proposed Project would provide low emission solar powered electricity that would reduce emissions of criteria pollutants from power-generating plants.

A Fugitive Dust Control Plan would be submitted to the SJVAPCD to comply with Regulation VIII prior to the initiation of construction. An Indirect Source Review (ISR-Rule 9510) application and Air Impact Analysis (AIA) would be filed with the SJVAPCD to address NO_x emissions from construction and operation. Therefore, the Project would not conflict with the SJVAPCD plans and would result in a less than significant impact.

III-b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?

[13] San Joaquin Valley Air Pollution Control District, http://www.valleyair.org/General_info/aboutdist.htm. Site accessed August 2013

Less Than Significant Impact. The proposed Project includes the construction and operation of an 18-acre solar energy generation facility. Emissions resulting from solar electricity generation are negligible because no fuels are combusted[14]; however temporary emissions will be associated with construction activities. There will be no permanent on-site personnel and it is anticipated that proposed Project operations will generate approximately five weekly trips related to cleaning, repair or security.

Proposed Project construction will require the use of graders, trenchers, and a crane, as well as other types of earth moving machines. After initial site work, a hydraulic driver will be used to drive metal piers into the ground. Concrete pads will be poured for the electrical equipment stations and up to five miles of trench three feet wide and four feet deep will be dug in order to bury up to 12 two inch diameter conduit for AC and DC wires connecting solar panel arrays with the onsite electrical equipment.

The construction and installation of the proposed Project will take place over six months. Earth moving activities will take approximately three days in total. The remainder of the construction period will be the on-site assembly and installation of PV panels which will not require heavy machinery. The proposed Project will comply with Air District Rule 8021 for construction and earthmoving activities.

The California Emissions Estimator Model (CalEEMod), Version 2013.2, was used to estimate construction and operation emissions for the proposed Project. The modeling results are provided in Table 4 and the CalEEMod output files can be seen in Appendix C.

Table 4
Proposed Project Construction and Operation Emissions[15]

	VOC (ROG) (tons/year)	NO_x (tons/year)	PM_{10} (tons/year)	CO_2 (tons/year)
Total Project Construction Emissions	0.4491	3.9521	0.2839	359.6439
Total Project Operation and Area Emissions	3.8078	0.00	0.00	3.60
Total Project Emissions	4.5408	3.9521	0.2839	363.2439
Threshold of Significance	10	10	--	--

Regulation VIII measures are SJVAPCD mandated requirements for any type of ground moving activity and are listed in Table 3. The Project will implement Regulation VIII measures which will reduce any construction related PM_{10} emission impacts to less than significant. In order to lower the amounts of dust circulated by construction activity, soil stabilizers will be applied to inactive areas. As demonstrated in Table 4, Project construction and operation emissions will be under the significance threshold, and are therefore considered less than significant.

III-c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?

[14] U.S. Environmental Protection Agency, Clean Energy. Air Emissions. http://www.epa.gov/cleanenergy/energy-and-you/affect/air-emissions.html. Site accessed August 2013.
[15] California Emissions Estimator Model, Version 2011.1.1

Less Than Significant Impact. As discussed in Impact III-b, the proposed Project will result in the generation of criteria pollutants during construction; however, during construction, air quality impacts will be less than Air District thresholds for non-attainment pollutants and operation of the Project will not exceed the emissions thresholds for criteria pollutants. During construction, the Project will generate an average of approximately 70 round trips per day. During operation, approximately five trips per week will be generated by the maintenance employees, up to 10 trips per year for the panel washing activities and up to 88 trips per year for the module tilting will be generated. Total operational annual round trips per year will be 358, or an average of approximately one round trip per day. Due to the minimal increase of proposed Project generated emissions, cumulative net increases of non-attainment criteria pollutants will be less than significant.

III-d) Expose sensitive receptors to substantial pollutant concentrations?

Less Than Significant Impact. Section 3 of the Air Districts Guide for Assessing and Mitigating Air Quality Impacts (GAMAQI), defines a sensitive receptor as a location where human populations, especially children, seniors, and sick persons are present and where there is a reasonable expectation of human exposure to pollutants. Sensitive receptors normally refer to people with heightened sensitivity to localized, rather than regional pollutants. The nearest sensitive receptors are approximately 38 rural residences located within a 300-feet radius south and north of the nearest solar array. Facility operation will not produce Hazardous Air Pollutants (HAPs), as no fuels are combusted[16] however the temporary construction and operational maintenance of the facility has the potential to emit HAPs in exhaust emissions, such as diesel PM. Concentrations of pollutants due to vehicle emissions will not pose a hazardous threat to any sensitive receptors as emissions resulting from the Project will be below significance thresholds, as demonstrated in Table 4. The impact will be less than significant.

III-e) Create objectionable odors affecting a substantial number of people?

Less Than Significant Impact. The nearest sensitive receptor, a rural residence, is located approximately 100 feet south of the nearest solar array. The proposed Project operation will not be a source of odors. Construction of the proposed project may have the potential to result in diesel fuel combustion odors from construction equipment; however, the construction periods will be temporary and short-term. Diesel-type construction odors are not typically detectable offsite and therefore are not considered a "nuisance" by the general public. Therefore, objectionable odors are not expected to be a significant concern during either proposed Project construction or operation. The impact will be less than significant.

[16] U.S. Environmental Protection Agency, Clean Energy. Air Emissions. http://www.epa.gov/cleanenergy/energy-and-you/affect/air-emissions.html. Site accessed August 2013.

IV. BIOLOGICAL RESOURCES

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

BASELINE CONDITIONS

Environmental Setting

The Project site is located in the middle of the San Joaquin Valley of California adjacent to the Hanford City limits in Kings County. A reconnaissance-level field survey of the Project site was conducted on June 24, 2013 by Live Oak Associates, Inc. (LOA) ecologist Wendy Fisher. The survey consisted of a meandering walk through the site in which principal land uses of the site were identified and the constituent plants and animals were noted. Focused surveys for particular plant or wildlife species were not part of the field survey. Field surveys conducted for this study were

sufficient to assess the significance of possible biological impacts associated with the development plans for the Project site. At the time of the survey the Project site consisted of a vacant industrial yard historically used to store cotton and sulfur. The site perimeter contains a security fence on all but the west side. Eucalyptus trees grow along most of the site perimeter. Vegetation is largely absent from the site and any native habitats once present on the site have been completely transformed to a ruderal state by commercial enterprise. Surrounding lands are highly disturbed, consisting of a similar commercial parcel to the west, rural residential to the north, vineyard to the east, and residential housing tracts to the south. Natural drainage features such as creeks, ponds, vernal pools, etc. are not present on the project site (Appendix C).

Site soils have been significantly altered through grading, scraping, compaction, and the presence of residual sulfur across portions of the site. As such, any native soil characteristics potentially supporting sensitive biological resources have been significantly altered (Appendix C).

The Project site is located in a region of California having a Mediterranean climate. Summers are dry and typically quite warm with daytime temperatures commonly exceeding 100 degrees Fahrenheit. Winters are rainy and cool with daytime temperatures rarely exceeding 65 degrees Fahrenheit. The climate in Kings County can be classified as Mediterranean with average rainfall rates of 7.6 inches annually, occurring primarily between November and April[17]. Virtually all precipitation falls in the form of rain. Stormwater infiltrates onsite soils and, when field capacity is reached, stormwater sheet flows off the site tending south (Appendix C).

The Project site has been significantly disturbed by commercial enterprise which has included past grading, scraping, heavy equipment operation, and product storage/stockpiling. As a result, vegetation was absent from much of the site. Vegetation observed during the field survey consisted primarily of weedy grasses and forbs concentrated at the eastern edge of the site and eucalyptus trees along the margins of the site. Herbaceous species observed on the site included weedy species such as red brome (*Bromus madritensis*), Johnson grass (*Sorghum halepense*), Canada horseweed (*Erigeron canadensis*), dove weed (*Croton setigerus*), pigweed amaranth (*Amaranthus albus*), and Russian thistle (*Salsola tragus*), among others. Trees along portions of the site perimeter included red gum (*Eucalyptus camaldulensis*), blue gum (*Eucalyptus globulus*), and tree of heaven (*Ailanthus altissima*) (Appendix C).

The number of native animal species expected to utilize the Project site is very small due to the lack of vegetation on much of the site. Amphibians would be absent from the site due to the lack of water. Reptile use of the site would be limited to a few common species such as the western fence lizard (*Sceloporus occidentalis*), side-blotched lizard (*Uta stansburiana*), gopher snake (*Pituophis melanoleucus*), and common kingsnake (*Lampropeltis getulus*). The site provides very little foraging and cover habitat for avian species. However, year-round resident birds such as the killdeer (*Charadrius vociferus*), rock pigeon (*Columba livia*), European starling (*Sturnus vulgaris*), black phoebe (*Sayornis nigricans*), house sparrow (*Passer domesticus*), mourning dove (*Zenaida macroura*), American crow (*Corvus brachyrhynchos*), and house finch (*Carpodacus mexicanus*) could be expected to use the site from time to time. Two winter migrants, the white-crowned sparrow (*Zonotrichia leucorphrys*) and yellow-rumped warbler (*Dendroica coronata*) are expected to use the site. The western kingbird (*Tyrannus verticalis*), a common summer migrant to agricultural lands of the region, was observed on the site (Appendix C).

[17] 2035 Kings County General Plan, Health and Safety Element, Section I.A, Page HS-2.

Mammalian use of the site is expected to be severely limited by existing fencing and the lack of vegetation over much of the site. Rodents such as house mice (*Mus musculus*) and black rat (*Rattus rattus*) may occur on the site. A few California ground squirrel (*Otospermophilus beecheyi*) burrows were found in small portions of the site. Various bat species may forage over the site (Appendix C).

Regulatory Setting

Federal

Endangered Species Act: The Federal Endangered Species Act (FESA) protects plants and wildlife that are listed as endangered or threatened by the USFWS and National Oceanic and Atmospheric Administration (NOAA) Fisheries. Section 9 of the FESA prohibits the taking of listed wildlife, where taking is defined as "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt to engage in such conduct" (50 CFR 17.3). For plants, this statute governs removing, possessing, maliciously damaging, or destroying any listed plant on federal land and removing, cutting, digging-up, damaging, or destroying any listed plant on non-federal land in knowing violation of state law (16USC1538). Pursuant to Section 7 of the FESA, federal agencies are required to consult with the USFWS if their actions, including permit approvals or funding, could adversely affect a listed plant or wildlife species or its critical habitat. Through consultation and the issuance of a biological opinion, the USFWS may issue an incidental take statement allowing take of the species that is incidental to another authorized activity, provided the action will not jeopardize the continued existence of the species. Section 10 of the FESA provides for issuance of incidental take permits to private parties, provided a Habitat Conservation Plan (HCP) is developed.

Migratory Bird Treaty Act: The MBTA implements international treaties devised to protect migratory birds and any of their parts, eggs, and nests from activities such as hunting, pursuing, capturing, killing, selling, and shipping, unless expressly authorized in the regulations or by permit. As authorized by the MBTA, the USFWS issues permits to qualified applicants for the following types of activities: falconry, raptor propagation, scientific collecting, special purposes (rehabilitation, education, migratory game bird propagation, and salvage), take of depredating birds, taxidermy, and waterfowl sale and disposal. The regulations governing migratory bird permits are in 50 CFR part 13 General Permit Procedures and 50 CFR part 21 Migratory Bird Permits. The State of California has incorporated the protection of birds of prey in Sections 3800, 3513, and 3503.5 of the CDFG Code.

Federal Clean Water Act: The federal Clean Water Act's (CWA's) purpose is to "restore and maintain the chemical, physical, and biological integrity of the nation's waters." Section 404 of the CWA prohibits the discharge of dredged or fill material into waters of the United States without a permit from the U.S. Army Corps of Engineers (ACOE). The definition of waters of the United States includes rivers, streams, estuaries, the territorial seas, ponds, lakes, and wetlands. Wetlands are defined as those areas "that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions (33 CFR 328.3 7b)." The USEPA also has authority over wetlands and may override an ACOE permit. Substantial impacts to wetlands may require an individual permit. Projects that only minimally affect wetlands may meet the conditions of one of the existing Nationwide Permits. A Water Quality Certification or Waiver pursuant to Section 401 of the CWA is required for Section 404 permit actions; this certification or waiver is issued by the RWQCB.

State

California Endangered Species Act: The California Endangered Species Act (CESA) generally parallels the main provisions of the FESA, but unlike its federal counterpart, the CESA applies the take prohibitions to species proposed for listing (called candidates by the state). Section 2080 of the CDFG Code prohibits the taking, possession, purchase, sale, and import or export of endangered, threatened, or candidate species, unless otherwise authorized by permit or in the regulations. Take is defined in Section 86 of the CDFG Code as to "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." The CESA allows for take incidental to otherwise lawful development projects. State lead agencies are required to consult with the CDFG to ensure that any action they undertake is not likely to jeopardize the continued existence of any endangered, threatened, or candidate species or result in destruction or adverse modification of essential habitat. The CDFG administers the act and authorizes take through Section 2081 agreements (except for designated fully protected species).

Fully Protected Species: The State of California first began to designate species as fully protected prior to the creation of the CESA and FESA. Lists of fully protected species were initially developed to provide protection to those animals that were rare or faced possible extinction, and included fish, amphibians, reptiles, birds, and mammals. Most fully protected species have since been listed as threatened or endangered pursuant to the CESA and/or FESA. The regulations that implement the Fully Protected Species Statute (CDFG Code Section 4700) provide that fully protected species may not be taken or possessed at any time. Furthermore, the CDFG prohibits any state agency from issuing incidental take permits for fully protected species, except for necessary scientific research.

Native Plant Protection Act: Regarding listed rare and endangered plant species, the CESA defers to the California Native Plant Protection Act (NPPA) of 1977 (CDFG Code Sections 1900 to 1913), which prohibits importing of rare and endangered plants into California, and the taking and selling of rare and endangered plants. The CESA includes an additional listing category for threatened plants that are not protected pursuant to NPPA. In this case, plants listed as rare or endangered pursuant to the NPPA are not protected pursuant to CESA, but can be protected pursuant to the CEQA. In addition, plants that are not state listed, but that meet the standards for listing, are also protected pursuant to CEQA (Guidelines, Section 15380). In practice, this is generally interpreted to mean that all species on lists 1B and 2 of the CNPS Inventory potentially qualify for protection pursuant to CEQA, and some species on lists 3 and 4 of the CNPS Inventory may qualify for protection pursuant to CEQA. List 3 includes plants for which more information is needed on Taxonomy or distribution. Some of these are rare and endangered enough to qualify for protection pursuant to CEQA. List 4 includes plants of limited distribution that may qualify for protection if their abundance and distribution characteristics are found to meet the standards for listing.

California Lake and Streambed Alteration Agreement: Sections 1600 through 1616 of the CDFG Code require that a Lake and Streambed Alteration Program Notification Package be submitted to the CDFG for "any activity that may substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake." The CDFG reviews the proposed actions and, if necessary, submits to the applicant a proposal for measures to protect affected fish and wildlife resources. The final proposal on which the CDFG and the applicant agree is the Lake and Streambed Alteration Agreement. Often, projects that require a Lake and Streambed Alteration Agreement also require a permit from the ACOE pursuant to Section 404 of the CWA. In these instances, the conditions of the Section 404 permit and the Lake and Streambed Alteration Agreement may overlap.

In addition, this project is being evaluated pursuant to CEQA.

Local

This project is being evaluated pursuant to CEQA; however, there are no local regulations, plans, programs, or guidelines associated with biological resources that are applicable to the proposed project.

IMPACT ASSESSMENT

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

Less Than Significant With Mitigation Incorporation. The Project site is located within the United States Geological Survey (USGS) Hanford 7.5-minute topographic quadrangle. A review of information from the California Department of Fish and Game Natural Diversity Database (CNDDB) RareFind3 data (2013) was conducted for the Hanford. USGS quadrangle, and for the eight surrounding quadrangles (Riverdale, Layton, Burris Park, Remnoy, Waukena, Guernsey, Stratford, and Lemoore) using the CNDDB Rarefind 2013. A list of special status species that could occur in the Project vicinity can be seen in Table 5.

Table 5
List of Special Status Species that could occur in the Project vicinity.

Species	Status	Habitat	Occurrence in the Project Site*
PLANTS			
Earlimart orache (*Atriplex cordulata var. erecticaulis*)	CNPS 1B	Occurs in valley and foothill grasslands between 131 and 328 feet. Blooms Aug.-Sep.	**Absent.** Historic commercial use of the site has rendered it unsuitable for this species.
Brittlescale (*Atriplex depressa*)	CNPS 1B.2	Occurs in relatively barren areas with alkaline clay soils in chenopod scrub, playas, valley grasslands, and vernal pools of the Central Valley.	**Absent.** Historic commercial use of the site has rendered it unsuitable for this species.
Subtle Orache (*Atriplex subtilis*)	CNPS 1B	Occurs in valley and foothill grasslands of the San Joaquin Valley. Blooms August-October.	**Absent.** Historic commercial use of the site has rendered it unsuitable for this species.
Recurved Larkspur (*Delphinium recurvatum*)	CNPS 1B	Chenopod scrub, cismontane woodlands, and alkaline soils of valley and foothill grasslands. Blooms March-May.	**Absent.** Historic commercial use of the site has rendered it unsuitable for this species.

Species	Status	Habitat	Occurrence in the Project Site*
ANIMALS			
Vernal Pool Fairy Shrimp (*Branchinecta lynchi*)	FT	Vernal pools of California's Central Valley.	**Absent.** Vernal pools required by this species are absent from the Project site.
Vernal Pool Tadpole Shrimp (*Lepidurus packardi*)	FE	Primarily found in vernal pools of California's Central Valley.	**Absent**. Vernal pool habitat required by this species is absent from the Project site.
Valley Elderberry Longhorn Beetle (*Desmocerus californicus dimorphus*)	FT	Mature elderberry shrubs of California's Central Valley and Sierra Foothills.	**Absent.** Elderberry shrubs, the obligate habitat required by this species, are absent from the Project site and surrounding lands.
California Tiger Salamander (*Ambystoma californiense*)	FT , CSC	Found primarily in annual grasslands. Breeds in vernal/ seasonal pools or perennial pools which lack fish or bullfrogs. Requires rodent burrows for refuge.	**Absent.** Historic commercial use of the site has rendered it unsuitable for this species. Breeding pools required by this species are absent from the project site and surrounding land. Furthermore, the project site is outside of this species' known range[18]
Blunt-Nosed Leopard Lizard (*Gambelia silus*)	FE, CE, CP	Frequents grasslands, alkali meadows and chenopod scrub of the San Joaquin Valley.	**Unlikely.** Historic commercial use of the site and surrounding lands has created conditions unfavorable for this species.
Swainson's Hawk (*Buteo swainsoni*)	CT	Breeds in stands with few trees in juniper-sage flats, riparian areas, and in oak savannah. Requires adjacent suitable foraging areas such as grasslands or alfalfa fields supporting rodent populations.	**Possible.** Foraging habitat is marginal due to the degradation of onsite habitats through years of commercial activity that has eliminated vegetation, and therefore, rodent activity, across much of the site. Possible nesting habitat is present in the form of eucalyptus trees bordering the site. A Swainson's hawk was observed passing over the site during the field survey.
Western Snowy Plover (*Charadrius alexandrines nivosus*)	FT, CSC	Uses man-made agricultural wastewater ponds and reservoir margins. Breeds on barren to sparsely vegetated ground at alkaline or saline lakes, reservoirs, ponds, and riverine sand bar.	**Absent.** Breeding and foraging habitat is absent from the Project site.
Tipton Kangaroo Rat (*Dipodomys nitratoides nitratoides*)	FE, CE	Chenopod scrub and alkali grasslands of the Tulare Basin from Fresno County in the north to Kern County in the south.	**Absent.** Historic commercial use of the site has rendered it unsuitable for this species.

[18] California Department of Fish and Wildlife, 2013

Species	Status	Habitat	Occurrence in the Project Site*
San Joaquin Kit Fox (*Vulpes macrotis mutica*)	FE, CT	Frequents desert alkali scrub and annual grasslands and may forage in adjacent agricultural habitats. Utilizes enlarged (4 to 10 inches in diameter) ground squirrel burrows as denning habitat.	**Unlikely.** Historic commercial use of the site, the existing chainlink perimeter fence, and the presence of domestic dogs on neighboring lands has created unfavorable conditions for this species. The nearest documented occurrence of a kit fox is 1.25 miles north of the project in the City of Hanford from 1971[17].
Western Spadefoot (*Spea hammondii*)	CSC	Primarily occurs in grasslands, but also occurs in valley and foothill hardwood woodlands. Requires vernal pools or other temporary wetlands for breeding.	**Absent.** Vernal pools required by this species are absent from the project site and surrounding lands.
Western Pond Turtle (*Emys marmorata*)	CSC	Ponds, marshes, rivers, streams, and irrigation ditches with aquatic vegetation. Requires basking sites of sandy banks or grassy open fields for egg laying.	**Absent.** Aquatic habitat is absent from the Project site and the immediate vicinity.
Northern Harrier (*Circus cyaneus*)	CSC (nesting)	Frequents meadows, grasslands, open rangelands, freshwater emergent wetlands; uncommon in wooded habitats.	**Unlikely.** Foraging habitat is marginal due to the degradation of onsite habitats through years of commercial activity. Nesting habitat is absent from the project site. At most this species may occasionally pass over the site while foraging or during migration.
White-tailed Kite (*Elanus leucurus*)	FP	Open grasslands and agricultural areas throughout central California.	**Possible.** Foraging habitat is marginal due to the degradation of onsite habitats through years of commercial activity. Possible nesting habitat is present in the form of eucalyptus trees bordering the site.
Burrowing Owl (*Athene cunicularia*)	CSC	Frequents open, dry annual or perennial grasslands, deserts, and scrublands characterized by low growing vegetation. Dependent upon burrowing mammals, most notably the California ground squirrel, for nest burrows.	**Unlikely.** Foraging habitat is marginal due to the degradation of onsite habitats through years of commercial activity that has eliminated vegetation, and therefore, rodent activity, across much of the site. Possible nesting habitat is present in the form of a few ground squirrel burrows; however, no burrowing owl sign was observed at these burrows during the field visit. The nearest documented occurrence of this species is approximately 10 miles to the northeast[19].
Loggerhead Shrike (*Lanius ludovicianus*)	CSC	Frequents open habitats with sparse shrubs and trees, other suitable perches, bare ground, and low herbaceous cover. Can often be found in cropland.	**Possible.** Foraging habitat is marginal due to the degradation of onsite habitats through years of commercial activity. Possible nesting habitat is present in the form of eucalyptus trees bordering the site.

[19] California Department of Fish and Wildlife, 2013

Species	Status	Habitat	Occurrence in the Project Site*
Tricolored Blackbird (*Agelaius tricolor*)	CSC	Breeds near fresh water, primarily emergent wetlands, with tall thickets. Forages in grassland and cropland habitats.	**Possible.** The site provides possible foraging habitat; breeding habitat is absent.
Pallid Bat (*Antrozous pallidus*)	CSC	Roosts in rocky outcrops, cliffs, and crevices with access to open habitats for foraging. May also roost in caves, mines, hollow trees and buildings.	**Possible.** This species may forage over the site; roosting habitat is absent.
Townsend's Western Big-Eared Bat (*Corynorhinus townsendii*)	CSC	Primarily a cave-dwelling bat that may also roost in buildings. Occurs in a variety of habitats.	**Possible.** This species may forage over the site; roosting habitat is absent.
American Badger (*Taxidea taxus*)	CSC	Found in drier open stages of most shrub, forest and herbaceous habitats with friable soils.	**Absent.** Historic commercial use of the site has rendered it unsuitable for this species.

Explanation of Occurrence Designations and Status Codes
Present: Species observed on the sites at time of field surveys or during recent past.
Likely: Species not observed on the sites, but it may reasonably be expected to occur there on a regular basis.
Possible: Species not observed on the sites, but it could occur there from time to time.
Unlikely: Species not observed on the sites, and would not be expected to occur there except, perhaps, as a transient. Absent: Species not observed on the sites, and precluded from occurring there because habitat requirements not met.

FE	***Federally Endangered***	***CE***	***California Endangered***
FT	***Federally Threatened***	***CT***	***California Threatened***
FPE	***Federally Endangered (Proposed)***	***CR***	***California Rare***
FC	***Federal Candidate***	***CP***	***California Fully Protected***
		CSC	***California Species of Special Concern***
CNPS	***California Native Plant Society Listing***		
1A	***Plants Presumed Extinct in California***	***3***	***Plants about which we need more information – a review list***
1B	***Plants Rare, Threatened, or Endangered in California and elsewhere***	***4***	***Plants of limited distribution – a watch list***
2	***Plants Rare, Threatened, or Endangered in California, but more common elsewhere***		

In addition to the sensitive species identified by the CNDDB, in June of 2013, LOA surveyed the site for biotic habitats, as the plants and animals occurring in those habitats may be protected by state and federal law. No special-status plant species were identified on the Project site and due to the highly disturbed condition of the site no special-status plants are considered likely to be present. Of the 23 special status animal and plant species identified by the CNDDB, 17 species would be absent or unlikely to occur on the sites due to unsuitable habitat conditions or the sites' not being within the known range of the species. Loss of habitat as a result of future development of the project sites would have no effect on these species because there is little or no likelihood that they are

present. The Project site however may provide habitat for federal and state-listed or special-status wildlife species which could impact the following species:

Swainson's Hawk (*Buteo swainsoni*). Federal Listing Status: None; State Listing Status: Threatened.

The Swainson's hawk is designated as a California Threatened species. The loss of agricultural lands (i.e., foraging habitat) to urban development and additional threats such as riverbank protection projects have contributed to its decline.

Swainson's hawks are large, broad-winged, broad-tailed hawks and have a high degree of mate and territorial fidelity. They arrive at their nesting sites in March or April. In the Central Valley, Swainson's hawks typically nest in large trees in or peripherally to riparian systems adjacent to suitable foraging habitats. The young hatch sometime between March and July and do not leave the nest until some 4 to 6 weeks later. Other suitable nest sites include lone trees, groves of trees such as oaks, other trees in agricultural fields, and mature roadside trees. Swainson's hawks forage in large, open fields with abundant prey, including grasslands or lightly grazed pastures, alfalfa and other hay crops, and certain grain and row croplands (Appendix C).

Potential to occur onsite

A Swainson's hawk was observed passing over the site during the June field survey. There is some possibility that Swainson's hawks may utilize the onsite eucalyptus trees for nesting. Three stick nests were observed in these trees; one was a very old stick nest in a dead eucalyptus tree; the other two were clumps of sticks in live eucalyptus trees at the southern edge of the site. These nests were not occupied by any avian species at the time of the field survey and no indications were found of recent raptor use such as prey remains or whitewash on the ground beneath. While the site contains open habitat generally suitable for Swainson's hawk foraging, the compacted and sulfur contaminated soils have resulted in an absence of vegetation across a vast majority of the site. The lack of vegetation has, therefore, restricted the suitability of the site for most small mammals, birds, and invertebrates. The field survey of the site found a limited amount of ground squirrel activity on the site restricted to only a few small areas and occasionally along the fence line beneath the eucalyptus trees. As a result, Swainson's hawks would find little foraging opportunity on the site. The nearest documented Swainson's hawk nest is located approximately 4.5 miles southeast of the site[20].

Loss of Habitat for Special Status Animals that may Occur on the Site as Occasional or Regular Foragers but Breed Elsewhere

Three species may occasionally utilize the site for foraging only. These species include the tricolored blackbird, pallid bat, and Townsend's western big-eared bat. The project site provides limited foraging opportunity due to the lack of vegetation and invertebrates and does not provide regionally important foraging habitat for these species. In fact, much more suitable habitats are abundant throughout the region. Because the site is to retain earthen ground cover following project implementation, the limited invertebrate populations present under existing conditions will likely still be present; therefore, the project would not significantly reduce the amount or quality of foraging habitat currently available on the site. Any habitat with the potential to be used by these three species for foraging, both on the project site and surrounding lands, will continue to be

[20] California Department of Fish and Wildlife, 2013

available following development of the project. Furthermore, the project is not expected to result in direct harm to any individuals of these species. Therefore, project development will result in a less than significant impact on these species and no mitigation is required (see Appendix C).

Active Raptors and birds protected under the federal Migratory Bird Treaty Act.

In addition to the Swainson's hawk, other raptor species such as northern harriers, American kestrels and red-tailed hawks could potentially forage over the project site. Additionally, the site provides nesting habitat for a number of migratory bird species. Nearly all native bird species are protected by the federal Migratory Bird Treaty Act. Nearby trees and the sparse onsite vegetation could provide potential nesting habitat for these species. Several ground-nesting bird species could nest on site as well. If birds were to nest in these areas in the future prior to construction, such project-related activities could result in the abandonment of active nests or direct mortality to these birds. Construction activities that adversely affect the nesting success of raptors or result in mortality of individual birds constitute a violation of state and federal laws and would be considered a significant impact under CEQA. Implementation of the following measures will reduce any impacts to protected nesting birds including Swainson's hawk to less than significant.

BIO-1 (avoidance). In order to avoid impacts to all nesting raptors and other migratory birds from tree removal, grading, and construction, these activities shall occur between September 1 and January 31. This will ensure that construction does not coincide with the nesting season (February 1 to August 31).

BIO-2 (pre-construction surveys). If brushing, grading, or construction must occur between February 1 and August 31, a qualified biologist shall conduct pre-construction surveys for active raptor and migratory bird nests within 30 days of the onset of these activities.

BIO-3 (establish buffers). Should any active nests be discovered in or near proposed construction zones, the biologist shall identify a suitable construction-free buffer around the nest. This buffer shall be identified on the ground with flagging or fencing, and will be maintained until the biologist has determined that the young have fledged.

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

No Impact. Riparian habitat is absent from the site. Rural residential lands constitute the majority of the types of habitat on the site and surrounding vicinity and are not considered habitats of special concern. These habitats are not of significant importance to regional wildlife populations (see Appendix C). Because riparian and other habitats of special concern are absent, future project construction will have no impact on these habitats.

IV-c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

No Impact. Jurisdictional waters include rivers, creeks, and drainages that have a defined bed and bank and which, at the very least, carry ephemeral flows. Jurisdictional waters also include lakes,

ponds, reservoirs, and wetlands. Such waters may be subject to the regulatory authority of the U.S. Army Corps of Engineers (USACE), the California Department of Fish and Game (CDFG), and the California Regional Water Quality Control Board (RWQCB).

No aquatic or wetland features occur on the proposed Project site; therefore, jurisdictional waters are considered absent from the project site. There will be no impact.

IV-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?

Less Than Significant Impact. The proposed Project site consists of and is surrounded by agricultural lands, rural residential, and light industrial land and therefore contains no unique geographic features that would constitute a "movement corridor" for native wildlife, although some resident species move within and through the disturbed area. Project development will have some effect on home range and dispersal movements of wildlife currently using the site, but such movements does not constitute a movement corridor. Many migratory species that pass through the Project site are neotropical migrant birds that are likely to pass through and over the sites even when they are developed. Therefore, this project will result in a less than significant effect on regional wildlife movements.

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

No Impact. The 2035 Kings County General Plan's Resource Conservation Element requires "a primary objective in the review of development projects the preservation of healthy native oaks and other healthy native trees." No trees are known to occur on the site. Therefore, the proposed Project would have no impact.

IV-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?

No Impact. The Project site is located within PG&E's Operations and Maintenance Habitat Conservation Plan service areas. There are no other approved habitat conservation plans, natural community conservation plans, regional or state habitat conservation plans in effect within the vicinity of the proposed Project Site. Because the project proposes to connect to PG&E's 115Kv transmission lines, that portion of the project at the connection to 115Kv line may be covered under the PG&E HCP. The project would not conflict with the PG&E HCP; therefore, the proposed Project would have no impact.

V. CULTURAL RESOURCES

Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	☐	☒	☐	☐
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☒	☐	☐
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☒	☐
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☒	☐

BASELINE CONDITIONS

Environmental Setting

Kings County is located in the southern San Joaquin Valley in an area known to have been the home of the Tachi tribe of Yokut Native Americans. The Tachi Yokuts lived north of Tulare Lake and westward to the hills near Coalinga. Archaeological evidence indicates that the historic Native American people were "the last in a series of hunting or hunting-gathering populations" to live in the Tulare Lake region. Artifacts collected from archaeological sites in the vicinity of the lake, primarily along a former (lower) lake shoreline, include over 325 Clovis-type lithic projectile points. Clovis points are typically considered index fossils of an early North American stone tool technology developed 11,000 to 13,000 years ago. Therefore, human occupation of the Tulare Lake margin probably began more than 10,000 years ago[21].

The 2035 Kings County General Plan identifies four sites in the County that are listed on the National Register of Historic Places, and three additional sites that have been designated as California Historical Landmarks. Three of the sites on the National Register are in Hanford: the Taoist Temple; the old County Courthouse; and the Carnegie Library. The fourth site is the Witt archaeological site near Dudley Ridge. The three California Historical Landmarks are the Mussel Slough Tragedy site south of Hardwick; the Kingston Town site north of Hardwick; and the El Adobe de los Robles Rancho west of Lemoore. These sites are located in the unincorporated portions of the County. The 2035 General Plan also identifies 16 additional historic sites of local importance. The sites include seven cemeteries and two churches located in Corcoran, Lemoore, Grangeville, and other rural areas in the northern County. Additional sites include the original site of Lemoore, Avenal Ranch, Kettleman Hills fossil beds, and First High School on the Kings River[22]. The proposed Project site is not located within any of these sites.

[21] Kings County 2035 General Plan EIR, Pg. 4.5-1
[22] Ibid, Pg. 4.5-2

Regulatory Setting

Federal

Cultural resources are protected by several federal regulations, none of which are relevant to this project because it will not be located on lands administered by a federal agency and the project applicant is not requesting federal funding.

State

The project is subject to CEQA which requires public or private projects financed or approved by public agencies to assess their effects on historical resources. CEQA uses the term "historical resources" to include buildings, sites, structures, objects or districts, each of which may have historical, prehistoric, architectural, archaeological, cultural, or scientific importance. CEQA states that if implementation of a project results in significant effects on historical resources, then alternative plans or mitigation measures must be considered; however, only significant historical resources need to be addressed (CCR 15064.5, 15126.4). For the purposes of this CEQA document, a significant impact would occur if project implementation:

- Causes a substantial change in the significance of a historical resource
- Causes a substantial adverse change in the significance of an archaeological resource
- Disturbs any human remains, including those interred outside of formal cemeteries

Therefore, before impacts and mitigation measures can be identified, the significance of historical resources must be determined. CEQA guidelines define three ways that a property may qualify as a historical resource for the purposes of CEQA review:

- If the resource is listed in or determined eligible for listing in the California Register of Historical Resources (CRHR)
- If the resource is included in a local register of historical resources, as defined in Section 5020.1(k) of the PRC or identified as significant in an historical resource survey meeting the requirements of Section 5024.1(g) of the PRC unless the preponderance of evidence demonstrates that it is not historically or culturally significant
- The lead agency determines the resource to be significant as supported by substantial evidence in light of the whole record (CCR, Title 14, Division 6, Chapter 3, Section 15064.5(a))

Each of these ways of qualifying as a historical resource for the purpose of CEQA is related to the eligibility criteria for inclusion in the CRHR (PRC 5020.1(k), 5024.1, 5024.1(g)).

A historical resource may be eligible for inclusion in the CRHR if it:

- Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage
- Is associated with the lives of persons important in our past

- Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values

Has yielded, or may be likely to yield, information important in prehistory or history Properties that area listed in or eligible for listing in the National Register of Historic Places are considered eligible for listing in the CRHR, and thus are significant historical resources for the purpose of CEQA (PRC Section 5024.1(d)(1)).Public Resources Code §5097.5: California Public Resources Code §5097.5 prohibits excavation or removal of any "vertebrate paleontological site…or any other archaeological, paleontological or historical feature, situated on public lands, except with express permission of the public agency having jurisdiction over such lands." Public lands are defined to include lands owned by or under the jurisdiction of the state or any city, county, district, authority or public corporation, or any agency thereof. Section 5097.5 states that any unauthorized disturbance or removal of archaeological, historical, or paleontological materials or sites located on public lands is a misdemeanor.

California Health and Safety Code § 7050.5: Health and Safety Code states that in the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the county in which the remains are discovered has determined whether or not the remains are subject to the coroner's authority. If the human remains are of Native American origin, the coroner must notify the Native American Heritage Commission within 24 hours of this identification. The Native American Heritage Commission will identify a Native American Most Likely Descendant (MLD) to inspect the site and provide recommendations for the proper treatment of the remains and associated grave goods.

Paleontological Resources: Paleontological resources are the fossilized remains of plants and animals and associated deposits. The Society of Vertebrate Paleontology has identified vertebrate fossils, their taphonomic and associated environmental indicators, and fossiliferous deposits as significant nonrenewable paleontological resources. Botanical and invertebrate fossils and assemblages may also be considered significant resources23.CEQA requires that a determination be made as to whether a project would directly or indirectly destroy a unique paleontological resource or site or unique geological feature (CEQA Appendix G(v)(c)). If an impact is significant, CEQA requires feasible measures to minimize the impact (CCR Title 14(3) §15126.4 (a)(1)). California Public Resources Code §5097.5 (see above) also applies to paleontological resources.

Local

The 2035 Kings County General Plan Resource Conservation Element includes a goal with supporting objectives and policies related to archaeological, cultural, and historical resources. Those policies that are pertinent to the Project are included below:

RC Policy I1.1.3: Encourage the protection of cultural and archaeological sites with potential for placement on the National Register of Historic Places and/or inclusion in the California Inventory of Historic Resources.

[23] Society of Vertebrate Paleontology. Comformable Impact Mitigation Guidelines Committee Policy Statements. http://www.vertpaleo.org/ConformableImpactMitigationGuidelinesCommittee.htm.

RC Policy I1.2.1: Participate in and support efforts to identify significant cultural and archaeological resources and protect those resources in accordance with PRC 5097.9 and 5097.993.

RC Policy I1.2.2: Continue to solicit input from local Native American communities in cases where development may result in disturbance to sites containing evidence of Native American activity and/or to sites of cultural importance.

RC Policy I1.2.3: Address archaeological and cultural resources in accordance with CEQA for discretionary land use applications[24] .

Cultural Resources Records Search

A records search (#13-232) of the Project area was conducted on June 27, 2013 by Sierra Valley Cultural Planning, at the Southern San Joaquin Valley Information Center (SSJVIC) of the California Historical Resources Information System, California State University, Bakersfield. The SSJVIC, an affiliate of the State of California Office of Historic Preservation, is the official state repository of cultural resource records and reports for Kings County. As part of the records search, Sierra Valley Cultural Planning reviewed the following State of California inventories for cultural resources in and adjacent to the project area:

- *California Inventory of Historic Resources*;
- *California Historical Landmarks*;
- *California Points of Historical Interest*;
- *California State Historic Landmarks.*

IMPACT ASSESSMENT

V-a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?

Less Than Significant With Mitigation Incorporation. The Project proposes the construction and operation of an approximately 18 acre solar generation facility. A cultural resources records search was conducted on June 27, 2013 by Sierra Valley Cultural Planning at the Southern San Joaquin Valley Historical Resources Information Center, California State University, Bakersfield. The records search included an examination of the National Register of Historic Places, the California Register of Historical Resources, California Points of Historical Interest, California Inventory of Historic Resources, California State Historic Landmarks Registry, and the HRIC files of pertinent historical and archaeological data (see Appendix D). No cultural resources were found within a 1/2 mile of the proposed Project site.

Although no cultural resources were identified in the records search, there would, nonetheless, be a potentially significant impact if historical resources were uncovered during Project construction; however, implementation of the following mitigation measures will reduce potential impacts to historical or archaeological resources to less than significant.

[24] 2035 Kings County General Plan, p. RC-51

CUL-1 If, in the course of Project construction or operation, any archaeological or historical resources are uncovered, discovered, or otherwise detected or observed, activities within fifty (50) feet of the find shall be ceased. A qualified archaeologist shall be contacted and advise the County of the site's significance. If the findings are deemed significant by the Kings County Community Development Agency, appropriate mitigation measures shall be required prior to any resumption of work in the affected area of the Project.

CUL-2 If cultural resource remains are encountered during construction or land modification activities work shall stop and the County shall be notified at once to assess the nature, extent, and potential significance of any cultural remains. If such remains are determined to be significant, appropriate actions shall be determined. Depending upon the nature of the find, mitigation could involve avoidance, documentation, or other appropriate actions to be determined by a qualified archaeologist. For example, activities within 50 feet of the find shall be ceased.

V-b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

Less Than Significant With Mitigation Incorporation. Any impacts to archaeological resources have been discussed in Impact V-a. The mitigation measure in Impact V-a will ensure that any impacts will be less than significant.

V-c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Less Than Significant Impact. No known paleontological resources exist within the Project area, nor are there any known geologic features in the Project area. Project construction will not be expected to disturb any paleontological resources not previously disturbed; however, the mitigation measure in Impact V-a will ensure that any impacts will be less than significant.

V-d) Disturb any human remains, including those interred outside of formal cemeteries?

Less Than Significant Impact. No formal cemeteries or other places of human internment are known to exist on the Project site (see Appendix D); however, in accordance with State Health and Safety Code Section 7050.5 and Public Resource Code Section 5097.98, if human remains are unearthed during project construction, no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition of such remains. If the remains are determined to be of Native American descent, the coroner has 24 hours to notify the Native American Heritage Commission (NAHC). The NAHC would then identify the person(s) thought to be the most likely descendent of the deceased Native American, who will then help determine what course of action should be taken in dealing with the remains. As such, any impacts will be less than significant.

VI. GEOLOGY AND SOILS

Would the project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☒	☐
ii) Strong seismic ground shaking?	☐	☐	☒	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv) Landslides?	☐	☐	☐	☒
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☒	☐
d) Be located on expansive soil, as defined in Table 18-1-B of the most recently adopted Uniform Building Code creating substantial risks to life or property?	☐	☐	☒	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒

BASELINE CONDITIONS

Environmental Setting

The Project is located in northern Kings County, in the southern section of California's Great Valley Geomorphic Province, or Central Valley. The Sacramento Valley makes up the northern third and the San Joaquin Valley makes up the southern two-thirds of the geomorphic province. Both valleys are watered by large rivers flowing west from the Sierra Nevada Range, with smaller tributaries flowing east from the Coast Ranges. Most of the surface of the Great Valley is covered by Quaternary (present day to

1.6 million years ago) alluvium. The sedimentary formations are steeply upturned along the western margin due to the uplifted Sierra Nevada Range[25].

Faulting and Seismicity

The Project site is not located within an Alquist-Priolo Earthquake Fault Zone and no known faults cut through the local soil at the site. The nearest mapped principal fault is the San Andreas Fault, located over 52 miles southwest of the Project site. The San Andreas Fault is the dominant active tectonic feature of the Coast Ranges and represents the boundary of the North American and Pacific plates. The smaller Poso Creek fault is 39 southeast of the site. The Owens Valley fault group is on the east side of the Sierra Nevada and the White Wolf fault is south of Kings County[26].

Historically, earthquakes documented in Kings County have been of low local magnitude and have produced low level ground shaking[27]. These include the 1857 Fort Tejon earthquake (Magnitude[M 7.9), with an epicenter approximately seven miles west of the Kings County boundary in Monterey County, in the community of Parkfield. During this event, the San Andreas Fault ruptured for a length of approximately 225 miles between Parkfield and San Bernardino. The largest earthquake in southern California since the Fort Tejon earthquake was the 1952 Kern County earthquake (Magnitude 7.3), which occurred on the White Wolf fault. The epicenter occurred approximately 38 miles southeast of the Kings County boundary near Bakersfield and produced ground shaking felt over 200 miles away. The most recent earthquakes in Kings County occurred during the 1980s. The 1982 New Idria earthquake (Magnitude 5.4) and the 1983 Coalinga (Magnitude 6.5) earthquakes both occurred approximately 20 miles from the western border of Kings County. These two earthquakes were followed by the 1985 Kettleman Hills earthquake (Magnitude 6.1) with an epicenter located four miles west of the Kings County border, just north of the City of Avenal.

Soils

According to the United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Soil Survey of Kings County, California[28] the Solar Facility site contains four soil types: Cajon sandy loam, Kimberlina fine sandy loam, Wasco sandy loam, and Urban land. The Cajon and Kimberlina soil series originates from alluvial fans with a parent material of igneous and sedimentary rock. The Wasco soil series originates from alluvium derived from sandstone (see Appendix A). These soil types are well drained, and have a very low to moderate water holding capacity.

Regulatory Setting

Federal

Federal regulations for geology and soils are not relevant to this Project because it is not a federal undertaking (the Project site is not located on lands administered by a federal agency, and the applicant is not requesting federal funding or a federal permit).

[25] Harden, D.R. 1998,Califorina Geology, Prentice Hall, 479 pages
[26] Kings County 2035 General Plan EIR
[27] Ibid.
[28] United States Department of Agriculture, Natural Resource Conservation Service. Site accessed, July 2013.

State

Uniform Building Code: The California Code of Regulations (CCR) Title 24 is assigned to the California Building Standards Commission, which, by law, is responsible for coordinating all building standards. The California Building Code incorporates by reference the Uniform Building Code with necessary California amendments. The Uniform Building Code is a widely adopted model building code in the United States published by the International Conference of Building Officials. About one-third of the text within the California Building Code has been tailored for California earthquake conditions. In addition, this project is being evaluated pursuant to CEQA.

Local

This project is being evaluated pursuant to CEQA; however, there are no local regulations, plans, programs, or guidelines associated with geology and soils that are applicable to the proposed project.

IMPACT ASSESSMENT

VI-a) Would the Project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

VI-a-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.

Less Than Significant Impact. No substantial faults are known to occupy Kings County according to the Alquist-Priolo Earthquake Fault Zoning Maps and the State of California Department of Conservation.

According to the Five County Seismic Safety Element (FCSSE) and the Kings County Seismic Safety Map (Figure HS-2 of the 2035 Kings County General Plan Health and Safety Element), the Project site is located in the V-1 zone, defined as an area "of hard rock alluvium on valley floors". The FCSSE further states that, "The distance to either of the faults expected to be a source of shaking is sufficiently great that shaking should be minimal and the requirements of the Uniform Building Code Zone II should be adequate for normal facilities. The risk of the rupture of a known earthquake fault is less than significant.

VI-a-ii) Strong seismic ground shaking?

Less Than Significant Impact. Any impacts regarding strong seismic ground shaking have been discussed in Impact VI-a-i. The impact will be less than significant.

VI-a-iii) Seismic-related ground failure, including liquefaction?

No Impact. The project site is outside subsidence and liquefaction hazard zones identified in the Kings County General Plan Seismic Safety Map (Figure HS-2 of the 2035 Kings County General Plan Health and Safety Element). No subsidence-prone soils or oil or gas production is involved with the Project. There would be no impact.

VI-a-iv) Landslides?

No Impact. The Project site is outside the landslide hazard areas identified on the Kings County Seismic Safety Map (Figure HS-2 of the 2035 Kings County Health and Safety Element). No geologic landforms exist on or near the site that would result in a landslide event. There would be no impact.

VI-b) Result in substantial soil erosion or the loss of topsoil?

Less Than Significant Impact. Grading activities associated with the construction of the solar generation facility would involve earthmoving and grading. These activities could expose soils to erosion processes. The extent of erosion would vary depending on slope steepness/stability, vegetation/cover, concentration of runoff, and weather conditions. The site is relatively flat, with very little slope and would continue to have a flat topography after grading.

The proposed Project site has flat terrain with a low potential for soil erosion. The site is indicated as having a moderate erosion susceptibility index according to the NRCS Soil Survey of Kings County. Though wind erosion is of concern in the majority of the Central Valley, to further prevent water and wind erosion during the construction period, a Storm Water Pollution Prevention Plan (SWPPP) would be developed for the Project as required for all projects which disturb more than one acre in size. As part of the SWPPP, the applicant would be required to provide erosion control measures to protect the topsoil. Any stockpiles of soils would be watered and/or covered to prevent loss due to wind erosion as part of the SWPPP during construction. As a result of these efforts, loss of topsoil and substantial soil erosion during the construction period are not anticipated. The impact would be less than significant.

VI-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?

No Impact. There are no residences or structures on the Project site. Moreover, the site is flat in terrain and substantial grade change would not occur in the topography to the point where the Project would expose people or structures to potential substantial adverse effects on, or offsite, such as landslides, lateral spreading, subsidence, liquefaction or collapse. There would be no impact.

VI -d) Be located on expansive soil, as defined in Table 18-1-B of the most recently adopted Uniform Building Code creating substantial risks to life or property?

Less Than Significant Impact. The soils at the Project site are described as well drained. Soil types on the site formed in alluvium derived from sandstone, igneous and sedimentary rock. The Project site is not located within an area with high soil expansion potential as shown on Figure HS-4 of the Health and Safety Element of the 2035 Kings County General Plan[29]. Any impacts would be less than significant.

VI-e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

No Impact. The Project site is located within an area with Soil Type 'A', which requires 40-square feet of leaching per 100 gallons of the septic tank. Therefore, the soils at the Project location are capable of

[29] 2035 Kings County General Plan EIR, (SCH# 2008121020)

adequately supporting the use of a septic system. However, the Project does not include the installation of a septic system. Therefore, there will be no impact.

VII GREENHOUSE GAS EMISSIONS **Would the project:**	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

BASELINE CONDITIONS

Environmental Setting

Various gases in the earth's atmosphere play an important role in moderating the earth's surface temperature. Solar radiation enters earth's atmosphere from space and a portion of the radiation is absorbed by the earth's surface. The earth emits this radiation back toward space, but the properties of the radiation change from high-frequency solar radiation to lower-frequency infrared radiation. GHGs are transparent to solar radiation, but are effective in absorbing infrared radiation. Consequently, radiation that would otherwise escape back into space is retained, resulting in a warming of the earth's atmosphere. This phenomenon is known as the greenhouse effect[30]. Scientific research to date indicates that some of the observed climate change is a result of increased GHG emissions associated with human activity. Among the GHGs contributing to the greenhouse effect are water vapor, carbon dioxide (CO_2), methane (CH_4), ozone, NOx, and chlorofluorocarbons. Human-caused emissions of these GHGs in excess of natural ambient concentrations are considered responsible for enhancing the greenhouse effect. GHG emissions contributing to global climate change are attributable, in large part, to human activities associated with the industrial/manufacturing, utility, transportation, residential, and agricultural sectors. In California, the transportation sector is the largest emitter of GHGs, followed by electricity generation[14]. Global climate change is, indeed, a global issue. GHGs are global pollutants, unlike criteria pollutants and TACs (which are pollutants of regional and/or local concern). Global climate change, if it occurs, could potentially affect water resources in California. Rising temperatures could be anticipated to result in sea-level rise (as polar ice caps melt) and possibly change the timing and amount of precipitation, which could alter water quality. According to some, climate change could result in more extreme weather patterns; both heavier precipitation that could lead to flooding, as well as more extended drought periods. There is uncertainty regarding the timing, magnitude, and nature of the potential changes to water resources as a result of climate change; however, several trends are evident[14].

Snowpack and snowmelt may also be affected by climate change. Much of California's precipitation falls as snow in the Sierra Nevada and southern Cascades, and snowpack represents approximately 35 percent of the state's useable annual water supply. The snowmelt typically occurs from April through July; it provides natural water flow to streams and reservoirs after the annual rainy season has ended. As air temperatures increase due to climate change, the water stored in California's snowpack could be affected by increasing temperatures resulting in: (1) decreased snowfall, and (2) earlier snowmelt[14].

[30] U.S Bureau of Reclamation, Contra Costa Water District, and Western Area Power Administration. 2009. Los Vaqueros Reservoir Expansion Project. Environmental Impact Statement/Environmental Impact Report. State Clearinghouse No. 2006012037. February. Pages cites: 5-1 through 5-4.

Regulatory Setting

Federal

The USEPA Mandatory Reporting Rule (40 CFR Part 98), which became effective December 29, 2009, requires that all facilities that emit more than 25,000 metric tons CO2-equivalent per year beginning in 2010, report their emissions on an annual basis. On May 13, 2010, the USEPA issued a final rule that established an approach to addressing GHG emissions from stationary sources under the CAA permitting programs. The final rule set thresholds for GHG emissions that define when permits under the New Source Review Prevention of Significant Deterioration and title V Operating Permit programs are required for new and existing industrial facilities.

In addition, the Supreme Court decision in Massachusetts v. EPA (Supreme Court Case 05-1120) found that the USEPA has the authority to list GHGs as pollutants and to regulate emissions of GHGs under the CAA. On April 17, 2009, the USEPA found that CO_2, CH_4, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride may contribute to air pollution and may endanger public health and welfare. This finding may result in the USEPA regulating GHG emissions; however, to date the USEPA has not proposed regulations based on this finding.

State

California is taking action to reduce GHG emissions. In June 2005, Governor Schwarzenegger signed Executive Order S-3-05 to address climate change and GHG emissions in California. This order sets the following goals for statewide GHG emissions:

- Reduce to 2000 levels by 2010
- Reduce to 1990 levels by 2020
- Reduce to 80 percent below 1990 levels by 2050

In 2006, California passed AB 32, the California Global Warming Solutions Act of 2006. The Act requires ARB to design and implement emission limits, regulations, and other feasible cost-effective measures to reduce statewide GHG emissions to 1990 levels by 202014. Senate Bill 97 was signed into law in August 2007. The Senate Bill required the Office of Planning and Research (OPR) to prepare, develop, and transmit to the Resource Agency guidelines for the feasible mitigation of GHG emissions or the effects of GHG emissions by July 1, 2009. On April 13, 2009, the OPR submitted to the Secretary for Natural Resources its recommended amendments to the State CEQA Guidelines for addressing GHG emissions. On July 3, 2009, the Natural Resources Agency commenced the Administrative Procedure Act rulemaking process for certifying and adopting the amendments. Following a 55-day public comment period and 2 public hearings, and in response to comments, the Natural Resources Agency proposed revisions to the text of the proposed Guidelines amendments. The Natural Resources Agency transmitted the adopted amendments and the entire rulemaking file to the Office of Administrative Law on December 31, 2009. On February 16, 2010, the Office of Administrative Law approved the amendments, and filed them with the Secretary of State for inclusion in the CCR. The Amendments became effective on March 18, 2010.

The AB 32 Scoping Plan contains the main strategies California will use to reduce GHG emissions that cause climate change. The scoping plan has a range of GHG reduction actions which include direct

regulations, alternative compliance mechanisms, monetary and non-monetary incentives, voluntary actions, market-based mechanisms such as a cap-and-trade system, and an AB 32 cost of implementation fee regulation to fund the program. The first regulation adopted by the ARB pursuant to AB 32 was the regulation requiring mandatory reporting of GHG emissions. The regulation requires large industrial sources emitting more than 25,000 metric tons of CO_2 per year to report and verify their GHG emissions from combustion of both fossil fuels and biomass-derived fuels. The California Cap and Trade program is being developed and the ARB must adopt regulations by January 1, 2011. Finally, Governor Schwarzenegger directed the ARB, pursuant to Executive Order S-21-09, to adopt a regulation by July 31, 2010, requiring the state's load serving entities to meet a 33 percent renewable energy target by 2020.

In addition, this project is being evaluated pursuant to CEQA.

Local

This Project is being evaluated pursuant to CEQA; however, there are no local regulations, plans, programs, or guidelines associated with greenhouse gas emissions that are applicable to the proposed project.

IMPACT ASSESSMENT

VII-a) Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? and;

VII-b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Less Than Significant Impact. As seen in Chapter 2, during operations, the Project will generate enough electricity to power all of the electricity usage for 660 households in Kings County, which will reduce greenhouse gas emissions by more than 1,437 metric tons of CO_2 equivalents during the first year of the project and as much as 26,700 metric tons of CO_2 equivalents during the life of the project if there were no changes in electricity generation mix in the Central Valley. The Project will interconnect the Solar Generation Facility to the existing Southern California Electric (SCE) 12 kV distribution line that runs north along Orchard Drive and ultimately will connect to the Hanford Substation.

Temporary Project construction emissions will be under any significance thresholds, as demonstrated by the CalEEMod output results on Table page 3-21, and Project operations will reduce greenhouse gas emissions. In addition, Regulation VIII measures, as seen in Table 3 on page 3-18, will be implemented, further decreasing potential emissions. The Project will not significantly generate or contribute to the emission of GHGs either directly or indirectly. In addition, the Project will not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing emissions of greenhouse gases. The impact will be less than significant.

VIII. HAZARDS AND HAZARDOUS MATERIALS

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

BASELINE CONDITIONS

Environmental Setting

The Project site is located in eastern Kings County (County), California, 185 miles southeast of Sacramento and 72 miles northwest of Bakersfield. The Project site is located west of State Route (SR)

43 and south of SR 198 and more specifically, immediately north of Orchard Drive and east of 10th Avenue. The Project can be found within the Hanford, CA, United States Geological Survey (USGS) 7.5 minute quadrangle, in Section 6, Township 19 South, Range 22 East, M. D. B & M. The Project site is located on Assessor Parcel Number 016-160-069 and -024.

Hanford Municipal Airport is located approximately one quarter mile to the northeast of the Project site. Visalia Municipal Airport is located 12.3 miles to the east of the site; Lemoore Naval Air Station is 16.6 miles to the west of the site, while Fresno Yosemite International/Fresno Air Terminal is located 31.9 miles to the north of the Project site.

The Hanford Water Treatment plant is located approximately one mile southwest of the Project site, with the wastewater treatment ponds located approximately one mile southwest of the site.

Various elementary, middle and high schools are located to the southwest and north of the project site. However, the closest school, Lincoln Elementary School is at a distance of approximately three quarters of a mile northwest of the site.

The Project site is currently vacant though it has historically been utilized for dry farming of row crops.

Regulatory Setting

Federal

The NFPA 70National Electrical Code is adopted in all 50 states. It includes requirements for electrical wiring and equipment. Article 705 covers interconnecting generators, windmills, and solar and fuel cells with other power supplies[31]. The federal Resource Conservation and Recovery Act (RCRA) and California Hazardous Waste Control Law regulate the disposal of solar PV cells. The local hazardous waste regulatory authority is Kings County.

State

California Environmental Protection Agency (CalEPA): The California Environmental Protection Agency (CalEPA) was created in 1991 by Governor's Executive Order. The six boards, departments, and office were placed under the CalEPA umbrella to create a cabinet-level voice for the protection of human health and the environment and to assure the coordinated deployment of State resources. The mission of CalEPA is to restore, protect, and enhance the environment to ensure public health, environmental quality, and economic vitality under Title 22 of the California Code of Regulations (CCR)[32]

Unified Program: The Unified Program (codified CCR Title 27, Division 1, Subdivision 4, Chapter 1, Sections 15100- 15620) consolidates, coordinates, and makes consistent the administrative requirements, permits, inspections, and enforcement activities of the following six environmental and emergency response programs[33]:

- Hazardous Waste Generator (HWG) program and Hazardous Waste On-site Treatment activities;
- Aboveground Storage Tank (AST) program Spill Prevention Control and Countermeasure Plan requirements;

[31] National Fire Protection Association. 2010. NFPA 70: National Fire Code.
[32] California Environmental Protection Agency, Site accesses: August 2013, http://www.calepa.ca.gov
[33] California Environmental Protection Agency, Site accesses: August 2013, http://www.calepa.ca.gov/cupa/

- Underground Storage Tank (UST) program;
- Hazardous Materials Release Response Plans and Inventory (HMRRP) program;
- California Accidental Release Prevention (CalARP) program;
- Hazardous Materials Management Plans and Hazardous Materials Inventory Statement (HMMP/HMIS) requirements.

The Secretary of CalEPA is directly responsible for coordinating the administration of the Unified Program. The Unified Program requires all counties to apply to the CalEPA Secretary for the certification of a local unified program agency. Qualified cities are also permitted to apply for certification. The local Certified Unified Program Agency (CUPA) is required to consolidate, coordinate, and make consistent the administrative requirements, permits, fee structures, and inspection and enforcement activities for these six program elements in the county. Most CUPAs have been established as a function of a local environmental health or fire department.

Hazardous Waste Management Program: The Hazardous Waste Management Program (HWMP) regulates hazardous waste through its permitting, enforcement, and Unified Program activities in accordance with California Health and Safety Code Section 25135 et seq. The main focus of HWMP is to ensure the safe storage, treatment, transportation, and disposal of hazardous wastes.

State Water Resources Control Board (SWRCB): The State Water Resources Control Board (SWRCB) was created by the California legislature in 1967. The mission of SWRCB is to ensure the highest reasonable quality for waters of the State, while allocating those waters to achieve the optimum balance of beneficial uses. The joint authority of water allocation and water quality protection enables SWRCB to provide comprehensive protection for California's waters.

California Department of Industrial Relations – Division of Occupational Safety and Health (Cal OSHA): In California, every employer has a legal obligation to provide and maintain a safe and healthful workplace for employees, according to the California Occupational Safety and Health Act of 1973 (per Title 8 of the CCR). The Division of Occupational Safety and Health (Cal/OSHA) program is responsible for enforcing California laws and regulations pertaining to workplace safety and health and for providing assistance to employers and workers about workplace safety and health issues. Cal/OSHA regulations are administered through Title 8 of the CCR. The regulations require all manufacturers or importers to assess the hazards of substances that they produce or import and all employers to provide information to their employees about the hazardous substances to which they may be exposed.

Local

The 2035 Kings County General Plan Health and Safety Element includes an objective and policy related to environmental hazards and hazardous materials. The policy that is pertinent to the Project is included below:

HS Objective B1.5 Ensure adequate protection of County residents form new generations of toxic or hazardous waste substances.

HS Policy B1.5.1: Evaluated development applications to determine the potential for hazardous waste generation and be required to provide sufficient financial assurance that is available to the County to cover waste cleanup and/or site restoration in instances where the site has been abandoned or the business operator is unable to remove hazardous materials form the site.

IMPACT ASSESSMENT

VIII-a Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? and;

VIII-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?

Less Than Significant With Mitigation Incorporation. Project construction will require the transport and use of small quantities of hazardous materials in the form of gasoline, diesel and oil. There is the potential for small leaks due to refueling of the construction equipment, however standard construction Best Management Practices (BMPs) included in the SWPPP will reduce the potential for the release of construction-related fuels and other hazardous materials to storm water contamination from spills or leaks, control the amount of runoff from the site, and require proper disposal or recycling of hazardous materials. The Project will also interconnect the Solar Generation Facility to the existing Southern California Electric (SCE) 12 kV distribution line that runs north along Orchard Drive and ultimately will connect to the Hanford Substation. Project operation may require the storage of small amounts of hazardous materials, such as fuel and lubricants. The storage, transport, and use of these materials will comply with Local, State and Federal regulatory requirements.

Project construction and operation will also require the use of heavy equipment. The use of heavy equipment will have the ability to generate dust. Soil on the Project site may contain fungal spores. When the soil is disturbed by digging, vehicles, or by the wind, the fungal spores may become airborne, and may be inhaled by people on or near the site. Some fungal spores are known to cause Valley Fever. In order to minimize the risk of Valley Fever, the generation of fugitive dust should be reduced to the greatest extent feasible. Such reduction can best be achieved by utilizing soil stabilizers before and during ground disturbing activities. Prior to the initiation of construction a Fugitive Dust Control Plan outlining the methods to reduce dust is required by the SJVAPCD to demonstrate compliance with its Regulation VIII.

It is not known at this time if the Project site soils contain the fungus that may cause Valley Fever. Nonetheless, a potentially significant health risk impact associated with contraction of Valley Fever could result if said fungal spores were in the soil, released as a result of construction and operation activities, and inhaled by workers, employees or nearby sensitive receptors. Implementation of the following mitigation measures will reduce potential impacts pertaining to the release into the environment of hazardous dust to less than significant.

HAZ-1 The constructor and operator of the Project shall develop an Injury and Illness Prevention Program and project-specific health and safety plans. These plans should include but not be limited to the following:

- Compliance with the SJVAPCD's Regulation VIII and SJVAPCD-approved Dust Control Plan;
- Train workers and supervisors on how to recognize symptoms of illness related to Valley Fever;
- Provide pre-construction training and instruction regarding requirements for on-site construction pursuant to the approved Dusts Control Plan;

- Limit workers' exposure to outdoor dust in disease-endemic areas;
- When soil will be disturbed by heavy equipment or vehicles, wet the soil with water or other permitted soil stabilizer before disturbing it and continuously wet it while digging to keep dust levels down;
- Heavy equipment, trucks, and other vehicles generating heavy dust should have enclosed cabs equipped with air filters; and
- When exposure to dust is unavoidable, provide NIOSH-approved respiratory protection to all employees.

VIII-c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

No Impact. The nearest school, Lincoln Elementary, is approximately 0.75 miles northwest of the Project site. The Project involves construction of a solar energy generation facility and will not emit hazardous emissions, involve hazardous materials, or create a hazard to the schools in any way. There will be no impact.

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

No Impact. The Project does not involve land that is listed as a hazardous materials site pursuant to Government Code Section 65962.5 and is not included on a list compiled by the Department of Toxic Substances Control per a review of "Identified Hazardous Waste Sites", conducted on August 16, 2013 by Provost & Pritchard Consulting Group. The nearest site is the Old Hanford City Dump, site 16490003, which is approximately 1.3 miles to the southwest of the site. There will be no impact.

VIII-e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?; and,

VIII-f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?

No Impact. The closest airport, the Hanford Municipal Airport, is approximately 0.23 miles northeast of the Project site, while the closest regional airport, Visalia Municipal Airport, is approximately 12.3 miles to the east. The Project site is located within the B2 Zone (Extended Approach/Departure) as identified by Figure HS-22 of the 2035 Kings County General Plan. The Kings County Airport Land Use Compatibility Plan (ALUC) has addressed all land use compatibility surrounding the Hanford Municipal Airport. The ALUC establish criteria intended to ensure that local general plans, specific plans, and zoning ordinances take into account airport and surrounding land use compatibility.[34] Table HS 4 of the Health and Safety Element of the 2035 Kings County General Plan identifies the B2 Zone as a moderate risk zone with aircraft commonly below 800 feet and determines that the maximum density of the

[34] 2035 Kings County General Plan, Health and Safety Element, p. HS-34

Project site shall be 60 people per acre. There will be no employees stationed at the site on a permanent basis. The proposed Project would not result in a safety hazard for people working in the Project area since the solar panels would have a maximum height of about 18 feet above the ground and they would be thin-film, light-absorbing with anti-reflective coatings that virtually eliminate glare. There would be no impact.

VIII-g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

No Impact. The Project does not cross any publicly accessed routes, and would not interfere with implementation of an emergency response plan or evacuation. There would be no impact.

VIII-h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

Less than Significant Impact. The Project site and the surrounding lands are either vacant or rural residential and are designated as low density residential or industrial land uses and are not considered wildlands. Vegetation on the site is sparse with little potential for vegetative fuel buildup. However, due to the Project geographic location the County would require a pest management and weed abatement plan to be prepared to mitigate potential impacts to adjacent farmlands. The PV panels and ancillary equipment would result in a negligible increase in fire potential. The applicant would also prepare and provide to the County a fire prevention plan for the Project in compliance with applicable County regulations. The impact would be less than significant.

IX. HYDROLOGY AND WATER QUALITY

Would the project:

		Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a)	Violate any water quality standards or waste discharge requirements?	☐	☐	☒	☐
b)	Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☒	☐
c)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	☐	☐	☒	☐
d)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	☐	☐	☒	☐
e)	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?	☐	☐	☒	☐
f)	Otherwise substantially degrade water quality?	☐	☐	☒	☐
g)	Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☒
h)	Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	☐	☐	☐	☒
i)	Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☐	☒
j)	Inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒

BASELINE CONDITIONS

Environmental Setting

The climate in Kings County can be classified as Mediterranean with average rainfall rates of 7.6 inches annually, occurring primarily between November and April. [35].

Hydrology in the Project vicinity is associated with the Tulare Lake Basin, one of three main subareas in the County. The Tulare Lake Basin is in the northern alluvial fan and basin subarea characterized by southwest to south flowing rivers, creeks, and irrigation canal systems that convey water from the Sierra Nevada to the west toward the Tulare Lake Bed. The southern portion of the basin is internally drained by the Kings, Kaweah, Tule, and Kern Rivers[36]. The Tulare Lake Basin comprises the drainage area of the San Joaquin Valley south of the San Joaquin River, and is essentially a closed basin because surface water drains north into the San Joaquin River only in years of extreme rainfall.

Regulatory Framework

Federal

Clean Water Act: The Clean Water Act (CWA) is intended to restore and maintain the chemical, physical, and biological integrity of the nation's waters (33 CFR 1251). The regulations implementing the CWA protect waters of the U.S. including streams and wetlands (33 CFR 328.3). The CWA requires states to set standards to protect, maintain, and restore water quality by regulating point source and some non-point source discharges. Under Section 402 of the CWA, the National Pollutant Discharge Elimination System (NPDES) permit process was established to regulate these discharges.

The National Flood Insurance Act (1968) makes available federally subsidized flood insurance to owners of flood-prone properties. To facilitate identifying areas with flood potential, Federal Emergency Management Agency (FEMA) has developed Flood Insurance Rate Maps (FIRM) that can be used for planning purposes.

State

State Water Resources Control Board: The State Water Resources Control Board (SWRCB), located in Sacramento, is the agency with jurisdiction over water quality issues in the State of California. The SWRCB is governed by the Porter-Cologne Water Quality Act (Division 7 of the California Water Code), which establishes the legal framework for water quality control activities by the SWRCB. The intent of the Porter-Cologne Act is to regulate factors which may affect the quality of waters of the State to attain the highest quality which is reasonable, considering a full range of demands and values. Much of the implementation of the SWRCB's responsibilities is delegated to its nine Regional Boards. The Project site is located within the Central Valley Region.

Regional Water Quality Board: The Regional Water Quality Control Board (RWQCB) administers the NPDES storm water-permitting program in the Central Valley region. Construction activities on one acre or more are subject to the permitting requirements of the NPDES General Permit for Discharges of

[35] 2035 Kings County General Plan, Health and Safety Element, p. HS-2
[36] California Department of Water Resources. California's Groundwater Bulletin 118. 2004. Tulare Lake Hydrologic Region, San Joaquin Valley Groundwater Basin. http://www.water.ca.gov/pubs/groundwater/bulletin_118/basindescriptions/5-22.11.pdf Site accessed August 2013.

Storm Water Runoff Associated with Construction Activity (General Construction Permit). The General Construction Permit requires the preparation and implementation of a Storm Water Pollution Prevention Plan (SWPPP). The plan will include specifications for Best Management Practices (BMPs) that will be implemented during project construction to control degradation of surface water by preventing the potential erosion of sediments or discharge of pollutants from the construction area. The General Construction Permit program was established by the RWQCB for the specific purpose of reducing impacts to surface waters that may occur due to construction activities. BMPs have been established by the RWQCB in the California Storm Water Best Management Practice Handbook (2003), and are recognized as effectively reducing degradation of surface waters to an acceptable level. Additionally, the SWPPP will describe measures to prevent or control runoff degradation after construction is complete, and identify a plan to inspect and maintain these facilities or project elements.

In addition, this proposed Project is being evaluated pursuant to CEQA.

Local

The 2035 Kings County General Plan Health and Safety Element has the following goal and policies related to flood hazards:

HS GOAL A4: Prevent unnecessary exposure of people and property to flood damage.

HS Policy A4.1.1: Review new development proposals against current Federal Emergency Management Agency (FEMA) digital flood insurance rate maps and California Department of Water Resource special flood hazard maps to determine project site susceptibility to flood hazard.

HS Policy A4.1.5: Regulate development, water diversion, vegetation removal, and grading to minimize any increase in flood damage to people and property.

HS Policy A4.1.7: Consider and identify all areas subject to flooding in the review of all land divisions and development projects.

IMPACT ASSESSMENT

IX-a Violate any water quality standards or waste discharge requirements? and,

IX-f) Otherwise substantially degrade water quality?

Less Than Significant Impact. The State Water Resources Control Board requires any new construction project over an acre to complete a Stormwater Pollution Prevention Plan (SWPPP). A SWPPP involves site planning and scheduling, limiting disturbed soil areas, and determining best management practices to minimize the risk of pollution and sediments being discharged from construction sites. Implementation of the SWPPP will minimize the potential for the Project to substantially alter the existing drainage pattern in a manner that will result in substantial erosion or siltation onsite or offsite. Additionally, there will be no discharge to any surface or groundwater source. Further, no chemicals or surfactants will be used in the maintenance or operation of solar panels and as such, there will be no discharge that could impact or degrade water quality standards. The Project will not violate or degrade any water quality standards and will not impact waste discharge requirements. The impact will be less than significant.

IX-b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?

Less Than Significant Impact. The Project site is located in the Tulare Lake Basin, an area affected by overdraft. The Project site is located within the Tulare Lake Sub-basin portion of the regional area; however, no water would be drawn from the local groundwater for construction or operation of the facilities as the water that will be used will be provided by a third party outside of the Project boundaries. Therefore, the Project would not impact any groundwater resources. In addition, only small volumes of water, approximately 0.05 acre feet, would be utilized during operation to wash the panels approximately two times per year, resulting in minimal runoff. Pursuant to California Water Code Section 10912(a)(5)(B) the Project is not required to complete a Water Supply Assessment as the Project, a photovoltaic energy generating facility covered by that section, would use only less than 2 ac/ft of water per year; the threshold for a Water Supply Assessment to be required is 75 ac/ft of water per year. Water drainage patterns would not be modified other than being slightly delayed by dripping down solar panel surfaces.

No chemicals will be used in the maintenance or operation of solar panels and as such, there will be no discharge that could impact water quality standards. Any impacts to groundwater resources will be less than significant.

IX-c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?

Less Than Significant Impact. Drainage patterns would minimally change as a result of Project build-out. Drainage and runoff controls and barriers would be installed to ensure both on and off site erosion would not result from construction activities. Grading activities would be limited due to the relatively flat topography of the selected site. Areas that may be prone to soil erosion would not be graded and the final engineering drawings will indicate the specific deliberate actions that would be taken to ensure that the natural drainage pattern of the site is retained to the fullest extent feasible. Any impacts would be less than significant.

IX-d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?

Less Than Significant Impact. Any impacts regarding the alteration of drainage patterns to increase runoff water that will potentially induce flooding have been discussed in the impact analysis for Impact IX-c. The impact will be less than significant.

IX-e) 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?

Less Than Significant Impact. Any impacts regarding the creation or contribution to runoff water that will potentially exceed the capacity of existing stormwater drainage systems have been discussed in the impact analysis for Impact IX-c. The impact will be less than significant.

IX-g Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map? and,

IX-h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?

No Impact. The Project site is located within Other Areas Zone X as shown on the National Flood Insurance Program, Flood Insurance Rate Map (FIRM), Map Number 06031C0195C, dated June 16, 2009. There are no development restrictions associated with Other Areas Zone X, since these are areas determined to be outside the 0.2 percent annual chance floodplain. Flood Zone A is located approximately 4,000 feet northwest of the Project site as shown on Figure 5 below. There would be no impact with regard to placement of housing or structures within flood hazard areas.

IX-i Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?

IX-j) Inundation by seiche, tsunami, or mudflow?

No Impact. The nearest large body of water is Lake Kaweah, which is located approximately 35.5 miles to the east of the Project site. Lake Isabella is located about 80 miles to the southeast of the Project site and Pine Flat Lake is approximately 40 miles to the northeast of the site. Due to the lengthy distance between the lakes and the Project site, there would be no potential for seiche or tsunami to occur. There would be no impact.

Figure 6 - Kings County DFIRM

X. LAND USE AND PLANNING

Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a) Physically divide an established community?	☐	☐	☐	☒
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the General Plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☒	☐
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒

BASELINE CONDITIONS

Environmental Setting

The Project site is located in northern Kings County. Kings County is located in the San Joaquin Valley portion of the Great Central Valley of California that lies south of the Sacramento-San Joaquin Delta, and is comprised of 1,391 square miles. Kings County is bordered by Fresno County to the north and west; Kern County to the south; Tulare County to the east; and Monterey County and San Luis Obispo County to the southwest. There four incorporated cities within Kings County: Avenal, Corcoran, Hanford, and Lemoore. Several unincorporated communities are also located within the County, as well as the Naval Air Station Lemoore.

The Project site has been historically used as a vacant lot to store cotton, though it is currently not in use. The site is designated as Light Industrial in the County's 2035 General Plan and is zoned by Kings County as ML - Light Industrial. Land adjacent to the site is developed into rural residential, industrial and agricultural uses. No forest or timber land is present at the project site or in the project vicinity.

Regulatory Setting

Federal

Federal regulations for land use are not relevant to this Project because it is not a federal undertaking (the Project site is not located on lands administered by a federal agency, and the project applicant is not requesting federal funding or a federal permit).

State

This proposed Project is being evaluated pursuant to CEQA; however, there are no state regulations, plans, programs, or guidelines associated with land use and planning that are applicable to the proposed Project.

Local

2035 Kings County General Plan

The 2035 Kings County General Plan Land Use Element has the following objective and policy related to land uses in agricultural areas:

LU Policy B7.1.3: Power generation facilities for commercial markets shall be allowed and regulated through the Conditional Use Permit approval process, and include thermal, wind, and solar photovoltaic electrical generating facilities that produce power. Hydroelectric and cogeneration facilities shall also be regulated as conditional uses except as follows:

1. The installation of hydroelectric generating facilities, with a capacity of 5 megawatts or less, in connection with existing dams, canals, and pipelines shall be regulated as permitted uses, subject to issuance of a site plan review that is categorically exempt pursuant to Section 15328 of the CEQA Guidelines.
2. The installation of cogeneration equipment with a capacity of 50 megawatts or less at existing facilities shall be regulated as permitted uses, subject to issuance of a site plan review, which is categorically exempt pursuant to Section 15329 of the CEQA Guidelines.

IMPACT ASSESSMENT

X-a) Would the project physically divide an established community?

No Impact. The proposed Project is located in a rural area in northern Kings County, within the census-designated place of Home Garden and just outside the City of Hanford. The proposed Project will not physically divide any established community. There will be no impact.

X-b) Would the project Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the General Plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

Less Than Significant Impact. The proposed Project site is located within Kings County. The Kings County General Plan designates the Project for light industrial uses and the Zoning for the site is ML - Light Industrial. As described in section II-b, the proposed Project is consistent with the underlying zoning with the approval of a Conditional Use Permit. The impact will be less than significant.

X-c) Would the project Conflict with any applicable habitat conservation plan or natural community conservation plan?

No Impact. The proposed Project will not conflict with any adopted habitat conservation plans or natural community conservation plans. Therefore, there will be no impact.

XI. MINERAL RESOURCES

Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒

BASELINE CONDITIONS

Environmental Setting

According to the Resource Conservation Element of the 2035 Kings County General Plan, there are currently no mineral extraction activities occurring within the County. The California Division of Mines and Geology has not identified any significant mineral resources within the County[37]. Few commercial mining and mineral extraction activities occur in Kings County, and are mostly located in the southwestern portions of the County. Only limited excavation of soil, sand and some gravel is excavated in the County for commercial use. In 2009, the County had only one surface mining permit for a non-active gravel operation, and two agricultural reclamation sites that were fully reclaimed. Historical local mines that are now closed include an open pit gypsum mine and a mercury mine in southwestern Kings County[38].

The California Department of Conservation, Office of Mine Reclamation (OMR) provides mine information to the public through the Mines Online (MOL) website. The website is an interactive web map designed to provide information such as mine name, operation status, commodities sold, and mine locations. According to the MOL geographic information system (GIS), a closed mine was formally located at 12451 12TH Avenue approximately 3 miles southwest of the Project site in the unincorporated areas of Kings County (Mine Id: 91-16-0002). According to the Office of Mine Reclamation GIS, the former mine operator provided sand and gravel commodities[39]. The mine reclamation status certification has been complete for the former site and certified by Kings County. The open pit mine has since been closed with no intent to resume operations.

Regulatory Setting

Federal

There are no federal or local regulations pertaining to mineral resources relevant to the proposed Project.

[37] 2035 General Plan Update EIR (SCH#2008121020), p. 4.6-11
[38] Ibid.
[39] State of California, Department of Conservation, http://maps.conservation.ca.gov/mol/mol-app.html

State

California Surface Mining and Reclamation Act of 1975: Enacted by the State Legislature in 1975, the Surface Mining and Reclamation Act (SMARA), Public Resources Code Section 2710 et seq., insures a continuing supply of mineral resources for the State. The act also creates surface mining and reclamation policy to assure that:

- Production and conservation of minerals is encouraged;
- Environmental effects are prevented or minimized;
- Consideration is given to recreational activities, watersheds, wildlife, range and forage, and aesthetic enjoyment;
- Mined lands are reclaimed to a useable condition once mining is completed; and
- Hazards to public safety both now and in the future are eliminated.

Areas in the State (city or county) that do not have their own regulations for mining and reclamation activities rely on the Department of Conservation, Division of Mines and Geology, Office of Mine Reclamation to enforce this law. SMARA contains provisions for the inventory of mineral lands in the State of California. The State Geologist, in accordance with the State Board's Guidelines for Classification and Designation of Mineral Lands, must classify Mineral Resource Zones (MRZ) as designated below:

- **MRZ-1.** Areas where available geologic information indicates that there is minimal likelihood of significant resources.
- **MRZ-2.** Areas underlain by mineral deposits where geologic data indicate that significant mineral deposits are located or likely to be located.
- **MRZ-3.** Areas where mineral deposits are found but the significance of the deposits cannot be evaluated without further exploration.
- **MRZ-4.** Areas where there is not enough information to assess the zone. These are areas that have unknown mineral resource significance.

SMARA only covers mining activities that impact or disturb the surface of the land. Deep mining (tunnel) or petroleum and gas production is not covered by SMARA.

In addition, this proposed Project is being evaluated pursuant to CEQA.

Local

Kings County General Plan

The Kings County General Plan Resource Conservation Element has the following goals, objectives and policies related to mineral resources:

RC GOAL H1: Support the extraction of mineral resources in a manner that will not degrade the environment or conflict with other land uses.

RC OBJECTIVE H1.1: Provide for the development of mining and mineral extraction.

RC Policy H1.1.1: Implement the Surface Mining and Reclamation Act by requiring all mining operations, including surface mining, to secure a Conditional Use Permit, pursuant to the Kings County Zoning Ordinance, prior to beginning any mining operation.

RC Policy H1.1.2: All surface mines, unless otherwise exempted, shall be subject to reclamation plans that meet the requirements of the Kings County Surface Mining and Reclamation Act Ordinance (Article 17 Kings County Code of Ordinance) and the State Surface Mining and Reclamation Act (SMARA) requirements. Reclamation procedures shall restore the site for future beneficial use of the land. Mine reclamation costs shall be borne by the mine operator, and guaranteed by financial assurances set aside for reclamation procedures.

RC OBJECTIVE H1.2: Ensure that mineral extraction operations are designed, located and operated so that they do not harm humans or the natural environment or are incompatible with surrounding land uses.

RC Policy H1.2.1: Discourage the location of mining operations near residential areas and other sensitive land uses, unless all impacts to such uses can be mitigated.

RC Policy H1.2.2: Minimize the adverse effects on environmental resources such as water quality and quantity, air quality, drainage and flood control, geophysical characteristics, biological resources, and aesthetic factors.

IMPACT ASSESSMENT

XI-a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

No Impact. Mineral resources located within Kings County are predominately sand and gravel resources primarily located in the County's southwestern portions. As analyzed by the Program EIR for the 2035 Kings County General Plan (SCH#2008121020), Section 4.6 Geology and Soils, the California Geological Survey Division of Mines and Geology has not classified lands in Kings County as a Mineral Resource Zone under the Surface Mining and Reclamation Act (SMARA) of 1975. The proposed Project site is located approximately 3 miles east of a former sand and gravel open pit; however the mine operation has been closed. Soils of the proposed Project site have been altered through grading, scraping, compaction, and the presence of residual sulfur across the portions of the site. According to the United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Soil Survey of Kings County, California[40], the proposed solar facility site contains three soil types: Cajon sandy loam, Kimberlina fine sandy loam-saline-alkali, and Wasco sandy loam- 0 to 5 percent slopes. Due to the Project site's soil rating, distance from the former mine facility, and site location, the proposed Project will not result in the loss of an available known mineral resource that would be of value to residents of the region or state. There will be no impact as a result of Project implementation.

XI-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?

No Impact. As noted in response XI-a), the proposed Project site is not located in a State identified Mineral Resource Zone. Furthermore, the proposed Project site is not delineated on a local land use plan

[40] USDA, Natural Resources Conservation Service Soil Survey of Kings County, California, Site accessed: July 2013

as a locally important mineral resource recovery site; therefore, the existence of the Project will not result in the loss of known availability of any mineral resources. There will be no impact.

XII. NOISE

Would the project:

		Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a)	Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☒	☐
b)	Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c)	A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐
d)	A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the 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 expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒
f)	For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

BASELINE CONDITIONS

Environmental Setting

The site historically had been used for farming related operations/storage of cotton and sulfur materials[41]; however, the proposed Project site is currently vacant and in fallow conditions. Surrounding land uses include rural residential to the north and south, agricultural lands to the west and east. Maximum noise levels generated by farm-related tractors typically range from 77 to 85 dB at a distance of 50 feet from the tractor, depending on the horsepower of the tractor and the operating conditions[42]. Due to the seasonal nature of the agricultural industry, there are often extended periods of time when no noise is generated at the proposed Project site, followed by short-term periods of intensive mechanical equipment usage and corresponding noise generation[43]. Typical rural residents in Kings County near Agricultural zones experience outdoor daytime noise levels of 55 to 75 dB while nighttime outdoor noise range a lower levels between 50 to 70 dB[44].

Regulatory Setting

[41] Appendix C- Biology Report
[42] Kings County General Plan, Noise Element, p. N-22
[43] Ibid.
[44] Ibid. p.N-39

Federal

Federal Vibration Policies

The Federal Railway Administration (FRA) and the Federal Transit Administration (FTA) have published guidance relative to vibration impacts. According to the FRA, fragile buildings can be exposed to ground-borne vibration levels of 0.5 PPV without experiencing structural damage[45]. The FTA has identified the human annoyance response to vibration levels as 80 RMS[46].

State

The California Noise Control Act was enacted in 1973 (Health and Safety Code § 46010 *et seq.*), and states that the Office of Noise Control (ONC) should provide assistance to local communities in developing local noise control programs. It also indicates that ONC staff would work with the OPR to provide guidance for the preparation of the required noise elements in city and county General Plans, pursuant to Government Code § 65302(f). California Government Code § 65302(f) requires city and county general plans to include a noise element. The purpose of a noise element is to guide future development to enhance future land use compatibility.

Local

In addition to General Plan requirements, some jurisdictions have established noise ordinances in their municipal codes. Noise ordinances establish limits for which penalties or enforcement action may be taken. Therefore, a noise ordinance generally must not be exceeded; whereas, General Plan limits are to be taken into consideration during the development of a project and may or may not be strictly applied, depending on the particular circumstances of the proposed project. In preparing the noise element, a city or county must identify local noise sources and analyze and quantify, to the extent practicable, current and projected noise levels for various sources, including highways and freeways; passenger and freight railroad operations; ground rapid transit systems; commercial, general, and military aviation and airport operations; and other ground stationary noise sources.

Kings County General Plan

The Kings County General Plan Noise Element has the following objectives and policies related to noise:

N OBJECTIVE B1.1: Reduce the potential for exposure of County residents and noise-sensitive land uses to excessive noise generated from non-transportation noise sources.

N Policy B1.1.1: Appropriate noise mitigation measures shall be included in a proposed project design when the proposed new use(s) would be affected by or include nontransportation noise sources and exceed the County's "Non-Transportation Noise Standards". Mitigation measures shall reduce projected noise levels to a state of compliance with this standard within sensitive areas. These standards are applied at the sensitive areas of the receiving use.

N Policy B1.1.3: Noise associated with construction activities shall be considered temporary, but would still be required to adhere to applicable County Noise Element standards.[47]

[45] Federal Railway Administration, High-Speed Ground Transportation Noise and Vibration Impact Assessment, December 1998.
[46] Federal Transit Administration, Transit Noise and Vibration Impact Assessment, April 1995.
[47] 2035 Kings County General Plan, p. N.35

The purpose of the 2035 Kings County General Plan Noise Element is to identify the existing and projected future noise environment in Kings County, and provide policy direction and implementation efforts to protect County residents from exposure to excessive noise levels. It provides the basis for comprehensive local policies to control and abate environmental noise from stationary and mobile noise sources, and reduce conflicts between noise and noise-sensitive land uses. The County has not established a noise ordinance. The non-transportation noise standard for outdoor areas for all residential land uses is 55/75 dB (average/maximum Leq) for the daytime and 50/70 dB (average/maximum Leq) for the nighttime. The non-transportation noise standard for interior areas for the day and night is 35/55 dB Leq. The non-transportation standards shall be reduced by 5 dB for sounds consisting primarily of speech or music, and for recurring impulsive sounds. If the existing ambient noise level exceeds those standards, then the noise level standards shall be increased at 5 dB increments to encompass the ambient[48].

IMPACT ASSESSMENT

XII-a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Less Than Significant Impact. Project operations of the solar PV energy facility would be passive with minimal noise generating activity and therefore would not create a substantial increase in ambient noise levels. Potential noise sources resulting from the facility implementation include noise associated with scheduled periodic vehicular trips for site operation and maintenance activities. Maintenance activities would occur infrequently and are not expected to substantially increase ambient noise levels in the area above existing levels without the facility.

Project construction would involve temporary noise sources and is anticipated to last approximately four to six months. Typical construction equipment would include graders, trenchers, small tractors, pile drivers, skid steers, front end loaders, and material haulers, a crane and miscellaneous equipment. During the construction phases, noise from construction activities would contribute to the noise environment in the immediate Project vicinity. Activities involved in construction would generate infrequent maximum noise levels, as indicated in Table 6, ranging from 79 to 91 dBA at a distance of 50 feet, without feasible noise control (e.g., mufflers) and ranging from 75 to 80 dBA at a distance of 50 feet, with feasible noise control. Construction noise levels would range between continual and irregular noises frequencies depending on type of mechanical equipment being utilized.

The 2035 Kings County General Plan Table N-7 sets the standard noise threshold of 65 dBA at the exterior of nearby residences; however, it does not identify a threshold for short-term, construction level noise threshold.

[48] 2035 Kings County General Plan, p. N-39

Table 6
Typical Construction Noise Levels[49]

Type of Equipment	dBA at 50 ft	
	Without Feasible Noise Control	With Feasible Noise Control[1]
Dozer or Tractor	80	75
Excavator	88	80
Scraper	88	80
Front End Loader	79	75
Backhoe	85	75
Grader	85	75
Truck	91	75

[1] Feasible noise control includes the use of intake mufflers, exhaust mufflers and engine shrouds operating in accordance with manufacturers specifications.

According to the 2035 Kings County General Plan "Noise level allowances for various types of land uses reflect the varying noise sensitivities associated with those uses. Residences, hotels/motels, hospitals, schools, and libraries are some of the most sensitive land uses to noise intrusion and therefore have more stringent noise level allowances than most commercial or agricultural uses that are not subject to impacts such as sleep disturbance"[50]. However, residences and schools located adjacent to major high-volume roadways as well as State Routes such as 41, 43, and 198, and other State Routes within the vicinity within Kings County may experience elevated noise levels.

The nearest sensitive receptors are 38 rural residences located within a 300 foot radius north and south of the Project site along Orchard Drive. Three additional rural residential units are located north of the Project site along 9¾ Avenue. Although the Project will not affect a hospital facility, Hanford Community Medical Facility is approximately 2.10 miles northwest of the Project site at the intersection of W. Lacey Boulevard and Greenfield Avenue in Hanford. Construction of the proposed Project is anticipated to last four to six months. All related construction activities and Project operations will comply with the standards set forth by the Noise Standards in the Noise Element of the 2035 Kings County General Plan. Construction activities would take place between 6 a.m. and 7 p.m. on weekdays and 7 a.m. and 5 p.m. on weekends, except as necessary for safety reasons or to perform specific construction activities when electrical clearances are available. Construction activities will comply with Noise Standards in the Noise Element of the 2035 Kings County General Plan and be conducted during day light hours, Monday through Friday, excluding holidays.

Post construction activities will include site system testing, commissioning and site clean-up. The Project would adhere to the following Noise Element Policy:

N Policy B1.1.3: Noise associated with construction activities shall be considered temporary, but will still be required to adhere to applicable County Noise Element standards.

Adherence to the General Plan policy would ensure that any potential impacts related to noise levels would remain less than significant.

[49] US Environmental Protection Agency 1971
[50] 2035 Kings County General Plan EIR, p. 4.10-1

XII-b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

Less Than Significant Impact. Vibration is the periodic oscillation of a medium or object. Vibration sources may be continuous, such as factory machinery, or transient, such as explosions. As is the case with airborne sound, ground borne vibrations may be described by amplitude and frequency. Vibration amplitudes are usually expressed in peak particle velocity (PPV) or root mean squared (RMS), as in RMS vibration velocity. The PPV and RMS (VbA) vibration velocity are normally described in inches per second (in/sec). PPV is defined as the maximum instantaneous positive or negative peak of a vibration signal and is often used in monitoring of blasting vibration because it is related to the stresses that are experienced by buildings[51].

Although PPV is appropriate for evaluating the potential for building damage, it is not always suitable for evaluating human response. As it takes some time for the human body to respond to vibration signals, it is more prudent to use vibration velocity when measuring human response. The typical background vibration-velocity level in residential areas is approximately 50 VdB. Ground borne vibration is normally perceptible to humans at approximately 65 VdB. For most people, a vibration-velocity level of 75 VdB is the approximate dividing line between barely perceptible and distinctly perceptible levels[52].

Typical outdoor sources of perceptible ground borne vibration are construction equipment, steel-wheeled trains, and traffic on rough roads. Construction vibrations can be transient, random, or continuous. The approximate threshold of vibration perception is 65 VdB, while 85 VdB is the vibration acceptable only if there are an infrequent number of events per day[53]. Table 7 below describes the typical construction equipment vibration levels.

Table 7
Typical Construction Vibration Levels[54]

Equipment	VdB at 25 ft^2
Small Bulldozer	58
Jackhammer	79

Vibration from construction activities would be temporary and not exceed the FTA threshold. The impact would be less than significant.

XII-c)A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project? and,

XII-d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

Less Than Significant Impact. Upon completion of construction activities, the majority of proposed Project operational activity will be passive. Potential noise sources resulting from proposed Project implementation include noise associated with vehicular trips for facility operation and maintenance activities. Maintenance will also involve activities such as property weed abatement, clearing debris,

[51] Federal Transit Administration, Transit Noise and Vibration Impact Assessment 2006
[52] Ibid.
[53] Ibid.
[54] Ibid.

trash removal, fence repairs, washing or repairing solar panels. Maintenance activities will occur infrequently and are not expected to substantially increase ambient noise levels in the area above existing levels without the proposed Project. The proposed Project will not create a substantial permanent increase in ambient noise levels in the Project's vicinity that would affect the existing environment. During construction phase the proposed Project could temporary increase noise levels, however construction is temporary in nature and will comply with the Noise Standards of the Noise Element of the 2035 Kings County General Plan. In addition, there will not be any increase in ambient noise levels in the Project vicinity above existing levels. Therefore, impacts to noise levels will be less than significant.

XII-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 expose people residing or working in the project area to excessive noise levels? and,

XII-f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?

No Impact. Hanford Municipal Airport is located approximately one quarter of a mile northeast of the Project site. Visalia Municipal Airport is located approximately 12.3 miles east of the proposed Project site; while Lemoore Naval Air Station is approximately 16.6 miles west of the site, and Fresno Yosemite International/ Fresno Air Terminal is approximately 31.9 miles north of the proposed Project site. .

The adopted January 2010 Hanford Municipal Airport Master Plan forecasts aircraft related activity and noise generation up to the year 2025[55]. In 2004, the Hanford Municipal Airport's annual operation was estimated at 6,518 aircrafts; current forecasts anticipate an increase to 13,800 aircrafts by 2025[56]. The proposed Project site is identified in Compatibility Zone B2 by the Kings County Airport Land Use Compatibility Plan[57]. Compatibility Zone B2 includes areas where aircrafts are commonly soaring at an altitudes of less than 800 feet above ground level on a straight in or out departures, the zone classification applies to runways with more than 500 operations per year[58]. The proposed Project would not create the demand for increase in population as it does not include any residential development or permanent staff members on the site. Although the nearest airstrip is approximately one quarter mile to the proposed Project site, the Project would not permanently staff onsite employees. Temporary employees will be contracted for bi-annual or annual property maintenance and solar panel cleaning. As such, the proposed Project would not expose people or Project operation employees associated with the Project to excessive noise levels. Therefore, it is anticipated that there will be no impact as a result of Project implementation.

[55] Hanford Municipal Airport Master Plan, http://www.ci.hanford.ca.us/civicax/filebank/blobdload.aspx?BlobID=4711
[56] Ibid. airport role & activity forecast, http://www.ci.hanford.ca.us/civicax/filebank/blobdload.aspx?BlobID=4713
[57] Kings County Airport Land Use Compatibility Plan, p. (3-6) http://www.countyofkings.com/planning/Plan/Kings%20County%20airport%20land%20use%20compatibility%20plan.pdf
[58] Ibid.

XIII. POPULATION AND HOUSING

Would the project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

BASELINE CONDITIONS

Environmental Setting

The proposed Project site is located in Kings County and abuts the City of Hanford City Limit Boundary to the east. The United States Census Bureau defines Kings County as encompassing the entire Hanford–Corcoran Metropolitan Statistical Area (MSA Code 25260). The population was 152,982 at the time of the 2010 U.S. Census. According to the California Department of Finance Population Report, Kings County is estimated at a population of approximately 152,007 as of July 1, 2013[59].

Regulatory Setting

This proposed Project is being evaluated pursuant to CEQA; however, there are no federal, state or local regulations, plans, programs, and guidelines associated with population or housing that are applicable to the proposed project.

IMPACT ASSESSMENT

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

No Impact. The proposed Project will include the construction and operation of a new solar energy generation facility. Total Project construction will take approximately four to six continuous months and will require approximately 65-80 temporary construction workers, at the peak. These construction workers will likely draw from the local and regional area; therefore, the Project will not induce population growth. It is anticipated that periodic operations personnel would be required for site inspection, security, maintenance and system monitoring proposes. However, the proposed Project does not include onsite full time staff members to operate the facility. Operation and management of

[59] California Department of Finance, http://www.dof.ca.gov/research/demographic/reports/estimates/e-1/documents/E-1_2013_Press_Release.pdf

the proposed Project will occur from a remote location. Therefore the Project would not induce population growth and there would be no impact.

XIII-b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?

No Impact. No housing or people will be displaced by the proposed Project. There will be no impact.

XIII-c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

No Impact. Any impacts regarding the displacement of people have been discussed in Impact XIII-b. There will be no impact.

XIV. PUBLIC SERVICES

Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, 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:				
Fire protection?	☐	☐	☒	☐
Police protection?	☐	☐	☒	☐
Schools?	☐	☐	☐	☒
Parks?	☐	☐	☐	☒
Other public facilities?	☐	☐	☐	☒

BASELINE CONDITIONS

Environmental Setting

The Hanford Police Department Station is the closest law enforcement office to the Project site, located approximately 1.7 miles northwest of the site, while the Kings County Sheriff Station is located 2.3 miles northwest of the Project site.

The Hanford Fire Department Station 2 is approximately one mile southwest of the Project site while Kings County Fire Department Station 4 South Hanford is approximately 1.8 miles to the southeast of the Project site.

There are a number of schools located near the Project site. Lincoln Elementary School is the nearest educational facility approximately three quarters of a mile northwest of the Project site. Woodrow Wilson Junior High School and Hanford West High School are approximately 2.2 miles northwest and 2.3 miles northwest of the Project site, respectively.

Coe Park and the Coe Park Ballpark are located 0.93 miles northwest of the Project site, within the City of Hanford. Soc Com, a soccer park, is located approximately 0.62 miles northwest of the Project site also within the City of Hanford.

The City of Hanford's wastewater treatment plant is located approximately one mile southwest of the Project site with the wastewater treatment ponds located approximately 1.1 miles to the southwest of the site.

Regulatory Setting

Federal

National Fire Protection Association: The National Fire Protection Association (NFPA) is an international nonprofit organization that provides consensus codes and standards, research, training, and education on fire prevention and public safety. The NFPA develops, publishes, and disseminates more than 300 such codes and standards intended to minimize the possibility and effects of fire and other risks. The NFPA publishes the NFPA 1, Uniform Fire Code, which provides requirements to establish a reasonable level of fire safety and property protection in new and existing buildings.

State

California Fire Code and Building Code: The 2007 California Fire Code (Title 24, Part 9 of the California Code of Regulations) establishes regulations to safeguard against hazards of fire, explosion, or dangerous conditions in new and existing buildings, structures, and premises. The Fire Code also establishes requirements intended to provide safety and assistance to fire fighters and emergency responders during emergency operations. The provision of the Fire Code includes regulations regarding fire-resistance rated construction, fire protection systems such as alarm and sprinkler systems, fire service features such as fire apparatus access roads, fire safety during construction and demolition, and wildland urban interface areas.

In addition, this proposed Project is being evaluated pursuant to CEQA.

Local

Kings County General Plan
The 2035 Kings County General Plan Health and Safety Element has the following goal related to public services:

HS GOAL C2: Support Countywide safety through adequate law enforcement, quality fire protection, emergency preparedness, and accessibility in times of emergency.

IMPACT ASSESSMENT

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

Less Than Significant Impact. The Project would not rely on the addition or alteration of any public services. The subject site is within the northeastern edge of Kings County and would utilize existing services provided by Kings County. Any impacts related to this checklist item would be less than significant.

Fire Protection – Kings County would continue to provide fire protection services to the Project site upon development. No residential or office construction is identified with this Project. Vegetation that presents any fire hazard would initially be removed from the facilities and the site would be regularly

maintained. The PV panels and ancillary equipment result in a negligible increase in fire potential. The Applicant will also provide the County with a fire prevention plan for the Project in compliance with applicable County regulations. Any impacts would be less than significant.

Police Protection – Kings County would provide sheriff protection services to the Project site upon development. Kings County Sheriff Department dispatch is approximately 2.3 miles northwest of the proposed Project site while Hanford Police Department is approximately 1.7 miles northwest of the site. Emergency response is adequate to the Project site. No residential or office construction is proposed for this Project. The proposed Project site would be fenced with a 6-foot chain-link fence with security wire around the perimeter, and gates would be installed at the roads entering the Project. Limiting access to the Project would be necessary both to ensure the safety of the public and to protect the equipment from potential theft and vandalism. Due to these measures, any impact to sheriff services would be less than significant.

Schools – Though there are a number of schools to the south and northwest of the Project site, the Project itself would not include construction of any residential structures, nor change the existing land use. The proposed Project would not result in an increase of population that would impact existing school facility service levels nor require additional need for school facilities to be expanded. There would be no impact.

Parks – As discussed in the Environmental Setting section there are a number of recreational parks in proximity to the Project site. However, the Project does not propose to add any residential population to the site and there will be no permanent day-time employees at the Project site. As the Project would not induce greater population growth, there would be no need for additional park or recreational services or facilities as a result of Project implementation. There would be no impact.

Other public facilities – Other public services such as wastewater treatment plants and Kings County Public Library- Hanford Branch are approximately 1.1 miles south and 1.7 miles north from the proposed Project site, respectively. In addition, the site would generate its own electricity and have no sewer needs. Furthermore, the Project would not induce greater population growth that would require additional need for expanding public library services or facilities. As such, there would be no impact as a result of Project implementation.

XV. RECREATION

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

Baseline Conditions

Environmental Setting

Kings County presently owns and maintains three parks (Burris, Hickey, and Kingston) which are located in the northern portions of the County.[60] Local parks within the vicinity of the proposed Project site include Coe Park and the Coe Park Ballpark located approximately 0.93 miles northwest of the Project site, within the City of Hanford. Soc Com, a soccer park, is located approximately 0.62 miles northwest of the Project site also within the City of Hanford.

Regulatory Setting

Kings County General Plan

The 2035 Kings County General Plan Open Space Element has the following goals, objectives and policies related to recreation:

OS GOAL D1L: Provide for parks, recreation and open space that will serve the current and future needs of County residents and visitors.

OS OBJECTIVE D1.1: Maintain and enhance the existing County park system within available funding constraints.

OS Policy D1.1.1: Apply the "Public/Quasi-Public" land use designation to County parks.

OS Policy D1.1.2: Community Plans should facilitate the development and maintenance of community park(s) within Community District areas to expand recreational resources available to residents.

OS Policy D1.1.3: Support community involvement that builds capacity for the long term maintenance and upkeep of open space and community park space within Community Districts.

[60] 2035 Kings County General Plan, p. OS-8

OS OBJECTIVE D1.2: Encourage the development of private recreational facilities compatible with the rural character of Kings County.

OS Policy D1.2.1: Support the establishment of new commercial recreational development, provided it is compatible with surrounding land uses and the intensity of such development does not exceed the ability of the natural environment of the site and the surrounding area to accommodate it. Such facilities may include, but are not limited to campgrounds, recreational camps, hotels and destination resorts, ball courts and ball fields, skeet clubs and facilities, hunting and fishing clubs, and equestrian facilities

IMPACT ASSESSMENT

XV-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?

No Impact. As discussed in Impact XIII-a, the proposed Project will not increase the demand for recreational facilities nor put a strain on the existing recreational facilities. The proposed Project will not induce population growth or employ on-site permanent staff. Maintenance, repair, and cleaning crews will service the site on an as-needed basis. As such, the proposed Project would not induce population growth which would increase the use of existing recreational facilities or cause physical deterioration to be accelerated as a result of the proposed Project implementation. Therefore, there will be no impact.

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

No Impact. The proposed Project does not include recreational facilities. As there is no population growth associated with the proposed Project, construction or expansion of nearby recreational facilities will not be necessary. There will be no impact.

XVI. TRANSPORTATION/TRAFFIC

Would the project:

		Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a)	Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	☐	☐	☒	☐
b)	Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	☐	☐	☒	☐
c)	Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that result in substantial safety risks?	☐	☐	☐	☒
d)	Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒
e)	Result in inadequate emergency access?	☐	☐	☐	☒
f)	Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	☐	☐	☐	☒

BASELINE CONDITIONS

Environmental Setting

The 18 acre Project site is located in the northeastern portion of the County, west of State Route (SR) 43 and south of SR 198. More specifically, the Project site is between E. Hanford Armona Road and Orchard Drive. SR 198 is approximately 1.17 miles north of the site, SR 43 Central Valley Highway/ 8th Avenue is located approximately 1.6 miles east of the site, and SR 99 is approximately 13.4 miles east of the site. All three of these routes are part of the California Freeway and Expressway System. Interstate 5 (I-5) is over 35 miles to the west of the site.

Hanford Municipal Airport is located approximately a quarter mile to the northeast of the Project site. Visalia Municipal Airport is located 12.3 miles to the east of the site; Lemoore Naval Air Station is approximately 16.6 miles to the west of the site, while Fresno Yosemite International Airport is approximately 31.9 miles north of the Project site.

The closest railroad is the Burlington Northern and Santa Fe (BNSF) Railway in Hanford and is used by Amtrak. Amtrak California's San Joaquin stops at Hanford station.

Regulatory Setting

Federal

Several federal regulations govern transportation issues. They include:

- Title 49, CFR, Sections 171-177 (49 CFR 171-177), governs the transportation of hazardous materials, the types of materials defined as hazardous, and the marking of the transportation vehicles.
- 49 CFR 350-399, and Appendices A-G, Federal Motor Carrier Safety Regulations, address safety considerations for the transport of goods, materials, and substances over public highways.
- 49 CFR 397.9, the Hazardous Materials Transportation Act of 1974, directs the U.S. Department of Transportation to establish criteria and regulations for the safe transportation of hazardous materials.

State

State of California Transportation Department Transportation Concept Reports

Each District of the State of California Transportation Department (Caltrans) prepares a Transportation Concept Report (TCP) for every state highway or portion thereof in its jurisdiction. The TCR usually represents the first step in Caltrans' long-range corridor planning process. The purpose of the TCR is to determine how a highway will be developed and managed so that it delivers the targeted LOS and quality of operations that are feasible to attain over a 20-year period, otherwise known as the "route concept" or beyond 20 years, for what is known as the "ultimate concept".

SR 43 is designated as Segment 18 in the vicinity of the Project site, and has a route concept rationale of LOS D assigned to all of the rural portions of Route 43. A LOS D route concept rationale is due to the interregional importance of this route and the anticipated traffic volumes[61]. It is anticipated to be improved for operational and safety purposes only under the route concept. Under the ultimate viable concept within 25 years, Segment 18 of SR 43 could be expanded to a four-lane expressway, only if it exceeds its concept level LOS D.

State Route 99 is designated as Segments 17 and 19 in the vicinity of the Project site. The route concept for SR 99 is a minimum six-lane freeway, which is consistent with District policy to complete a 6-lane system and also with the Interregional Transportation Strategic Improvement Plan for Route 99. The ultimate concept is for a six-lane freeway plus auxiliary lanes, however, it can be up to eight lanes plus auxiliary lanes[62]. An example of the concept is predominant in the Bakersfield area where there are already eight lanes or adequate right-of-way already exists to accommodate lane expansion.

State Route 198 is designated as Segments 8 and 9 in the Project vicinity which operates between LOS B and LOS C for the majority of its length.

[61] Caltrans Traffic Concept Report, http://www.dot.ca.gov/dist6/planning/tcrs/sr43tcr/sr43tcr.pdf
[62] Ibid.

Local

2035 Kings County General Plan

The 2035 Kings County General Plan has the following goals and objectives for traffic and circulation:

C GOAL A1: Provide a coordinated countywide circulation system with a variety of safe and efficient transportation alternatives and modes that interconnect cities, community districts, adult education facilities, and adjoining cities in neighboring counties, and meets the growing needs of residents, visitors, and businesses.

C OBJECTIVE A1.3: Maintain an adequate LOS for County roadways and ensure proper maintenance occurs along critical routes for emergency response vehicles.

C GOAL C1: Integrate through the County's regional transportation system, an efficient and coordinated goods and people moving network of highways, railroads, public transit, and non-motorized options that reduce overall fuel consumption and associated air emissions.

IMPACT ASSESSMENT

XVI-a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?

Less Than Significant Impact. The Project would consist of construction and maintenance of a solar energy generation facility and would not require any changes to existing highways, intersections, pedestrian or bike facilities. Project construction would be temporary and would potentially generate approximately 70 employee round trips per day over the course of four to six months of construction. Operations and maintenance employee trips would be contracted on an as needed basis as the Project does not anticipate employing permanent onsite staff.

The nearest through streets to the proposed Project site are Hanford Armona Avenue (east-west) north of the Project site and S. 10th Avenue (north-south), which is located west of the Project site. According to the 2035 Kings County General Plan Circulation Designation map, both streets are designated as Minor Arterials. Access to the proposed Project site will occur along Rural Residential Minor roads: Orchard Drive is located immediately south of the site, while a common easement known as 9¾ Avenue would provide site access from the north into the Project site. Furthermore, interior private service driveways within the Project site would be constructed at 18-20 feet wide and consist of crushed aggregate. Additional driveways between the panel rows will be built at 10-14 feet wide and be compacted to provide service access paths to vehicles for maintenance, repair, and cleaning.

All County roads currently operate at a LOS B or better and are projected to operate at a LOS B into the year 2035. Arterial streets are designed to carry large volumes of traffic for relatively long distances. Arterials also serve considerable volumes of local traffic traveling short distances. Alternatively rural residential minor roads provide access to properties and activity nodes in sparsely settled areas of the County[63].

[63] 2035 Kings County General Plan, p. C-10

It is anticipated that the construction-related trips would primarily utilize the adjacent State Route (SR) 198 and 10th Avenue for primary access to the Project site. The particular SR segments to be used are presumed to be SR 198 between: the 10th Avenue to SR 43; from SR 43: from Houston to SR 198. According to the 2035 Kings County General Plan – Annual Average Daily Traffic Volumes, these segments operate at a LOS "C" and "B", respectively. The segment SR 198 between the 10th Avenue to SR 43 is a 4-lane expressway and experiences 19,800 average daily trips. The segment of SR 43 from Houston to SR 198 is a 2-lane road and experiences 8,700 average vehicle trips[64]. The minimum LOS standard within rural areas of Kings County is LOS "D," as indicated on Page C-13 of the Circulation Element. Table C-3 of the Circulation Element and Table 4.14-1 of the 2035 Kings County General Plan EIR (SCH#2008121020) indicate the threshold of significance to maintain LOS "D" on a two-lane facility is 16,400 average daily trips (ADT) or less.

Table C-4 of the Circulation Element indicates that these segments of SR 43 and SR 198 currently operate at LOS "C" and "B" respectively. The Project would have a negligible effect on the service for the roadways surrounding the Project site; therefore, the permanent impact to local roadways would be less than significant.

XVI-b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?

Less Than Significant Impact. The proposed Project does not require construction of any roadways, and will generate approximately 70 round trips per day on average during the four to six months project construction phase. The solar facility will be remotely operated and require no on-site daily operational staff. Occasional service employees may be contracted for specific on-site operation, repair, and maintenance. As the proposed Project will not generate significant new traffic, and based on existing conditions, there is expected to be virtually no change in the operating conditions of the roadways from what currently exists. The impact to the level of service on surrounding roadways due to proposed Project implementation will be less than significant.

XVI-c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that result in substantial safety risks?

No Impact. The proposed Project is located approximately a quarter mile southwest of the Hanford Municipal Airport and 12.3 miles west of the Visalia Airport. The construction of a solar generation facility will not cause an increase in air traffic levels or cause a change in air traffic location. There will be no impact.

XVI-d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

No Impact. Any new roadways associated with the Project would be interior service driveways for the facility that would not necessitate hazardous roadway design features. The change in the existing land use would not result in substantial increase of hazards due to sharp curves or dangerous intersection designs. As such, no impacts will occur as a result of Project implementation.

[64] 2035 Kings County General Plan DEIR, p. 4.14-9

XVI-e) Result in inadequate emergency access?

No Impact. The proposed Project would have primary access along Orchard Drive. A possible second access point could occur on an easement for the extension of 9 ¾ Avenue, north of the proposed Project site. No roads will be modified as a result of this proposed Project; as such, there will be no impact to any emergency access.

XVI-f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

No Impact. There are no adopted alternative transportation policies, plans, or programs in the proposed Project area. There will be no impact.

XVII. UTILITIES AND SERVICE SYSTEMS

Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☐	☒
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☒
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☒	☐
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☐	☒
e) 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?	☐	☐	☐	☒
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☒	☐
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☐	☒

IMPACT ASSESSMENT

XVII-a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

No Impact. The Project involves the construction and operation of a solar energy generation facility. The facility would not include permanent restroom facilities, require a sewer hookup, or generate any wastewater. The Project would not result in a change to facilities or operations of the existing wastewater facilities. There would be no impact as a result of Project implementation.

XVII-b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

No Impact. As discussed in Impact IX-b and Impact XVII-a, Project operation would not generate any continuous wastewater, nor would it require significant amounts of water for operation of the Project. All water used onsite will be brought in from offsite. The biannual application of water to solar panels to clean off dust will be very diffuse across the approximate 18 acres of facilities. The small amount of water running off of panels will not generate enough flow to require wastewater treatment facilities or connection to local services. The runoff that doesn't evaporate will be allowed to percolate into the ground surface. No new facilities or the expansion of an existing facility would be needed. As such, there will be no impact to this checklist item.

XVII-c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

Less Than Significant Impact. The biannual application of water to solar panels to clean off dust would be very diffuse across the 18 acres of facilities. The small amount of water running off the panels would not generate enough flow to require drainage facilities or connection to local services. The runoff that does not evaporate would be allowed to percolate into the ground surface. Drainage patterns on the site would not be significantly altered during development. To prevent water and wind erosion during the construction period, a Storm Water Pollution Prevention Plan (SWPPP) would be developed for the Project as required for all projects which disturb more than one acre in size. As part of the SWPPP, the applicant would be required to provide erosion control measures to protect the topsoil within the Project site. Any stockpiles soils would be watered and/or covered to prevent loss due to wind erosion as part of the SWPPP during construction. As a result of these efforts, loss of topsoil and substantial soil erosion during the construction period are not anticipated. No new storm water drainage facilities would be needed nor would require the expansion of an existing facility. The impact would be less than significant.

XVII-d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?

No Impact. All water utilized for proposed Project construction and operation will be trucked in. The proposed Project would primarily utilize water to wash solar panels biannually or an as-needed basis. Module washing will occur twice a year and expected to require approximately 13,000 gallons of water, or equivalent to .05 acre-feet per year. There will be no impact.

XVII -e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

No Impact. As discussed in Impact XVII-a, the Project would not generate wastewater. There would be no impact.

XVII -f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?

Less Than Significant Impact. Operation of the Project would generate minimal amounts of solid waste from maintenance or repairs of solar modules. As previously noted, the Project operation would occur from a remote location and would not employ on-site staff. The biannual site maintenance would

employ contracted workers for site weed abatement and cleaning. Solid waste from the site would be received at the Kings Waste and Recycling Authority located approximately 1.6 miles east of the proposed Project site. Any impacts as a result of the Project would be less than significant.

XVII -g) Comply with federal, state, and local statutes and regulations related to solid waste?

No Impact. The proposed Project will continue to comply with any federal, state, and local regulations. There is no impact.

XVIII. MANDATORY FINDINGS OF SIGNIFICANCE

Would the project:

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

IMPACT ASSESSMENT

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

Less Than Significant Impact With Mitigation Incorporation. The analysis conducted in this Initial Study/Mitigated Negative Declaration results in a determination that the Project will have a less than significant effect on the local environment. The Project includes developing an approximate 18 acre site into a solar energy generation facility in the unincorporated areas of Kings County.

The potential for impacts to biological, cultural resources, and hazardous materials are addressed in sections IV.-Biological Resources, V.-Cultural Resources, and VIII. Hazards and Hazardous Materials. Both the construction and solar facility operations of the proposed Project will be less than significant to biological, cultural resources, and hazards and hazardous Materials with the incorporation of the mitigation measures stated in the previous impact sections. Accordingly, the Project will involve no potential for significant impacts through the degradation of the quality of the environment, the reduction in the habitat or population of fish or wildlife, including endangered plants or animals, the elimination of a plant or animal community or example of a major period of California history or prehistory. The impact will be less than significant with mitigation.

XVIII-b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

Less Than Significant Impact With Mitigation Incorporation. The Project proposes the installation of approximately 16,700 to 23,750 solar modules within the 18 acre property capable of generating an electrical capacity of 3 MW_{AC}. The proposed Project would generate enough electricity to service approximately 660 households within Kings County. As discussed above, the Project will result in less than significant impacts to biological, cultural resources, and hazards and hazardous materials with mitigation incorporation as described in section IV.-Biological Resources, V.-Cultural Resources, and VIII. Hazards and Hazardous Materials of this environmental review document. Once operating, the proposed Project will be monitored on a daily basis from a remote location utilizing Supervisory Control and Data Acquisition (SCADA) system to allow for the remote monitoring of facility operations and/or remote control of critical components. Occasional service and maintenance employees will be scheduled to service the facility on an as needed basis. As such, minimal project related vehicle trips would occur as a result of project implementation. The solar energy generation facility will be almost entirely passive and will not result in ongoing impacts that are individually limited or cumulatively considerable. The implementation of the identified Project-specific mitigation measures and compliance with applicable codes, ordinances, laws and other required regulations will reduce the magnitude of any impacts associated with construction activities to a less than significant level.

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

Less Than Significant Impact With Mitigation Incorporation. The Project will not result in substantial adverse effects on human beings, either directly or indirectly. Mitigation measures are provided in sections IV.-Biological Resources, V.-Cultural Resources, and VIII-Hazards and Hazardous Materials of this environmental document. The implementation of the identified mitigation measures would reduce the proposed Project's potential environmental effects on the public and the environment to less than significant levels. No additional mitigation measures will be required. Adverse effects on human beings resulting from implementation of the Project will be less than significant.

CHAPTER 4

MITIGATION MONITORING REPORT AND PROGRAM

4 MITIGATION MONITORING AND REPORTING PROGRAM

This Mitigation Monitoring and Reporting Program (MMRP) has been formulated based upon the findings of the Initial Study/Mitigated Negative Declaration (IS/MND) for the Hanford 12 Project (proposed Project) in Kings County (County). The MMRP lists mitigation measures recommended in the IS/MND for the proposed Project and identifies monitoring and reporting requirements.

Table 8 presents the mitigation measures identified for the proposed Project. Each mitigation measure is numbered with a symbol indicating the topical section to which it pertains, a hyphen, and the impact number. For example, AIR-2 would be the second mitigation measure identified in the Air Quality analysis of the IS/MND.

The first column of Table 8 identifies the mitigation measure. The second column, entitled "When Monitoring is to Occur," identifies the time the mitigation measure should be initiated. The third column, "Frequency of Monitoring," identifies the frequency of the monitoring of the mitigation measure. The fourth column, "Agency Responsible for Monitoring," names the party ultimately responsible for ensuring that the mitigation measure is implemented. The last columns will be used by the County to ensure that individual mitigation measures have been complied with and monitored.

Table 8

Mitigation Monitoring Plan

Mitigation Measure/Condition of Approval	When Monitoring is to Occur	Frequency of Monitoring	Agency Responsible for Monitoring	Method to Verify Compliance	Verification of Compliance		
Biological Resources:							
BIO-1: (avoidance). In order to avoid impacts to all nesting raptors and other migratory birds from tree removal, grading, and construction, these activities shall occur between September 1 and January 31. This will ensure that construction does not coincide with the nesting season (February 1 to August 31).	Prior to construction	During construction and closure	Kings County	Field inspection			
BIO-2: (pre-construction surveys). If brushing, grading, or construction must occur between February 1 and August 31, a qualified biologist shall conduct pre-construction surveys for active raptor and migratory bird nests within 30 days of the onset of these activities.	Prior to construction	Monthly monitoring during construction	Kings County	Field Inspection			
BIO-2: (establish buffers). Should any active nests be discovered in or near proposed construction zones, the biologist shall identify a suitable construction-free buffer around the nest. This buffer shall be identified on the ground with flagging or fencing, and will be maintained until the biologist has determined that the young have fledged.	Prior to construction	Monthly monitoring during construction	Kings County	Field Inspection			
Cultural Resources:							
CUL-1: If, in the course of Project construction or operation, any archaeological or historical resources are uncovered, discovered, or otherwise detected or observed, activities within fifty (50) feet of the find shall be ceased. A qualified archaeologist shall be contacted and advise the County of the site's significance. If the findings are deemed significant by the Kings County Community Development Agency, appropriate mitigation measures shall be required prior to any resumption of work in the affected area of the Project.	During construction	During construction	Kings County	Field inspection			

Mitigation Measure/Condition of Approval	When Monitoring is to Occur	Frequency of Monitoring	Agency Responsible for Monitoring	Method to Verify Compliance	Verification of Compliance		
CUL-2: If cultural resource remains are encountered during construction or land modification activities work shall stop and the County shall be notified at once to assess the nature, extent, and potential significance of any cultural remains. If such remains are determined to be significant, appropriate actions shall be determined. Depending upon the nature of the find, mitigation could involve avoidance, documentation, or other appropriate actions to be determined by a qualified archaeologist. For example, activities within 50 feet of the find shall be ceased.	Ongoing	During construction	Kings County	Field inspection			

Mitigation Measure/Condition of Approval	When Monitoring is to Occur	Frequency of Monitoring	Agency Responsible for Monitoring	Method to Verify Compliance	Verification of Compliance		
Hazards and Hazardous Materials:							
HZA-1 The constructor and operator of the Project shall develop an Injury and Illness Prevention Program and project-specific health and safety plans. These plans should include but not be limited to the following: • Compliance with the SJVAPCD's Regulation VIII and SJVAPCD-approved Dust Control Plan; • Train workers and supervisors on how to recognize symptoms of illness related to Valley Fever; • Provide pre-construction training and instruction regarding requirements for on-site construction pursuant to the approved Dusts Control Plan; • Limit workers' exposure to outdoor dust in disease-endemic areas; • When soil will be disturbed by heavy equipment or vehicles, wet the soil with water or other permitted soil stabilizer before disturbing it and continuously wet it while digging to keep dust levels down; • Heavy equipment, trucks, and other vehicles generating heavy dust should have enclosed cabs equipped with air filters; and • When exposure to dust is unavoidable, provide NIOSH-approved respiratory protection to all employees.	Prior to construction	During construction and closure	Kings County	Field inspection			

CHAPTER 5

LIST OF PREPARERS

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Appendix A

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 Kings County, California

Hanford 12 - Hanford, CA

July 29, 2013

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://soils.usda.gov/sqi/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (http://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://soils.usda.gov/contact/state_offices/).

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 Soil Data Mart Web site or the NRCS Web Soil Survey. The Soil Data Mart is the data storage site for the 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 alternative means

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Contents

How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil scientists classified and named the soils in the survey area, they compared the

individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

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

Custom Soil Resource Report
Soil Map

MAP 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: http://websoilsurvey.nrcs.usda.gov
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: Kings County, California
Survey Area Data: Version 8, Aug 27, 2009

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

Date(s) aerial images were photographed: Aug 27, 2010—Jul 3, 2011

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

Map Unit Legend

Kings County, California (CA031)			
Map Unit Symbol	**Map Unit Name**	**Acres in AOI**	**Percent of AOI**
104	Cajon sandy loam	2.9	16.2%
130	Kimberlina fine sandy loam, saline-alkali	5.6	30.8%
167	Urban land	1.0	5.8%
174	Wasco sandy loam, 0 to 5 percent slopes	8.5	47.3%
Totals for Area of Interest		**18.1**	**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.

Kings County, California

104—Cajon sandy loam

Map Unit Setting

Elevation: 320 to 400 feet
Mean annual precipitation: 5 to 7 inches
Mean annual air temperature: 61 to 70 degrees F
Frost-free period: 240 to 300 days

Map Unit Composition

Cajon and similar soils: 85 percent
Minor components: 15 percent

Description of Cajon

Setting

Landform: Alluvial fans
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from igneous and sedimentary rock

Properties and qualities

Slope: 0 to 1 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat excessively drained
Capacity of the most limiting layer to transmit water (Ksat): High (1.98 to 5.95 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline (0.0 to 2.0 mmhos/cm)
Available water capacity: Low (about 5.1 inches)

Interpretive groups

Farmland classification: Farmland of statewide importance
Land capability classification (irrigated): 3s
Land capability (nonirrigated): 7s
Hydrologic Soil Group: A

Typical profile

0 to 11 inches: Sandy loam
11 to 60 inches: Loamy sand
60 to 70 inches: Stratified sand to loamy fine sand

Minor Components

Kimberlina

Percent of map unit: 4 percent

Cajon, calcareous

Percent of map unit: 4 percent

Nord

Percent of map unit: 3 percent

Waslo
Percent of map unit: 1 percent

Unnamed, rare flooding
Percent of map unit: 1 percent

Unnamed
Percent of map unit: 1 percent
Landform: Sloughs

Lemoore
Percent of map unit: 1 percent
Landform: Alluvial fans

130—Kimberlina fine sandy loam, saline-alkali

Map Unit Setting
Elevation: 190 to 3,500 feet
Mean annual precipitation: 4 to 8 inches
Mean annual air temperature: 61 to 64 degrees F
Frost-free period: 210 to 300 days

Map Unit Composition
Kimberlina and similar soils: 85 percent
Minor components: 15 percent

Description of Kimberlina

Setting
Landform: Alluvial fans
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from igneous and sedimentary rock

Properties and qualities
Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
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
Calcium carbonate, maximum content: 5 percent
Maximum salinity: Very slightly saline to slightly saline (4.0 to 8.0 mmhos/cm)
Sodium adsorption ratio, maximum: 25.0
Available water capacity: Very low (about 3.0 inches)

Interpretive groups

Farmland classification: Farmland of statewide importance
Land capability classification (irrigated): 2s
Land capability (nonirrigated): 7s
Hydrologic Soil Group: C

Typical profile

0 to 8 inches: Fine sandy loam
8 to 60 inches: Fine sandy loam

Minor Components

Kimberlina, sandy substratum

Percent of map unit: 2 percent

Excelsior

Percent of map unit: 2 percent

Wasco

Percent of map unit: 2 percent

Nord

Percent of map unit: 2 percent

Melga

Percent of map unit: 1 percent

Garces

Percent of map unit: 1 percent

Unnamed

Percent of map unit: 1 percent
Landform: Sloughs

Yound

Percent of map unit: 1 percent

Unnamed, rare flooding

Percent of map unit: 1 percent

Remnoy

Percent of map unit: 1 percent

Cajon

Percent of map unit: 1 percent

167—Urban land

Map Unit Composition

Urban land: 85 percent
Minor components: 13 percent

Minor Components

Lemoore
Percent of map unit: 2 percent
Landform: Alluvial fans

Kimberlina
Percent of map unit: 2 percent

Nord
Percent of map unit: 2 percent

Grangeville
Percent of map unit: 2 percent
Landform: Alluvial fans

Wasco
Percent of map unit: 1 percent

Panoche
Percent of map unit: 1 percent

Lakeside
Percent of map unit: 1 percent
Landform: Basin floors

Unnamed
Percent of map unit: 1 percent
Landform: Sloughs

Lethent
Percent of map unit: 1 percent

174—Wasco sandy loam, 0 to 5 percent slopes

Map Unit Setting
Elevation: 250 to 3,700 feet
Mean annual precipitation: 4 to 7 inches
Mean annual air temperature: 61 to 64 degrees F
Frost-free period: 210 to 275 days

Map Unit Composition
Wasco and similar soils: 85 percent
Minor components: 15 percent

Description of Wasco

Setting
Landform: Alluvial fans
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from sandstone

Properties and qualities

Slope: 0 to 5 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): High (1.98 to 5.95 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 5 percent
Maximum salinity: Nonsaline (0.0 to 2.0 mmhos/cm)
Available water capacity: Moderate (about 6.4 inches)

Interpretive groups

Farmland classification: Prime farmland if irrigated
Land capability classification (irrigated): 2e
Land capability (nonirrigated): 7e
Hydrologic Soil Group: A

Typical profile

0 to 20 inches: Sandy loam
20 to 60 inches: Sandy loam

Minor Components

Kimberlina

Percent of map unit: 3 percent

Cantua

Percent of map unit: 3 percent

Kettleman

Percent of map unit: 3 percent

Avenal

Percent of map unit: 2 percent

Cajon

Percent of map unit: 2 percent

Panoche

Percent of map unit: 2 percent

Soil Information for All Uses

Suitabilities and Limitations for Use

The Suitabilities and Limitations for Use section includes various soil interpretations displayed as thematic maps with a summary table for the soil map units in the selected area of interest. A single value or rating for each map unit is generated by aggregating the interpretive ratings of individual map unit components. This aggregation process is defined for each interpretation.

Land Classifications

Land Classifications are specified land use and management groupings that are assigned to soil areas because combinations of soil have similar behavior for specified practices. Most are based on soil properties and other factors that directly influence the specific use of the soil. Example classifications include ecological site classification, farmland classification, irrigated and nonirrigated land capability classification, and hydric rating.

California Revised Storie Index (CA)

The Storie Index is a soil rating based on soil properties that govern a soil's potential for cultivated agriculture in California.

The Storie Index assesses the productivity of a soil from the following four characteristics: Factor A, degree of soil profile development; factor B, texture of the surface layer; factor C, slope; and factor X, manageable features, including drainage, microrelief, fertility, acidity, erosion, and salt content. A score ranging from 0 to 100 percent is determined for each factor, and the scores are then multiplied together to derive an index rating.

For simplification, Storie Index ratings have been combined into six grade classes as follows: Grade 1 (excellent), 100 to 80; grade 2 (good), 79 to 60; grade 3 (fair), 59 to 40; grade 4 (poor), 39 to 20; grade 5 (very poor), 19 to 10; and grade 6 (nonagricultural), less than 10.

The components listed for each map unit in the accompanying Summary by Map Unit table in Web Soil Survey or the Aggregation Report in Soil Data Viewer are determined

by the aggregation method chosen. An aggregated rating class is shown for each map unit. The components listed for each map unit are only those that have the same rating class as the one shown for the map unit. The percent composition of each component in a particular map unit is given to help the user better understand the extent to which the rating applies to the map unit.

Other components with different ratings may occur in each map unit. The ratings for all components, regardless the aggregated rating of the map unit, can be viewed by generating the equivalent report from the Soil Reports tab in Web Soil Survey or from the Soil Data Mart site. Onsite investigation may be needed to validate these interpretations and to confirm the identity of the soil on a given site.

Custom Soil Resource Report
Map—California Revised Storie Index (CA)

MAP LEGEND

Area of Interest (AOI)

- Area of Interest (AOI)

Soils

Soil Rating Polygons

- Grade One - Excellent
- Grade Two - Good
- Grade Three - Fair
- Grade Four - Poor
- Grade Five - Very Poor
- Grade Six - Nonagricultural
- Not rated
- Not rated or not available

Soil Rating Lines

- Grade One - Excellent
- Grade Two - Good
- Grade Three - Fair
- Grade Four - Poor
- Grade Five - Very Poor
- Grade Six - Nonagricultural
- Not rated
- Not rated or not available

Soil Rating Points

- Grade One - Excellent
- Grade Two - Good
- Grade Three - Fair
- Grade Four - Poor
- Grade Five - Very Poor
- Grade Six - Nonagricultural
- Not rated
- Not rated or not available

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: http://websoilsurvey.nrcs.usda.gov
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: Kings County, California
Survey Area Data: Version 8, Aug 27, 2009

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

Date(s) aerial images were photographed: Aug 27, 2010—Jul 3, 2011

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

Table—California Revised Storie Index (CA)

California Revised Storie Index (CA)— Summary by Map Unit — Kings County, California (CA031)					
Map unit symbol	**Map unit name**	**Rating**	**Component name (percent)**	**Acres in AOI**	**Percent of AOI**
104	Cajon sandy loam	Grade Two - Good	Cajon (85%)	2.9	16.2%
130	Kimberlina fine sandy loam, saline-alkali	Grade Two - Good	Kimberlina (85%)	5.6	30.8%
167	Urban land	Not Rated	Urban land (85%)	1.0	5.8%
			Kimberlina (2%)		
			Nord (2%)		
			Grangeville (2%)		
			Lemoore (2%)		
			Wasco (1%)		
			Panoche (1%)		
			Lakeside (1%)		
			Unnamed (1%)		
			Lethent (1%)		
174	Wasco sandy loam, 0 to 5 percent slopes	Grade One - Excellent	Wasco (85%)	8.5	47.3%
Totals for Area of Interest				**18.1**	**100.0%**

Rating Options—California Revised Storie Index (CA)

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Lower

Irrigated Capability Class

Land capability classification shows, in a general way, the suitability of soils for most kinds of field crops. Crops that require special management are excluded. The soils are grouped according to their limitations for field crops, the risk of damage if they are used for crops, and the way they respond to management. The criteria used in grouping the soils do not include major and generally expensive landforming that would change slope, depth, or other characteristics of the soils, nor do they include possible but unlikely major reclamation projects. Capability classification is not a substitute for interpretations that show suitability and limitations of groups of soils for rangeland, for woodland, or for engineering purposes.

In the capability system, soils are generally grouped at three levels-capability class, subclass, and unit. Only class and subclass are included in this data set.

Capability classes, the broadest groups, are designated by the numbers 1 through 8. The numbers indicate progressively greater limitations and narrower choices for practical use. The classes are defined as follows:

Class 1 soils have few limitations that restrict their use.

Class 2 soils have moderate limitations that reduce the choice of plants or that require moderate conservation practices.

Class 3 soils have severe limitations that reduce the choice of plants or that require special conservation practices, or both.

Class 4 soils have very severe limitations that reduce the choice of plants or that require very careful management, or both.

Class 5 soils are subject to little or no erosion but have other limitations, impractical to remove, that restrict their use mainly to pasture, rangeland, forestland, or wildlife habitat.

Class 6 soils have severe limitations that make them generally unsuitable for cultivation and that restrict their use mainly to pasture, rangeland, forestland, or wildlife habitat.

Class 7 soils have very severe limitations that make them unsuitable for cultivation and that restrict their use mainly to grazing, forestland, or wildlife habitat.

Class 8 soils and miscellaneous areas have limitations that preclude commercial plant production and that restrict their use to recreational purposes, wildlife habitat, watershed, or esthetic purposes.

Custom Soil Resource Report
Map—Irrigated Capability Class

MAP LEGEND

Area of Interest (AOI)

Area of Interest (AOI)

Soils

Soil Rating Polygons

Capability Class - I
Capability Class - II
Capability Class - III
Capability Class - IV
Capability Class - V
Capability Class - VI
Capability Class - VII
Capability Class - VIII
Not rated or not available

Soil Rating Lines

Capability Class - I
Capability Class - II
Capability Class - III
Capability Class - IV
Capability Class - V
Capability Class - VI
Capability Class - VII
Capability Class - VIII
Not rated or not available

Soil Rating Points

Capability Class - I
Capability Class - II
Capability Class - III
Capability Class - IV
Capability Class - V
Capability Class - VI
Capability Class - VII
Capability Class - VIII
Not rated or not available

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: http://websoilsurvey.nrcs.usda.gov
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: Kings County, California
Survey Area Data: Version 8, Aug 27, 2009

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

Date(s) aerial images were photographed: Aug 27, 2010—Jul 3, 2011

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

Table—Irrigated Capability Class

Irrigated Capability Class— Summary by Map Unit — Kings County, California (CA031)				
Map unit symbol	**Map unit name**	**Rating**	**Acres in AOI**	**Percent of AOI**
104	Cajon sandy loam	3	2.9	16.2%
130	Kimberlina fine sandy loam, saline-alkali	2	5.6	30.8%
167	Urban land		1.0	5.8%
174	Wasco sandy loam, 0 to 5 percent slopes	2	8.5	47.3%
Totals for Area of Interest			**18.1**	**100.0%**

Rating Options—Irrigated Capability Class

Aggregation Method: Dominant Condition

Aggregation is the process by which a set of component attribute values is reduced to a single value that represents the map unit as a whole.

A map unit is typically composed of one or more "components". A component is either some type of soil or some nonsoil entity, e.g., rock outcrop. For the attribute being aggregated, the first step of the aggregation process is to derive one attribute value for each of a map unit's components. From this set of component attributes, the next step of the aggregation process derives a single value that represents the map unit as a whole. Once a single value for each map unit is derived, a thematic map for soil map units can be rendered. Aggregation must be done because, on any soil map, map units are delineated but components are not.

For each of a map unit's components, a corresponding percent composition is recorded. A percent composition of 60 indicates that the corresponding component typically makes up approximately 60% of the map unit. Percent composition is a critical factor in some, but not all, aggregation methods.

The aggregation method "Dominant Condition" first groups like attribute values for the components in a map unit. For each group, percent composition is set to the sum of the percent composition of all components participating in that group. These groups now represent "conditions" rather than components. The attribute value associated with the group with the highest cumulative percent composition is returned. If more than one group shares the highest cumulative percent composition, the corresponding "tie-break" rule determines which value should be returned. The "tie-break" rule indicates whether the lower or higher group value should be returned in the case of a percent composition tie. The result returned by this aggregation method represents the dominant condition throughout the map unit only when no tie has occurred.

Component Percent Cutoff: None Specified

Components whose percent composition is below the cutoff value will not be considered. If no cutoff value is specified, all components in the database will be considered. The data for some contrasting soils of minor extent may not be in the database, and therefore are not considered.

Tie-break Rule: Higher

The tie-break rule indicates which value should be selected from a set of multiple candidate values, or which value should be selected in the event of a percent composition tie.

Irrigated Capability Subclass

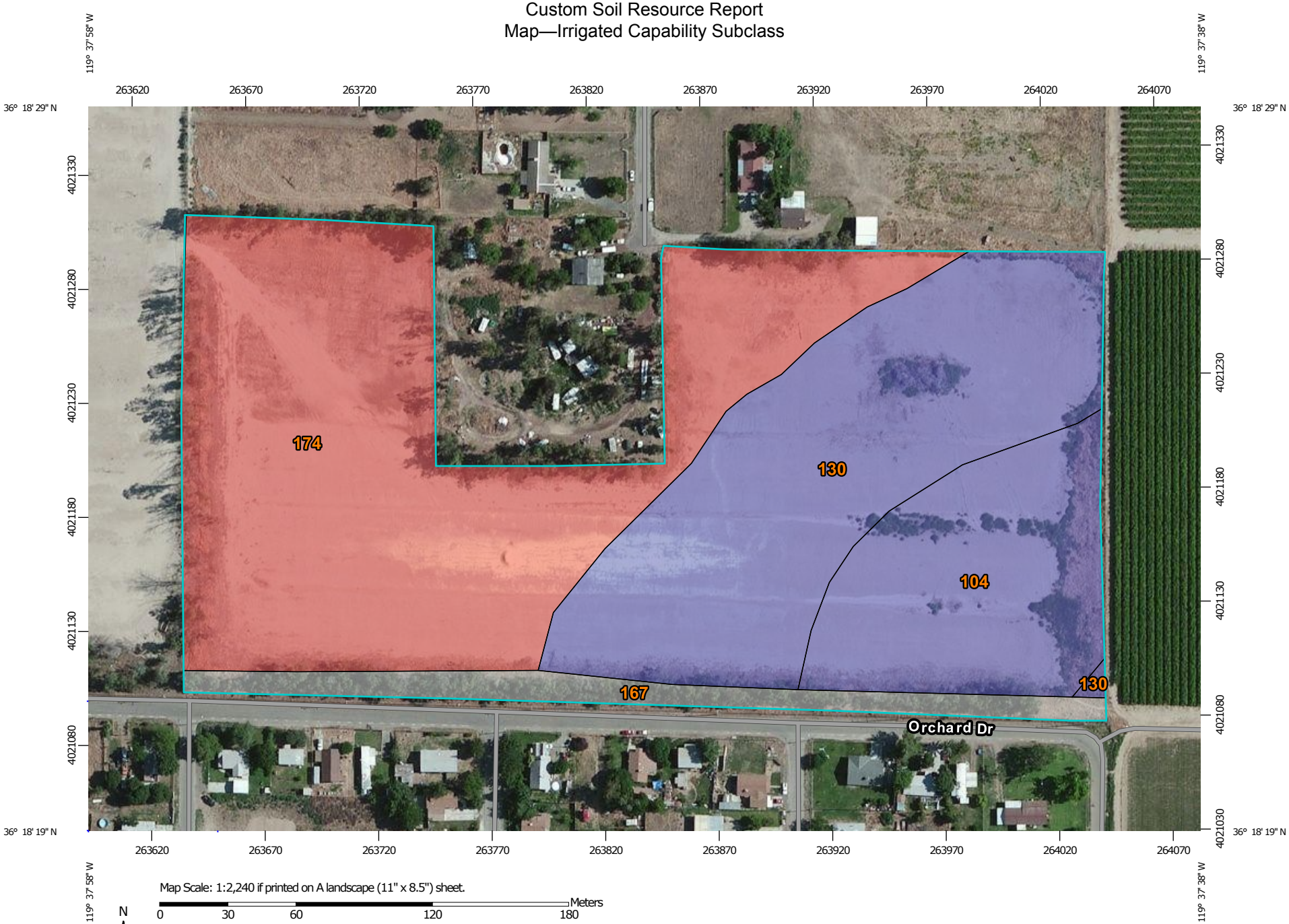
Land capability classification shows, in a general way, the suitability of soils for most kinds of field crops. Crops that require special management are excluded. The soils are grouped according to their limitations for field crops, the risk of damage if they are used for crops, and the way they respond to management. The criteria used in grouping the soils do not include major and generally expensive landforming that would change slope, depth, or other characteristics of the soils, nor do they include possible but unlikely major reclamation projects. Capability classification is not a substitute for interpretations that show suitability and limitations of groups of soils for rangeland, for woodland, or for engineering purposes.

In the capability system, soils are generally grouped at three levels-capability class, subclass, and unit. Only class and subclass are included in this data set.

Capability subclasses are soil groups within one capability class. They are designated by adding a small letter, "e," "w," "s," or "c," to the class numeral, for example, 2e. The letter "e" shows that the main hazard is the risk of erosion unless close-growing plant cover is maintained; "w" shows that water in or on the soil interferes with plant growth or cultivation (in some soils the wetness can be partly corrected by artificial drainage); "s" shows that the soil is limited mainly because it is shallow, droughty, or stony; and "c," used in only some parts of the United States, shows that the chief limitation is climate that is very cold or very dry.

In class 1 there are no subclasses because the soils of this class have few limitations. Class 5 contains only the subclasses indicated by "w," "s," or "c" because the soils in class 5 are subject to little or no erosion. They have other limitations that restrict their use to pasture, rangeland, forestland, or wildlife habitat.

Custom Soil Resource Report
Map—Irrigated Capability Subclass



MAP LEGEND

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

Soils

Soil Rating Polygons
- Erosion
- Soil limitation within the rooting zone
- Excess water
- Climate condition
- Not rated or not available

Soil Rating Lines
- Erosion
- Soil limitation within the rooting zone
- Excess water
- Climate condition
- Not rated or not available

Soil Rating Points
- Erosion
- Soil limitation within the rooting zone
- Excess water
- Climate condition
- Not rated or not available

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: http://websoilsurvey.nrcs.usda.gov
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: Kings County, California
Survey Area Data: Version 8, Aug 27, 2009

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

Date(s) aerial images were photographed: Aug 27, 2010—Jul 3, 2011

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

Table—Irrigated Capability Subclass

Irrigated Capability Subclass— Summary by Map Unit — Kings County, California (CA031)				
Map unit symbol	**Map unit name**	**Rating**	**Acres in AOI**	**Percent of AOI**
104	Cajon sandy loam	s	2.9	16.2%
130	Kimberlina fine sandy loam, saline-alkali	s	5.6	30.8%
167	Urban land		1.0	5.8%
174	Wasco sandy loam, 0 to 5 percent slopes	e	8.5	47.3%
Totals for Area of Interest			**18.1**	**100.0%**

Rating Options—Irrigated Capability Subclass

Aggregation Method: Dominant Condition

Aggregation is the process by which a set of component attribute values is reduced to a single value that represents the map unit as a whole.

A map unit is typically composed of one or more "components". A component is either some type of soil or some nonsoil entity, e.g., rock outcrop. For the attribute being aggregated, the first step of the aggregation process is to derive one attribute value for each of a map unit's components. From this set of component attributes, the next step of the aggregation process derives a single value that represents the map unit as a whole. Once a single value for each map unit is derived, a thematic map for soil map units can be rendered. Aggregation must be done because, on any soil map, map units are delineated but components are not.

For each of a map unit's components, a corresponding percent composition is recorded. A percent composition of 60 indicates that the corresponding component typically makes up approximately 60% of the map unit. Percent composition is a critical factor in some, but not all, aggregation methods.

The aggregation method "Dominant Condition" first groups like attribute values for the components in a map unit. For each group, percent composition is set to the sum of the percent composition of all components participating in that group. These groups now represent "conditions" rather than components. The attribute value associated with the group with the highest cumulative percent composition is returned. If more than one group shares the highest cumulative percent composition, the corresponding "tie-break" rule determines which value should be returned. The "tie-break" rule indicates whether the lower or higher group value should be returned in the case of a percent composition tie. The result returned by this aggregation method represents the dominant condition throughout the map unit only when no tie has occurred.

Component Percent Cutoff: None Specified

Components whose percent composition is below the cutoff value will not be considered. If no cutoff value is specified, all components in the database will be considered. The data for some contrasting soils of minor extent may not be in the database, and therefore are not considered.

Tie-break Rule: Lower

The tie-break rule indicates which value should be selected from a set of multiple candidate values, or which value should be selected in the event of a percent composition tie.

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Appendix B

CalEEMod Output Files

IMMODO Hanford 12

Kings County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	19.00	Acre	19.00	827,640.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	37
Climate Zone	3			**Operational Year**	2014
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Solar farm will be built on 19 acres.

Construction Phase - Site preparation is planned for 1 month and panel installation for 3 months.

Off-road Equipment - Grading equipment provided by solar installer.

Off-road Equipment - Panel installation equipment provided by solar installer.

Grading - Site area is 19 acres.

Trips and VMT - Estimated construction crew provided by solar installer.

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	300.00	64.00
tblConstructionPhase	NumDays	30.00	23.00
tblGrading	AcresOfGrading	57.50	19.00
tblOffRoadEquipment	OffRoadEquipmentType		Skid Steer Loaders
tblOffRoadEquipment	OffRoadEquipmentType		Generator Sets
tblOffRoadEquipment	OffRoadEquipmentType		Trenchers
tblOffRoadEquipment	OffRoadEquipmentType		Scrapers
tblOffRoadEquipment	OffRoadEquipmentType		Trenchers
tblOffRoadEquipment	OffRoadEquipmentType		Bore/Drill Rigs
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00
tblTripsAndVMT	HaulingTripNumber	0.00	10.00
tblTripsAndVMT	VendorTripNumber	136.00	0.00
tblTripsAndVMT	WorkerTripNumber	30.00	18.00
tblTripsAndVMT	WorkerTripNumber	348.00	67.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2014	0.4496	3.9568	2.5563	3.8800e-003	0.0983	0.2254	0.3237	0.0442	0.2129	0.2571	0.0000	358.2367	358.2367	0.0864	0.0000	360.0507
Total	**0.4496**	**3.9568**	**2.5563**	**3.8800e-003**	**0.0983**	**0.2254**	**0.3237**	**0.0442**	**0.2129**	**0.2571**	**0.0000**	**358.2367**	**358.2367**	**0.0864**	**0.0000**	**360.0507**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2014	0.4491	3.9521	2.5534	3.8800e-003	0.0587	0.2252	0.2839	0.0237	0.2127	0.2363	0.0000	357.8320	357.8320	0.0863	0.0000	359.6439
Total	**0.4491**	**3.9521**	**2.5534**	**3.8800e-003**	**0.0587**	**0.2252**	**0.2839**	**0.0237**	**0.2127**	**0.2363**	**0.0000**	**357.8320**	**357.8320**	**0.0863**	**0.0000**	**359.6439**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.1045**	**0.1183**	**0.1107**	**0.0000**	**40.2543**	**0.1153**	**12.3069**	**46.4706**	**0.1174**	**8.0896**	**0.0000**	**0.1129**	**0.1129**	**0.1158**	**0.0000**	**0.1130**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	3.8078	0.0000	1.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.4000e-004	3.4000e-004	0.0000	0.0000	3.6000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**3.8078**	**0.0000**	**1.8000e-004**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**3.4000e-004**	**3.4000e-004**	**0.0000**	**0.0000**	**3.6000e-004**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	3.8078	0.0000	1.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.4000e-004	3.4000e-004	0.0000	0.0000	3.6000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**3.8078**	**0.0000**	**1.8000e-004**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**3.4000e-004**	**3.4000e-004**	**0.0000**	**0.0000**	**3.6000e-004**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	1/15/2014	2/14/2014	5	23	
2	Solar Panel Installation	Building Construction	2/15/2014	5/15/2014	5	64	

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Generator Sets	2	8.00	84	0.74
Grading	Trenchers	2	8.00	80	0.50
Solar Panel Installation	Cranes	1	7.00	226	0.29
Solar Panel Installation	Skid Steer Loaders	2	8.00	64	0.37
Solar Panel Installation	Forklifts	2	8.00	89	0.20
Solar Panel Installation	Generator Sets	4	8.00	84	0.74
Solar Panel Installation	Scrapers	1	8.00	361	0.48
Solar Panel Installation	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Solar Panel Installation	Trenchers	1	8.00	80	0.50
Grading	Excavators	2	8.00	162	0.38
Solar Panel Installation	Bore/Drill Rigs	2	8.00	205	0.50
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Graders	1	8.00	174	0.41
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Solar Panel Installation	Welders	1	8.00	46	0.45
Grading	Scrapers	2	8.00	361	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Solar Panel Installation	17	67.00	0.00	10.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	12	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Clean Paved Roads

3.2 Grading - 2014

Unmitigated Construction On-Site

Acres of Grading: 0

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0793	0.0000	0.0793	0.0392	0.0000	0.0392	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1102	1.1752	0.7472	9.4000e-004		0.0635	0.0635		0.0592	0.0592	0.0000	89.0496	89.0496	0.0240	0.0000	89.5527
Total	**0.1102**	**1.1752**	**0.7472**	**9.4000e-004**	**0.0793**	**0.0635**	**0.1428**	**0.0392**	**0.0592**	**0.0983**	**0.0000**	**89.0496**	**89.0496**	**0.0240**	**0.0000**	**89.5527**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.3000e-003	1.6800e-003	0.0154	2.0000e-005	1.6600e-003	2.0000e-005	1.6800e-003	4.4000e-004	1.0000e-005	4.6000e-004	0.0000	1.5631	1.5631	1.1000e-004	0.0000	1.5655
Total	**4.3000e-003**	**1.6800e-003**	**0.0154**	**2.0000e-005**	**1.6600e-003**	**2.0000e-005**	**1.6800e-003**	**4.4000e-004**	**1.0000e-005**	**4.6000e-004**	**0.0000**	**1.5631**	**1.5631**	**1.1000e-004**	**0.0000**	**1.5655**

3.2 Grading - 2014

Mitigated Construction On-Site

Acres of Grading: 0

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0357	0.0000	0.0357	0.0176	0.0000	0.0176	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1101	1.1738	0.7463	9.4000e-004		0.0634	0.0634		0.0591	0.0591	0.0000	88.9436	88.9436	0.0239	0.0000	89.4462
Total	**0.1101**	**1.1738**	**0.7463**	**9.4000e-004**	**0.0357**	**0.0634**	**0.0991**	**0.0176**	**0.0591**	**0.0767**	**0.0000**	**88.9436**	**88.9436**	**0.0239**	**0.0000**	**89.4462**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.3000e-003	1.6800e-003	0.0154	2.0000e-005	1.6600e-003	2.0000e-005	1.6800e-003	4.4000e-004	1.0000e-005	4.6000e-004	0.0000	1.5631	1.5631	1.1000e-004	0.0000	1.5655
Total	**4.3000e-003**	**1.6800e-003**	**0.0154**	**2.0000e-005**	**1.6600e-003**	**2.0000e-005**	**1.6800e-003**	**4.4000e-004**	**1.0000e-005**	**4.6000e-004**	**0.0000**	**1.5631**	**1.5631**	**1.1000e-004**	**0.0000**	**1.5655**

3.3 Solar Panel Installation - 2014

Unmitigated Construction On-Site

Acres of Grading: 19

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2902	2.7606	1.6331	2.7200e-003		0.1618	0.1618		0.1536	0.1536	0.0000	251.0824	251.0824	0.0611	0.0000	252.3660
Total	**0.2902**	**2.7606**	**1.6331**	**2.7200e-003**		**0.1618**	**0.1618**		**0.1536**	**0.1536**	**0.0000**	**251.0824**	**251.0824**	**0.0611**	**0.0000**	**252.3660**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.8000e-004	1.8900e-003	1.3000e-003	0.0000	9.0000e-005	3.0000e-005	1.2000e-004	2.0000e-005	3.0000e-005	6.0000e-005	0.0000	0.3514	0.3514	0.0000	0.0000	0.3515
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0445	0.0174	0.1593	2.0000e-004	0.0172	1.6000e-004	0.0174	4.5800e-003	1.4000e-004	4.7200e-003	0.0000	16.1902	16.1902	1.1800e-003	0.0000	16.2149
Total	**0.0449**	**0.0193**	**0.1606**	**2.0000e-004**	**0.0173**	**1.9000e-004**	**0.0175**	**4.6000e-003**	**1.7000e-004**	**4.7800e-003**	**0.0000**	**16.5416**	**16.5416**	**1.1800e-003**	**0.0000**	**16.5664**

3.3 Solar Panel Installation - 2014

Mitigated Construction On-Site

Acres of Grading: 19

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2899	2.7573	1.6312	2.7200e-003		0.1616	0.1616		0.1534	0.1534	0.0000	250.7837	250.7837	0.0611	0.0000	252.0658
Total	**0.2899**	**2.7573**	**1.6312**	**2.7200e-003**		**0.1616**	**0.1616**		**0.1534**	**0.1534**	**0.0000**	**250.7837**	**250.7837**	**0.0611**	**0.0000**	**252.0658**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.8000e-004	1.8900e-003	1.3000e-003	0.0000	4.1500e-003	3.0000e-005	4.1800e-003	1.0200e-003	3.0000e-005	1.0500e-003	0.0000	0.3514	0.3514	0.0000	0.0000	0.3515
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0445	0.0174	0.1593	2.0000e-004	0.0172	1.6000e-004	0.0174	4.5800e-003	1.4000e-004	4.7200e-003	0.0000	16.1902	16.1902	1.1800e-003	0.0000	16.2149
Total	**0.0449**	**0.0193**	**0.1606**	**2.0000e-004**	**0.0214**	**1.9000e-004**	**0.0216**	**5.6000e-003**	**1.7000e-004**	**5.7700e-003**	**0.0000**	**16.5416**	**16.5416**	**1.1800e-003**	**0.0000**	**16.5664**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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

4.2 Trip Summary Information

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

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.386919	0.052166	0.133596	0.176852	0.052311	0.006188	0.012970	0.164254	0.002037	0.002333	0.007130	0.001163	0.002082

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

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

5.2 Energy by Land Use - NaturalGas

Unmitigated

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

5.2 Energy by Land Use - NaturalGas

Mitigated

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

5.3 Energy by Land Use - Electricity

Unmitigated

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

5.3 Energy by Land Use - Electricity

Mitigated

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

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	3.8078	0.0000	1.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.4000e-004	3.4000e-004	0.0000	0.0000	3.6000e-004
Unmitigated	3.8078	0.0000	1.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.4000e-004	3.4000e-004	0.0000	0.0000	3.6000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.5754					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	3.2324					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.0000e-005	0.0000	1.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.4000e-004	3.4000e-004	0.0000	0.0000	3.6000e-004
Total	**3.8078**	**0.0000**	**1.8000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**3.4000e-004**	**3.4000e-004**	**0.0000**	**0.0000**	**3.6000e-004**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.5754					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	3.2324					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.0000e-005	0.0000	1.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.4000e-004	3.4000e-004	0.0000	0.0000	3.6000e-004
Total	**3.8078**	**0.0000**	**1.8000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**3.4000e-004**	**3.4000e-004**	**0.0000**	**0.0000**	**3.6000e-004**

7.0 Water Detail

7.1 Mitigation Measures Water

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

7.2 Water by Land Use

Unmitigated

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

7.2 Water by Land Use

Mitigated

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

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

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

8.2 Waste by Land Use

Unmitigated

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

Mitigated

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

9.0 Operational Offroad

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

10.0 Vegetation

Appendix C

BIOLOGICAL EVALUATION

LIVE OAK ASSOCIATES, INC.

an Ecological Consulting Firm

HANFORD 12 SOLAR PROJECT
BIOLOGICAL EVALUATION
KINGS COUNTY, CALIFORNIA

Prepared by

LIVE OAK ASSOCIATES, INC.

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August 6, 2013 PN 1605-03

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EXECUTIVE SUMMARY

Live Oak Associates, Inc. (LOA) conducted an investigation of the biological resources of the Hanford 12 Solar Project site in Kings County, California, and evaluated likely impacts to such resources resulting from development of these facilities. The following report is an analysis of impacts to the biological resources on or within the vicinity of the project. The approximately 18 acre site is zoned industrial and is located just outside the southeastern portion of the City of Hanford. On June 24, 2013, LOA biologist Wendy Fisher surveyed the site for biotic habitats, the plants and animals occurring in those habitats, and significant habitat values that may be protected by state and federal law.

The project site consisted of a vacant commercial lot with vegetation absent from most of the site and a row of eucalyptus trees along the perimeter of the site. The project site is situated within a region dominated by commercial, residential, and agricultural land uses. The site is characterized by a single habitat/land use type, industrial /ruderal.

Any native habitats once present on the site have been heavily altered by human enterprise such that the site no longer provides suitable habitat for any locally occurring special status plants; hence, the proposed project will not impact special status plants. Project impacts will also be less than significant for wildlife movement corridors, jurisdictional waters, sensitive habitats, and many special status animal species that may occasionally forage on the project site. However, perimeter trees have the potential to support nesting birds including special status birds such as the Swainson's hawk, white-tailed kite, and loggerhead shrike. Should active nests occur in these trees at the time of site development, project development would have the potential to result in construction-related mortality to these species, which would be considered a significant impact. Project avoidance of active nests identified during preconstruction surveys or tree removal or trimming outside the nesting season will ensure that potential impacts to all avian species are reduced to a less than significant level.

TABLE OF CONTENTS

1.0 INTRODUCTION

The technical report that follows describes the biotic resources of the Hanford 12 Solar Project site (hereafter referred to as the "project site" or "site"), and evaluates possible impacts to those resources that could result from site development.

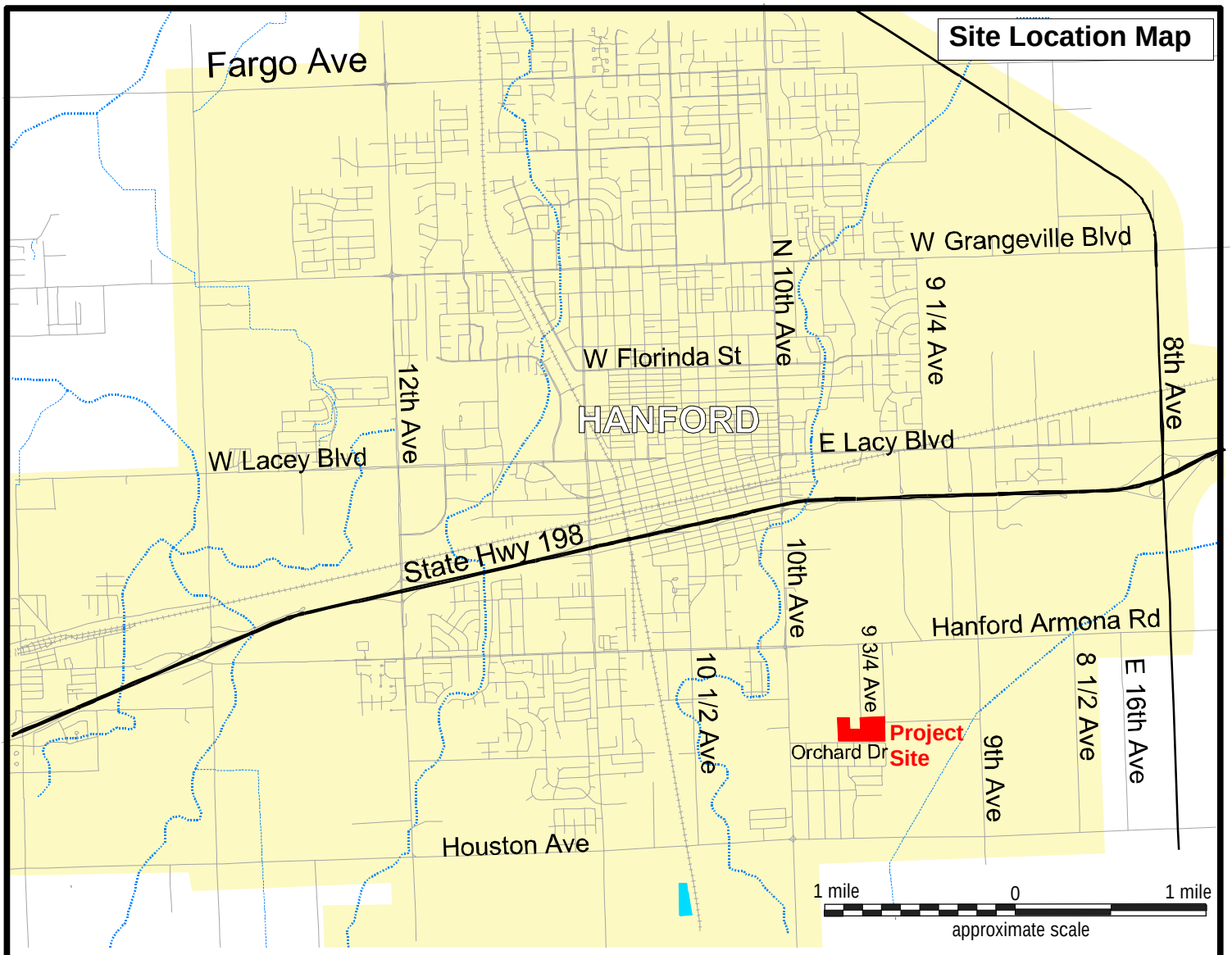
1.1 PROJECT LOCATION AND DESCRIPTION

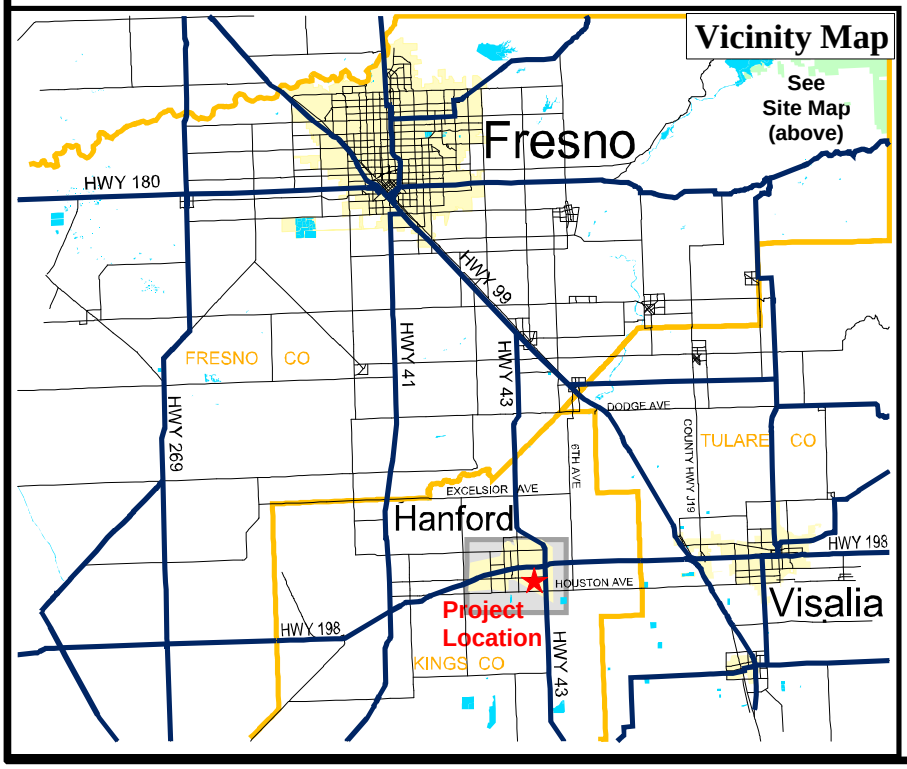
The project is located on an approximately 18 acre site within APN 016-016-069 and APN 016-016-024 located at 11375 and 11436 9¾ Avenue, Hanford, California (Figure 1) in Kings County. The project site is within the Hanford USGS 7.5 minute quadrangle; Section 6, Township 19 South, Range 22 East, Mt. Diablo Base and Meridian (Figure 2). The proposed project is the construction and operation of a 3 MW solar facility. The facility would consist of photovoltaic (PV) panels, inverter station, and an 8ft high chain link fence along the perimeter of the property. Groundcover beneath the PV panels would remain earthen based. Trees are slated for removal from the southern and western boundary of the site to prevent shading of PV panels. Tree trimming or removal may be required elsewhere.

1.2 REPORT OBJECTIVES

ImMODO California 1 LLC is submitting a Conditional Use Permit to Kings County for the construction and operation of the solar facilities and as such is subject to the requirements of the California Environmental Quality Act (CEQA) The development of photovoltaic projects may damage or modify biotic habitats used by sensitive plant and wildlife species. In such cases, site development may be regulated by state or federal agencies, subject to provisions of the California Environmental Quality Act (CEQA), and/or covered by policies and ordinances of Kings County. This report addresses issues related to: 1) Sensitive biotic resources occurring on the project site; 2) The federal, state, and local laws regulating such resources; and 3) Mitigation measures which may be required to reduce the magnitude of anticipated impacts and/or comply with permit requirements of state and federal resource agencies. As such, the objectives of this report are to:

- Summarize all site-specific information related to existing biological resources.

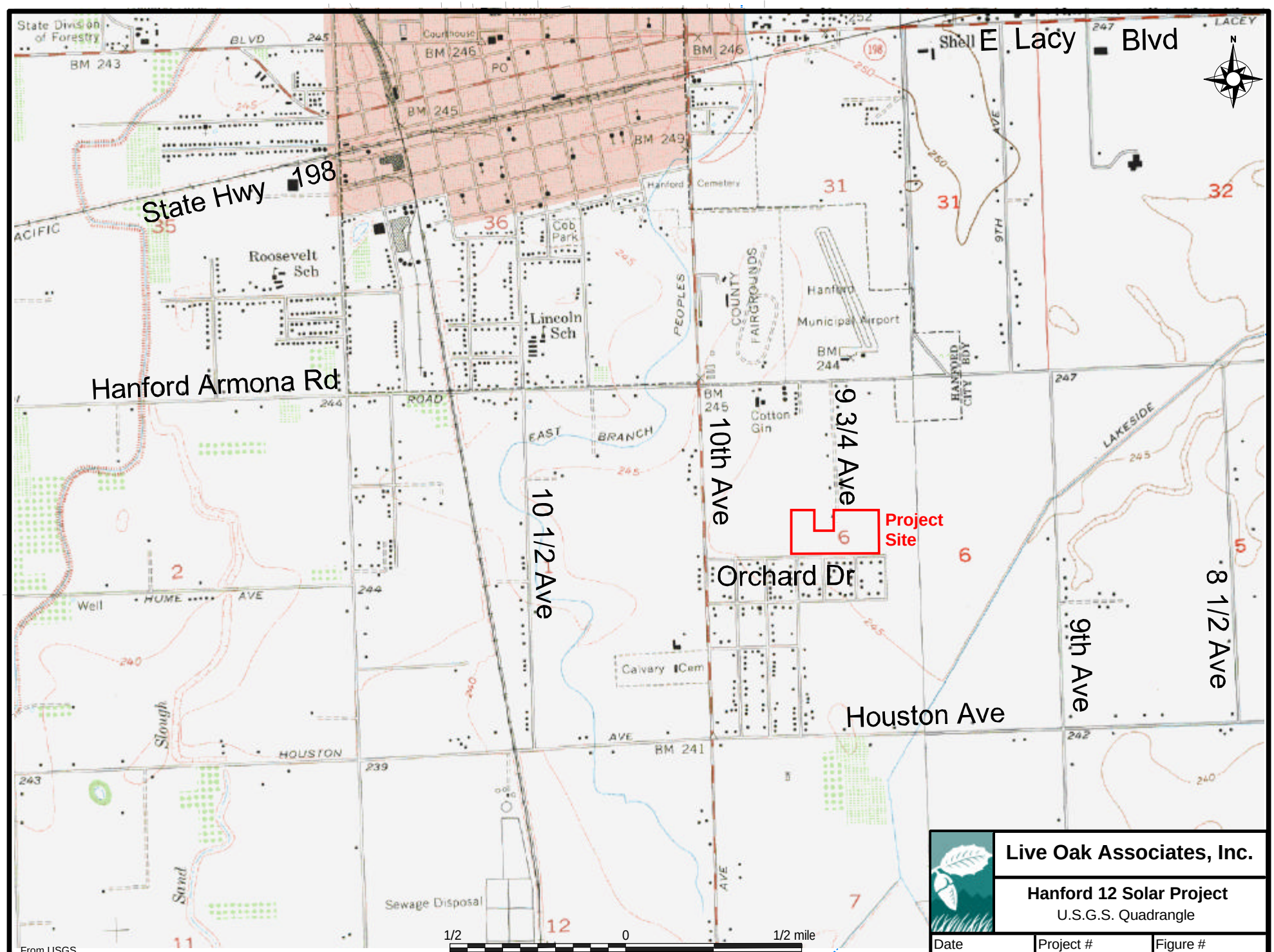




Live Oak Associates, Inc.

Hanford 12 Solar Project
Site / Vicinity Map

Date	Project #	Figure #
7/30/2013	1605-01	1



From USGS
Hanford 7.5' Quadrangle 1954

Live Oak Associates, Inc.

Hanford 12 Solar Project
U.S.G.S. Quadrangle

Date	Project #	Figure #
7/30/2013	1605-01	2

- Make reasonable inferences about the biological resources that could occur onsite based on habitat suitability and the proximity of the site to a species' known range.

- Summarize all state and federal natural resource protection laws that may be relevant to possible future site development.

- Identify and discuss project impacts to biological resources likely to occur on the site within the context of CEQA or any state or federal laws.

- Identify avoidance and mitigation measures that would reduce impacts to a less-than-significant level (as identified by CEQA) and are generally consistent with recommendations of the resource agencies for affected biological resources.

1.3 STUDY METHODOLOGY

The analysis of impacts, as discussed in Section 3.0 of this report, is based on the known and potential biotic resources of the project site discussed in Section 2.0. Sources of information used in the preparation of this analysis included: (1) the *California Natural Diversity Data Base* (CDFW 2013), (2) the *Online Inventory of Rare and Endangered Vascular Plants of California* (CNPS 2013), and (3) manuals, reports, and references related to plants and animals of the San Joaquin Valley region. A reconnaissance-level field survey of the project site was conducted on June 24, 2013 by Live Oak Associates, Inc. (LOA) ecologist Wendy Fisher. The survey consisted of a meandering walk through the site in which principal land uses of the site were identified and the constituent plants and animals were noted. Focused surveys for particular plant or wildlife species were not part of the field survey. Field surveys conducted for this study were sufficient to assess the significance of possible biological impacts associated with the development plans for the project site.

2.0 EXISTING CONDITIONS

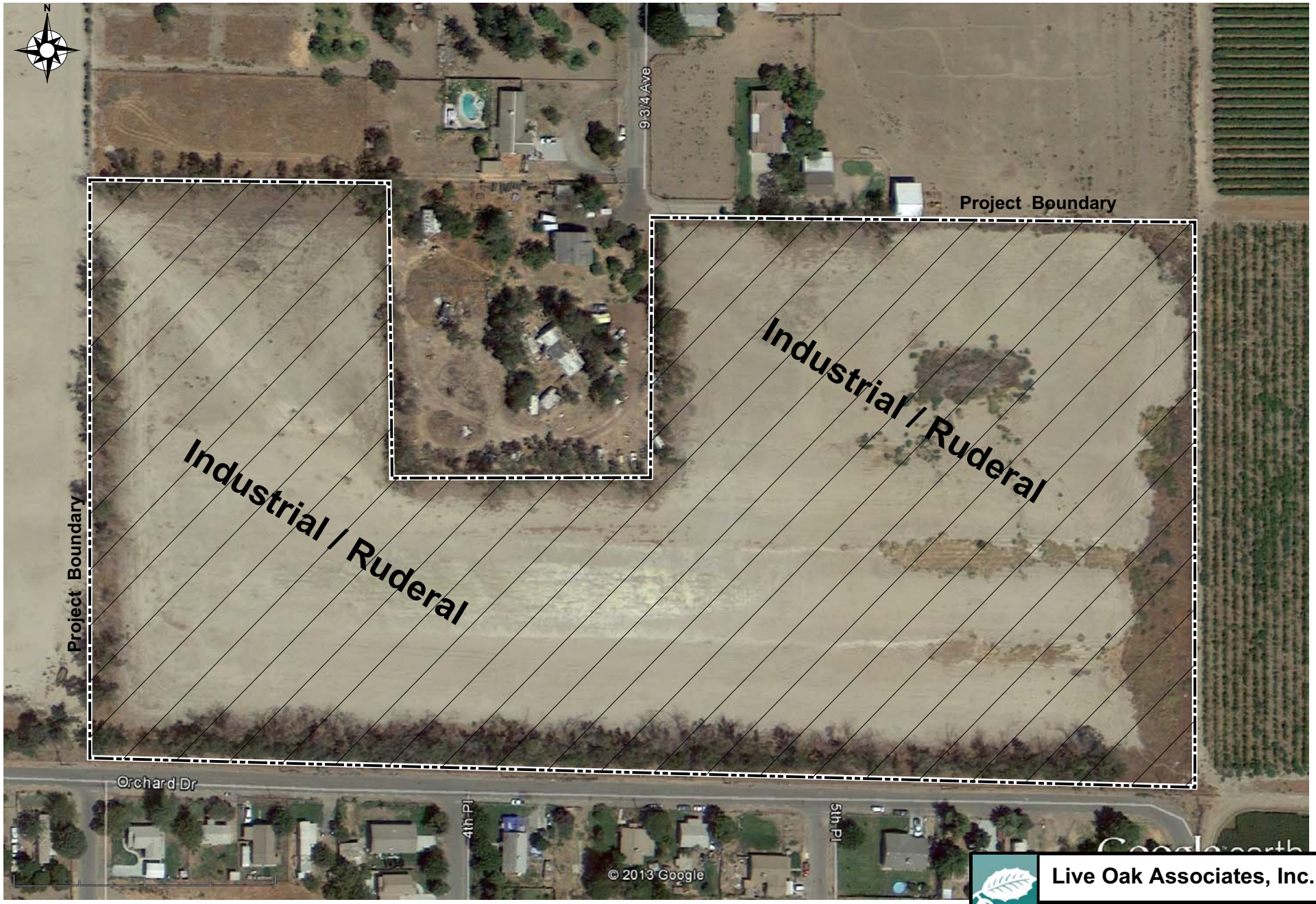
The project site is located in the middle of the San Joaquin Valley of California adjacent to the Hanford city limits in Kings County. At the time of the survey the project site consisted of a vacant industrial yard historically used to store cotton and sulfur (Figure 3). The site perimeter contains a security fence on all but the west side. Eucalyptus trees grow along most of the site perimeter. Vegetation is largely absent from the site and any native habitats once present on the site have been completely transformed to a ruderal state by commercial enterprise.

The topography of the project site is level at an elevation of approximately 248 feet National Geodetic Vertical Datum (NGVD). Natural drainage features such as creeks, ponds, vernal pools, etc. are not present on the project site.

Soils of the site have been significantly altered through grading, scraping, compaction, and the presence of residual sulfur across portions of the site. As such, any native soil characteristics potentially supporting sensitive biological resources have been significantly altered.

The project site is located in a region of California having a Mediterranean climate. Summers are dry and typically quite warm with daytime temperatures commonly exceeding 100^{o} Fahrenheit. Winters are rainy and cool with daytime temperatures rarely exceeding 65^{o} Fahrenheit. Annual precipitation in the general vicinity of the project site is highly variable from year to year with a mean annual rainfall of approximately 12 inches, most of which falls between the months of October and March. Virtually all precipitation falls in the form of rain. Stormwater infiltrates onsite soils and, when field capacity is reached, stormwater sheet flows off the site tending south.

Surrounding lands are highly disturbed, consisting of a similar commercial parcel to the west, rural residential to the north, vineyard to the east, and residential housing tracts to the south.



500' 0 500 Feet

approximate scale

Aerial Photo Courtesy of Google Earth

Live Oak Associates, Inc.

Hanford 12 Solar Project

Biotic Habitats

Date	Project #	Figure #
7/30/2013	1605-01	3

2.3 BIOTIC HABITATS/LAND USES

One habitat/land use type was observed on the project site during the June 2013 biological field survey, characterized as "industrial/ruderal." A list of the vascular plant species observed within the project site and the terrestrial vertebrates using, or potentially using, the site are provided in Appendices A and B, respectively. Photos of the project site are presented in Appendix C.

2.3.1 Industrial/Ruderal

The project site has been significantly disturbed by commercial enterprise which has included past grading, scraping, heavy equipment operation, and product storage/stockpiling. As a result, vegetation was absent from much of the site. Vegetation observed during the field survey consisted primarily of weedy grasses and forbs concentrated at the eastern edge of the site and eucalyptus trees along the margins of the site. Herbaceous species observed on the site included weedy species such as red brome (*Bromus madritensis*), Johnson grass (*Sorghum halepense*), Canada horseweed (*Erigeron canadensis*), dove weed (*Croton setigerus*), pigweed amaranth (*Amaranthus albus*), and Russian thistle (*Salsola tragus*), among others. Trees along portions of the site perimeter included red gum (*Eucalyptus camaldulensis*), blue gum (*Eucalyptus globulus*), and tree of heaven (*Ailanthus altissima*).

The number of native animal species expected to utilize the project site is very small due to the lack of vegetation on much of the site. Amphibians would be absent from the site due to the lack of water. Reptile use of the site would be limited to a few common species such as the western fence lizard (*Sceloporus occidentalis*), side-blotched lizard (*Uta stansburiana*), gopher snake (*Pituophis melanoleucus*), and common kingsnake (*Lampropeltis getulus*). The site provides very little foraging and cover habitat for avian species. However, year-round resident birds such as the killdeer (*Charadrius vociferus*), rock pigeon (*Columba livia*), European starling (*Sturnus vulgaris*), black phoebe (*Sayornis nigricans*), house sparrow (*Passer domesticus*), mourning dove (*Zenaida macroura*), American crow (*Corvus brachyrhynchos*), and house finch (*Carpodacus mexicanus*) could be expected to use the site from time to time. Two winter migrants, the white-crowned sparrow (*Zonotrichia leucorphrys*) and yellow-rumped warbler

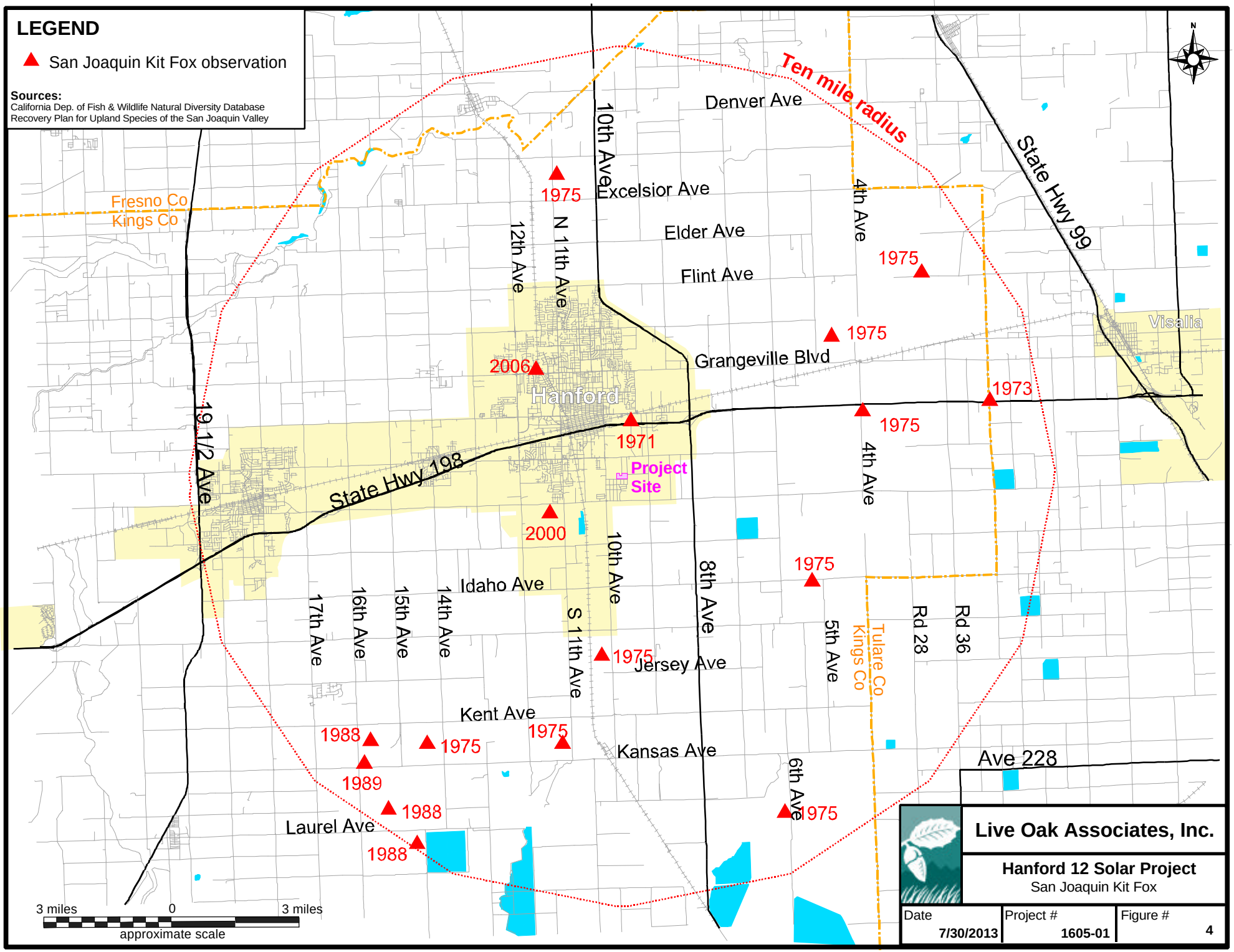
(*Dendroica coronata*) are expected to use the site. The western kingbird (*Tyrannus verticalis*), a common summer migrant to agricultural lands of the region, was observed on the site.

Mammalian use of the site is expected to be severely limited by existing fencing and the lack of vegetation over much of the site. Rodents such as house mice (*Mus musculus*) and black rat (*Rattus rattus*) may occur on the site. A few California ground squirrel (*Otospermophilus beecheyi*) burrows were found in small portions of the site. Various bat species may forage over the site.

2.4 SPECIAL STATUS PLANTS AND ANIMALS

Several species of plants and animals within the state of California have low populations and/or limited distributions. Such species may be considered "rare" and are vulnerable to extirpation as the state's human population grows and the habitats these species occupy are converted to agricultural and urban uses. As described more fully in Section 3.2, state and federal laws have provided the California Department of Fish and Wildlife (CDFW) and the U.S. Fish and Wildlife Service (USFWS) with a mechanism for conserving and protecting the diversity of plant and animal species native to the state. A sizable number of native plants and animals have been formally designated as "threatened" or "endangered" under state and federal endangered species legislation. Others have been designated as candidates for such listing. Still others have been designated as "species of special concern" by the CDFW. The California Native Plant Society (CNPS) has developed its own set of lists of native plants considered rare, threatened, or endangered (CNPS 2013). Collectively, these plants and animals are referred to as "special status species."

With the exception of the San Joaquin kit fox, recorded observations of special status species are absent within a four mile radius of the project site. Documented kit fox occurrences within 10 miles of the project site are illustrated in Figure 4. Special status species, and their potential to occur on the project site, are listed in Table 1. Sources of information for this table included *California's Wildlife, Volumes I, II, and III* (Zeiner et. al 1988-1990), *California Natural Diversity Data Base* (CDFW 2013), *Annual Report on the Status of California State Listed*


LEGEND
San Joaquin Kit Fox observation
Sources:
California Dep. of Fish & Wildlife Natural Diversity Database
Recovery Plan for Upland Species of the San Joaquin Valley
Ten mile radius
Fresno Co
Kings Co
Tulare Co
Kings Co
Denver Ave
Excelsior Ave
Elder Ave
Flint Ave
Grangeville Blvd
Idaho Ave
Jersey Ave
Kent Ave
Kansas Ave
Laurel Ave
Ave 228
10th Ave
12th Ave
N 11th Ave
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17th Ave
16th Ave
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Live Oak Associates, Inc.
Hanford 12 Solar Project
San Joaquin Kit Fox
Date
7/30/2013
Project #
1605-01
Figure #
4

Threatened and Endangered Animals and Plants (CDFW 2011), and *The California Native Plant Society's Inventory of Rare and Endangered Vascular Plants of California* (CNPS 2013). This information was used to evaluate the potential for special status plant and animal species to occur onsite. It is important to note that the California Natural Diversity Data Base (CNDDB) is a volunteer database; therefore, it may not contain all known literature records.

A search of published accounts for all of the relevant special status plant and animal species was conducted for the Hanford USGS 7.5-minute quadrangle in which the project site occurs, and for the eight surrounding quadrangles (Riverdale, Layton, Burris Park, Remnoy, Waukena, Guernsey, Stratford, and Lemoore) using the CNDDB Rarefind 2013.

TABLE 1. LIST OF SPECIAL STATUS SPECIES THAT COULD OCCUR IN THE PROJECT VICINITY

PLANTS (adapted from CDFW 2013 and CNPS 2013)

Special status plants listed by CNPS

Species	Status	Habitat	*Occurrence on the Project Site
Earlimart orache (*Atriplex cordulata var. erecticaulis*)	CNPS 1B	Occurs in valley and foothill grasslands between 131 and 328 feet. Blooms Aug.-Sep.	**Absent.** Historic commercial use of the site has rendered it unsuitable for this species.
Brittlescale (*Atriplex depressa*)	CNPS 1B.2	Occurs in relatively barren areas with alkaline clay soils in chenopod scrub, playas, valley grasslands, and vernal pools of the Central Valley.	**Absent.** Historic commercial use of the site has rendered it unsuitable for this species.
Subtle Orache (*Atriplex subtilis*)	CNPS 1B	Occurs in valley and foothill grasslands of the San Joaquin Valley. Blooms August-October.	**Absent.** Historic commercial use of the site has rendered it unsuitable for this species.
Recurved Larkspur (*Delphinium recurvatum*)	CNPS 1B	Chenopod scrub, cismontane woodlands, and alkaline soils of valley and foothill grasslands. Blooms March-May.	**Absent.** Historic commercial use of the site has rendered it unsuitable for this species.

TABLE 1. LIST OF SPECIAL STATUS SPECIES THAT COULD OCCUR IN THE PROJECT VICINITY

ANIMALS (adapted from CDFW 2013 and USFWS 2013)

Species Listed as Threatened or Endangered under the State and/or Federal Endangered Species Act

Species	Status	Habitat	*Occurrence on the Project Site
Vernal Pool Fairy Shrimp (*Branchinecta lynchi*)	FT	Vernal pools of California's Central Valley.	**Absent.** Vernal pools required by this species are absent from the project site.
Vernal Pool Tadpole Shrimp (*Lepidurus packardi*)	FE	Primarily found in vernal pools of California's Central Valley.	**Absent**. Vernal pool habitat required by this species is absent from the project site.
Valley Elderberry Longhorn Beetle (*Desmocerus californicus dimorphus*)	FT	Mature elderberry shrubs of California's Central Valley and Sierra Foothills.	**Absent.** Elderberry shrubs, the obligate habitat required by this species, are absent from the project site and surrounding lands.
California Tiger Salamander (*Ambystoma californiense*)	FT , CSC	Found primarily in annual grasslands. Breeds in vernal/ seasonal pools or perennial pools which lack fish or bullfrogs. Requires rodent burrows for refuge.	**Absent.** Historic commercial use of the site has rendered it unsuitable for this species. Breeding pools required by this species are absent from the project site and surrounding land. Furthermore, the project site is outside of this species' known range (CDFW 2013).
Blunt-Nosed Leopard Lizard (*Gambelia silus*)	FE, CE, CP	Frequents grasslands, alkali meadows and chenopod scrub of the San Joaquin Valley.	**Unlikely.** Historic commercial use of the site and surrounding lands has created conditions unfavorable for this species.
Swainson's Hawk (*Buteo swainsoni*)	CT	Breeds in stands with few trees in juniper-sage flats, riparian areas, and in oak savannah. Requires adjacent suitable foraging areas such as grasslands or alfalfa fields supporting rodent populations.	**Possible.** Foraging habitat is marginal due to the degradation of onsite habitats through years of commercial activity that has eliminated vegetation, and therefore, rodent activity, across much of the site. Possible nesting habitat is present in the form of eucalyptus trees bordering the site. A Swainson's hawk was observed passing over the site during the field survey.
Western Snowy Plover (*Charadrius alexandrines nivosus*)	FT, CSC	Uses man-made agricultural wastewater ponds and reservoir margins. Breeds on barren to sparsely vegetated ground at alkaline or saline lakes, reservoirs, ponds, and riverine sand bar.	**Absent.** Breeding and foraging habitat is absent from the project site.
Tipton Kangaroo Rat (*Dipodomys nitratoides nitratoides*)	FE, CE	Chenopod scrub and alkali grasslands of the Tulare Basin from Fresno County in the north to Kern County in the south.	**Absent.** Historic commercial use of the site has rendered it unsuitable for this species.
San Joaquin Kit Fox (*Vulpes macrotis mutica*)	FE, CT	Frequents desert alkali scrub and annual grasslands and may forage in adjacent agricultural habitats. Utilizes enlarged (4 to 10 inches in diameter) ground squirrel burrows as denning habitat.	**Unlikely.** Historic commercial use of the site, the existing chainlink perimeter fence, and the presence of domestic dogs on neighboring lands has created unfavorable conditions for this species. The nearest documented occurrence of a kit fox is 1.25 miles north of the project in the City of Hanford from 1971 (CDFW 2013).

TABLE 1. LIST OF SPECIAL STATUS SPECIES THAT COULD OCCUR IN THE PROJECT VICINITY

ANIMALS – cont'd.

State Species of Special Concern

Species	Status	Habitat	*Occurrence on the Project Site
Western Spadefoot (*Spea hammondii*)	CSC	Primarily occurs in grasslands, but also occurs in valley and foothill hardwood woodlands. Requires vernal pools or other temporary wetlands for breeding.	**Absent.** Vernal pools required by this species are absent from the project site and surrounding lands.
Western Pond Turtle (*Emys marmorata*)	CSC	Ponds, marshes, rivers, streams, and irrigation ditches with aquatic vegetation. Requires basking sites of sandy banks or grassy open fields for egg laying.	**Absent.** Aquatic habitat is absent from the project site and the immediate vicinity.
Northern Harrier (*Circus cyaneus*)	CSC (nesting)	Frequents meadows, grasslands, open rangelands, freshwater emergent wetlands; uncommon in wooded habitats.	**Unlikely.** Foraging habitat is marginal due to the degradation of onsite habitats through years of commercial activity. Nesting habitat is absent from the project site. At most this species may occasionally pass over the site while foraging or during migration.
White-tailed Kite (*Elanus leucurus*)	FP	Open grasslands and agricultural areas throughout central California.	**Possible.** Foraging habitat is marginal due to the degradation of onsite habitats through years of commercial activity. Possible nesting habitat is present in the form of eucalyptus trees bordering the site.
Burrowing Owl (*Athene cunicularia*)	CSC	Frequents open, dry annual or perennial grasslands, deserts, and scrublands characterized by low growing vegetation. Dependent upon burrowing mammals, most notably the California ground squirrel, for nest burrows.	**Unlikely.** Foraging habitat is marginal due to the degradation of onsite habitats through years of commercial activity that has eliminated vegetation, and therefore, rodent activity, across much of the site. Possible nesting habitat is present in the form of a few ground squirrel burrows; however, no burrowing owl sign was observed at these burrows during the field visit. The nearest documented occurrence of this species is approximately 10 miles to the northeast (CDFW 2013).
Loggerhead Shrike (*Lanius ludovicianus*)	CSC	Frequents open habitats with sparse shrubs and trees, other suitable perches, bare ground, and low herbaceous cover. Can often be found in cropland.	**Possible.** Foraging habitat is marginal due to the degradation of onsite habitats through years of commercial activity. Possible nesting habitat is present in the form of eucalyptus trees bordering the site.

TABLE 1. LIST OF SPECIAL STATUS SPECIES THAT COULD OCCUR IN THE PROJECT VICINITY

ANIMALS – cont'd.

State Species of Special Concern

Species	Status	Habitat	*Occurrence on the Project Site
Tricolored Blackbird (*Agelaius tricolor*)	CSC	Breeds near fresh water, primarily emergent wetlands, with tall thickets. Forages in grassland and cropland habitats.	**Possible.** The site provides possible foraging habitat; breeding habitat is absent.
Pallid Bat (*Antrozous pallidus*)	CSC	Roosts in rocky outcrops, cliffs, and crevices with access to open habitats for foraging. May also roost in caves, mines, hollow trees and buildings.	**Possible.** This species may forage over the site; roosting habitat is absent.
Townsend's Western Big-Eared Bat (*Corynorhinus townsendii*)	CSC	Primarily a cave-dwelling bat that may also roost in buildings. Occurs in a variety of habitats.	**Possible.** This species may forage over the site; roosting habitat is absent.
American Badger (*Taxidea taxus*)	CSC	Found in drier open stages of most shrub, forest and herbaceous habitats with friable soils.	**Absent.** Historic commercial use of the site has rendered it unsuitable for this species.

***Explanation of Occurrence Designations and Status Codes**

Present: Species observed on the sites at time of field surveys or during recent past.
Likely: Species not observed on the site, but it may reasonably be expected to occur there on a regular basis.
Possible: Species not observed on the sites, but it could occur there from time to time.
Unlikely: Species not observed on the sites, and would not be expected to occur there except, perhaps, as a transient.
Absent: Species not observed on the sites, and precluded from occurring there because habitat requirements not met.

STATUS CODES

FE	Federally Endangered
FT	Federally Threatened
FPE	Federally Endangered (Proposed)
FC	Federal Candidate

CE	California Endangered
CT	California Threatened
CR	California Rare
CP	California Protected
CSC	California Species of Special Concern

CNPS	California Native Plant Society Listing
1A	Plants Presumed Extinct in California
1B	Plants Rare, Threatened, or Endangered in California and elsewhere
2	Plants Rare, Threatened, or Endangered in California, but more common elsewhere
3	Plants about which we need more information – a review list
4	Plants of limited distribution – a watch list

2.5 ENDANGERED, THREATENED, OR SPECIAL STATUS PLANT AND ANIMAL SPECIES MERITING FURTHER DISCUSSION

2.5.1 Swainson's Hawk (*Buteo swainsoni*). Federal Listing Status: None; State Listing Status: Threatened.

The Swainson's hawk is designated as a California Threatened species. The loss of agricultural lands (i.e., foraging habitat) to urban development and additional threats such as riverbank protection projects have contributed to its decline. However, in recent years the Central Valley Swainson's hawk population has been increasing.

Swainson's hawks are large, broad-winged, broad-tailed hawks and have a high degree of mate and territorial fidelity. They arrive at their nesting sites in March or April. In the Central Valley, Swainson's hawks typically nest in large trees in or peripherally to riparian systems adjacent to suitable foraging habitats. The young hatch sometime between March and July and do not leave the nest until some 4 to 6 weeks later. Other suitable nest sites include lone trees, groves of trees such as oaks, other trees in agricultural fields, and mature roadside trees. Central Valley Swainson's hawks forage in large, open fields with abundant prey, including grasslands or lightly grazed pastures, alfalfa and other hay crops, and certain grain and row croplands. Their primary food source during the breeding season is voles; however they also prey on other small mammals, birds, and insects during this time.

Potential to occur onsite. A Swainson's hawk was observed passing over the site during the June field survey. There is some possibility that Swainson's hawks may utilize the onsite eucalyptus trees for nesting. Three stick nests were observed in these trees; one was a very old stick nest in a dead eucalyptus tree; the other two were clumps of sticks in live eucalyptus trees at the southern edge of the site. These nests were not occupied by any avian species at the time of the field survey and no indications were found of recent raptor use such as prey remains or whitewash on the ground beneath. While the site contains open habitat generally suitable for Swainson's hawk foraging, the compacted and sulfur contaminated soils have resulted in an absence of vegetation across a vast majority of the site. The lack of vegetation has, therefore, restricted the suitability of the site for most small mammals, birds, and invertebrates. The field survey of the site found a limited amount of ground squirrel activity on the site restricted to only

a few small areas and occasionally along the fence line beneath the eucalyptus trees. As a result, Swainson's hawks would find little foraging opportunity on the site. The nearest documented Swainson's hawk nest is located approximately 4.5 miles southeast of the site (CDFW 2013).

2.6 JURISDICTIONAL WATERS

Jurisdictional waters include rivers, creeks, and drainages that have a defined bed and bank and which, at the very least, carry ephemeral flows. Jurisdictional waters also include lakes, ponds, reservoirs, and wetlands. Such waters may be subject to the regulatory authority of the U.S. Army Corps of Engineers (USACE), the CDFW, and the California Regional Water Quality Control Board (RWQCB). See Section 3.2.4 of this report for additional information.

No aquatic or wetland features occur on the project sites; therefore, jurisdictional waters are considered absent from the project sites.

3.0 IMPACTS AND MITIGATIONS

3.1 SIGNIFICANCE CRITERIA

Approval of general plans, area plans, and specific projects is subject to the provisions of CEQA. The purpose of CEQA is to assess the impacts of proposed projects on the environment before they are carried out. CEQA is concerned with the significance of a proposed project's impacts. For example, a proposed development project may require the removal of some or all of a site's existing vegetation. Animals associated with this vegetation could be destroyed or displaced. Animals adapted to humans, roads, buildings, pets, etc., may replace those species formerly occurring on the site. Plants and animals that are state and/or federally listed as threatened or endangered may be destroyed or displaced. Sensitive habitats such as wetlands and riparian woodlands may be altered or destroyed.

Whenever possible, public agencies are required to avoid or minimize environmental impacts by implementing practical alternatives or mitigation measures. According to Section 15382 of the CEQA Guidelines, a significant effect on the environment means a "substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic interest."

Specific project impacts to biological resources may be considered "significant" if they would:

- 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.

- 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.

- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.

- 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.

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

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

Furthermore, CEQA Guidelines Section 15065(a) states that a project may trigger the requirement to make "mandatory findings of significance" if the project has 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, reduce the number or restrict the range of an endangered, rare or threatened species, or eliminate important examples of the major periods of California history or prehistory."

3.2 RELEVANT GOALS, POLICIES, AND LAWS

3.2.1 Threatened and Endangered Species

State and federal "endangered species" legislation has provided the CDFW and the USFWS with a mechanism for conserving and protecting plant and animal species of limited distribution and/or low or declining populations. Species listed as threatened or endangered under provisions of the state and federal endangered species acts, candidate species for such listing, state species of special concern, and some plants listed as endangered by the California Native Plant Society are collectively referred to as "species of special status." Permits may be required from both the CDFW and USFWS if activities associated with a proposed project will result in the "take" of a listed species. "Take" is defined by the state of California as "to hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture or kill" (California Fish and Game Code, Section 86). "Take" is more broadly defined by the federal Endangered Species Act to include "harm" (16 USC, Section 1532(19), 50 CFR, Section 17.3). Furthermore, the CDFW and the USFWS are responding agencies under CEQA. Both agencies review CEQA documents in order to determine the adequacy of their treatment of endangered species issues and to make project-specific recommendations for their conservation.

3.2.2 Migratory Birds

State and federal laws also protect most birds. The Federal Migratory Bird Treaty Act (16 U.S.C., scc. 703, Supp. I, 1989) prohibits killing, possessing, or trading in migratory birds, except in accordance with regulations prescribed by the Secretary of the Interior. This act encompasses whole birds, parts of birds, and bird nests and eggs.

3.2.3 Birds of Prey

Birds of prey are also protected in California under provisions of the State Fish and Game Code, Section 3503.5, which states that it is "unlawful to take, possess, or destroy any birds in the order *Falconiformes* or *Strigiformes* (birds of prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto." Construction disturbance during the breeding season could result in the incidental loss of fertile eggs or nestlings, or otherwise lead to nest abandonment. Disturbance that causes nest abandonment and/or loss of reproductive effort is considered "taking" by the CDFW.

3.2.4 Wetlands and Other Jurisdictional Waters

Natural drainage channels and adjacent wetlands may be considered "Waters of the United States" (hereafter referred to as "jurisdictional waters") subject to the jurisdiction of the USACE. The extent of jurisdiction has been defined in the Code of Federal Regulations but has also been subject to interpretation of the federal courts. Jurisdictional waters generally include:

- All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide.
- All interstate waters including interstate wetlands.
- All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce.
- All impoundments of waters otherwise defined as waters of the United States under the definition.
- Tributaries of waters identified in the bulleted items above.

As determined by the United States Supreme Court in its 2001 *Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers* (SWANCC) decision, channels and wetlands isolated from other jurisdictional waters cannot be considered jurisdictional on the basis of their use, hypothetical or observed, by migratory birds. Similarly, in its 2006 consolidated *Carabell/Rapanos* decision, the U.S. Supreme Court ruled that a significant nexus between a wetland and other navigable waters must exist for the wetland itself to be considered a navigable and therefore jurisdictional water.

The USACE regulates the filling or grading of jurisdictional waters under the authority of Section 404 of the Clean Water Act. The extent of jurisdiction within drainage channels is defined by "ordinary high water marks" on opposing channel banks. All activities that involve the discharge of fill into jurisdictional waters are subject to the permit requirements of the USACE. Such permits are typically issued on the condition that the applicant agrees to provide mitigation that result in no net loss of wetland functions or values. No permit can be issued until the RWQCB issues a certification (or waiver of such certification) that the proposed activity will meet state water quality standards.

The filling of isolated wetlands, over which the USACE has disclaimed jurisdiction, is regulated by the RWQCB. It is unlawful to fill isolated wetlands without filing a Notice of Intent with the RWQCB. The RWQCB is also responsible for enforcing National Pollution Discharge Elimination System (NPDES) permits, including the General Construction Activity Storm Water Permit. All projects requiring federal money must also comply with Executive Order 11990 (Protection of Wetlands).

CDFW has jurisdiction over the bed and bank of natural drainages and lakes according to provisions of Section 1601 and 1602 of the California Fish and Game Code (2003). Activities that would disturb these waters are regulated by the CDFW via a Streambed Alteration Agreement. Such an agreement typically stipulates that certain measures will be implemented which protect the habitat values of the drainage in question.

3.3 POTENTIALLY SIGNIFICANT PROJECT IMPACTS/MITIGATION

The project considered in this evaluation of impacts to biological resources is the development of a PV electric generating site on previously disturbed industrial land Project facilities include PV solar panels, inverters, transformers, and perimeter fencing. The following subsections assume that all lands of the project site will be impacted from proposed project development. Tree removal is slated to occur along the southern and western boundary of the site to eliminate shading of PV panels. Tree removal and/or trimming may be required elsewhere. Potentially significant project impacts to biological resources and mitigations are discussed below.

3.3.1 Disturbance to Special Status Avian Species and Other Migratory Birds That May Nest on or Immediately Adjacent to the Site

Potential Impacts. Perimeter trees on the site provide nesting habitat for the Swainson's hawk, white-tailed kite, loggerhead shrike and various other migratory birds. Although ruderal habitats of the site are unlikely to be used by most ground-nesting birds, disturbance-tolerant species such as the killdeer would have the potential to nest on the site. The Swainson's hawk is protected by the California Endangered Species Act and nearly all native bird species are protected by the federal Migratory Bird Treaty Act. If birds were to nest on or adjacent to the project site prior to construction, tree removal and/or trimming or other project-related activities could result in the abandonment of active nests or direct mortality to birds. Such an activity would constitute a violation of state and federal laws (see Sections 3.2.2 and 3.2.3) and would be considered a significant impact under CEQA.

Impacts to Swainson's hawks, white-tailed kites, loggerhead shrikes due to the loss of foraging habitat are considered less than significant. As discussed in Section 2.5.1, the site offers little foraging opportunity for these species due to the disturbed nature of the site that has resulted in the absence of vegetation across most of the site and, as a result, very low numbers of rodents, birds, and invertebrates.

Mitigation. In order to minimize construction disturbance to special status/migratory bird nests, the applicant will implement one or more of the following measure(s) as necessary, prior to project construction:

***Mitigation 3.3.1a* (*Avoidance*).** In order to avoid impacts to all nesting birds from tree removal, grading, and construction, these activities will occur between September 1 and January 31. This will ensure that construction does not coincide with the nesting season (February 1 to August 31).

***Mitigation 3.3.1b* (*Pre-construction surveys*).** If tree removal/trimming, brushing, grading, or construction must occur between February 1 and August 31, a qualified biologist will conduct pre-construction surveys for active migratory bird nests within 15 days of the onset of these activities.

***Mitigation 3.3.1c* (*Establish buffers*).** Should any active nests be discovered in or near proposed construction zones, the biologist will identify a suitable construction-free buffer around the nest. This buffer will be identified on the ground with flagging or fencing, and will be maintained until the biologist has determined that the young have fledged.

Implementation of the above measures will ensure future development of the project site will have no impact on Swainson's hawk, white-tailed kite, loggerhead shrike and other migratory birds and that the project will be in compliance with state and federal laws protecting nesting birds.

3.4 LESS THAN SIGNIFICANT PROJECT IMPACTS

3.4.1 Loss of Habitat for Special Status Plants

Potential Impacts. Four special status vascular plant species are known to occur in the vicinity of the project site (see Table 1). These plant species are absent from the site due to past land use practices. Therefore, the proposed project would have no impact on regional populations of these special status plant species.

Mitigation. Mitigation measures are not warranted.

3.4.2 Loss of Habitat or Direct Impact to Special Status Animals Absent or Unlikely to Occur on the Site

Potential Impacts. Of the 19 special status animal species potentially occurring in the region, 13 species would be absent or unlikely to occur on the site due to unsuitable habitat conditions created by past land use practices. These include the vernal pool fairy shrimp, vernal pool tadpole shrimp, valley elderberry longhorn beetle, California tiger salamander, blunt-nosed leopard lizard, western snowy plover, Tipton kangaroo rat, San Joaquin kit fox, western

spadefoot, western pond turtle, burrowing owl, northern harrier, and American badger. Since there is little to no likelihood that these species would use the site, disturbance from future development of the project site would have no effect on these species.

Mitigation. No loss of habitat or direct impact to these special status animals would occur; therefore, no mitigations are warranted.

3.4.3 Loss of Habitat for Special Status Animals that may Occur on the Site as Occasional or Regular Foragers but Breed Elsewhere

Three species may occasionally utilize the site for foraging only. These species include the tricolored blackbird, pallid bat, and Townsend's western big-eared bat. The project site provides limited foraging opportunity due to the lack of vegetation and invertebrates and does not provide regionally important foraging habitat for these species. In fact, much more suitable habitats are abundant throughout the region. Because the site is to retain earthen ground cover following project implementation, the limited invertebrate populations present under existing conditions will likely still be present; therefore, the project would not significantly reduce the amount or quality of foraging habitat currently available on the site. Any habitat with the potential to be used by these three species for foraging, both on the project site and surrounding lands, will continue to be available following development of the project. Furthermore, the project is not expected to result in direct harm to any individuals of these species. Therefore, project development will result in a less than significant impact on these species.

Mitigation. The loss of foraging habitat for special status animals is considered a less than significant impact and the project will not result in direct harm to individuals of these species. Therefore, no mitigations are warranted.

3.4.4 Project Impacts to Fish or Wildlife Movement Corridors

Potential Impacts. The project site does not serve as a fish or wildlife movement corridor. Existing fencing likely acts as a barrier to wildlife movement through the site.

Mitigation. Because this project will result in no effect on regional fish or wildlife movements, mitigation measures are not warranted.

3.4.5 Disturbance to Riparian Habitat or other Sensitive Habitats

Potential Impacts. No riparian or sensitive habitats occur on or adjacent to the project site.

Mitigation. Mitigations are not warranted.

3.4.6 Disturbance to Waters of the United States

Potential Impacts. Drainages, aquatic, and wetland areas are absent from the project site.

Mitigation. Impacts to Waters of the U.S. are absent from the project site; no mitigation is required.

3.4.7 Local Policies or Habitat Conservation Plans

Potential Impacts. It appears that all future development within the project area would be in compliance with the provisions of Kings County General Plan polices related to biological resources. No known Habitat Conservation Plans are in effect for the area.

Mitigation. No mitigations are warranted.

4.0 LITERATURE REFERENCED OR CITED

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APPENDIX A: VASCULAR PLANTS OF THE PROJECT SITE

APPENDIX A: VASCULAR PLANTS OF THE PROJECT SITE

The plants species listed below were observed on the proposed Hanford 12 Solar Facility site during surveys conducted by Live Oak Associates, Inc. on June 24, 2013. The U.S. Fish and Wildlife Service wetland indicator status of each plant has been shown following its common name.

OBL - Obligate
FACW - Facultative Wetland
FAC - Facultative
FACU - Facultative Upland
UPL - Upland
+/- - Higher/lower end of category
NR - No review
NA - No agreement
NI - No investigation

AMARANTHACEAE – Pigweed Family		
Amaranthus albus	Pigweed Amaranth	FACU
ASTERACEAE – Sunflower Family		
Erigeron canadensis	Canada Horseweed	FACU
Helianthus annuus	Annual Sunflower	FACU
BORAGINACEAE - Borage Family		
Amsinckia sp.	Fiddleneck	UPL
BRASICACEAE – Mustard Family		
Heliotropium curassavicum	Salt Heliotrope	FACU
CHENOPODIACEAE – Goosefoot Family		
Atriplex serenana var. serenana	Bractscale	FAC
Salsola tragus	Russian Thistle	FACU
EUPHORBIACEAE – Spurge Family		
Croton setigerus	Dove Weed	UPL
MYRTACEAE – Myrtle Family		
Eucalyptus camaldulensis	Red Gum Eucalyptus	UPL
Eucalyptus globulus	Blue Gum Eucalyptus	UPL
POACEAE – Grass Family		
Bromus hordeaceus	Soft Chess	FACU
Bromus madritensis rubens	Red Brome	UPL
Sorghum halepense	Johnson Grass	FACU
SIMAROUBACEAE – Simaroubaceae Family		
Ailanthus altisima	Tree of Heaven	UPL

APPENDIX B: TERRESTRIAL VERTEBRATE SPECIES THAT POTENTIALLY OCCUR ON THE PROJECT SITE

APPENDIX B: TERRESTRIAL VERTEBRATE SPECIES THAT POTENTIALLY OCCUR ON THE PROJECT SITE

The species listed below are those that may reasonably be expected to use the habitats of the project site routinely or from time to time. The list was not intended to include birds that are vagrants or occasional transients. Terrestrial vertebrate species observed in or adjacent to the proposed Hanford 12 Solar Facility site during surveys conducted by Live Oak Associates, Inc. on June 24, 2013 have been noted with an asterisk.

CLASS: REPTILIA (Reptiles)
ORDER: SQUAMATA (Lizards and Snakes)
SUBORDER: SAURIA (Lizards)
FAMILY: PHRYNOSOMATIDAE
*Western Fence Lizard (*Sceloporus occidentalis*)
*Side-blotched Lizard (*Uta stansburiana*)
FAMILY: TEIIDAE (Whiptails and relatives)
Western Whiptail (*Cnemidophorus tigris*)
SUBORDER: SERPENTES (Snakes)
FAMILY: COLUBRIDAE (Colubrids)
Gopher Snake (*Pituophis melanoleucus*)
Common Kingsnake (*Lampropeltis getulus*)
FAMILY: VIPERIDAE (Vipers)
Western Rattlesnake (*Crotalus viridis*)

CLASS: AVES (Birds)
ORDER: CICONIIFORMES (Herons, Storks, Ibises and Relatives)
FAMILY: CATHARTIDAE (American Vultures)
*Turkey Vulture (*Cathartes aura*)
ORDER: FALCONIFORMES (Vultures, Hawks, and Falcons)
FAMILY: ACCIPITRIDAE (Hawks, Old World Vultures, and Harriers)
White-tailed Kite (*Elanus leucurus*)
Northern Harrier (*Circus cyaneus*)
*Swainson's Hawk (*Buteo swainsoni*)
Red-tailed Hawk (*Buteo jamaicensis*)
FAMILY: FALCONIDAE (Caracaras and Falcons)
American Kestrel (*Falco sparverius*)
Merlin (*Falco columbarius*)
ORDER: CHARADRIIFORMES (Shorebirds, Gulls, and relatives)
FAMILY: CHARADRIIDAE (Plovers and relatives)
Killdeer (*Charadrius vociferus*)
ORDER: COLUMBIFORMES (Pigeons and Doves)
FAMILY: COLUMBIDAE (Pigeons and Doves)
Rock Pigeon (*Columba livia*)
Eurasian Collared Dove (*Streptopelia decaocto*)
Mourning Dove (*Zenaida macroura*)
ORDER: STRIGIFORMES (Owls)

FAMILY: TYTONIDAE (Barn Owls)
Common Barn Owl (*Tyto alba*)
FAMILY: STRIGIDAE (Typical Owls)
Great Horned Owl (*Bubo virginianus*)
ORDER: APODIFORMES (Swifts and Hummingbirds)
FAMILY: TROCHILIDAE (Hummingbirds)
Anna's Hummingbird (*Calypte anna*)
Rufous Hummingbird (*Selasphorus rufus*)
ORDER: PICIFORMES (Woodpeckers and relatives)
FAMILY: PICIDAE (Woodpecker and Wrynecks)
Northern Flicker (*Colaptes chrysoides*)
Downy Woodpecker (*Picoides pubescens*)
Nuttall's Woodpecker (*Picoides nuttallii*)
ORDER: PASSERIFORMES (Perching Birds)
FAMILY: TYRANNIDAE (Tyrant Flycatchers)
Black Phoebe (*Sayornis nigricans*)
Say's Phoebe (*Sayornis saya*)
*Western Kingbird (*Tyrannus verticalis*)
FAMILY: LANIIDAE (Shrikes)
Loggerhead Shrike (*Lanius ludovicianus*)
FAMILY: CORVIDAE (Jays, Magpies, and Crows)
Western Scrub Jay (*Aphelocoma coerulescens*)
American Crow (*Corvus brachyrhynchos*)
Common Raven (*Corvus corax*)
FAMILY: ALAUDIDAE (Larks)
Horned Lark (*Eremophila alpestris*)
FAMILY: HIRUNDINIDAE (Swallows)
Cliff Swallow (*Hirundo pyrrhonota*)
Barn Swallow (*Hirundo rustica*)
FAMILY: AEGITHALIDAE (Bushtit)
Bushtit (*Psaltriparus minimus*)
FAMILY: TROGLODYTIDAE (Wrens)
House Wren (*Troglodytes aedon*)
FAMILY: REGULIDAE (Kinglets)
Ruby-Crowned Kinglet (*Regulus calendula*)
FAMILY: TURDIDAE
American Robin (*Turdus migratorius*)
FAMILY: MIMIDAE (Mockingbirds and Thrashers)
Northern Mockingbird (*Mimus polyglottos*)
FAMILY: STURNIDAE (Starlings)
*European Starling (*Sturnus vulgaris*)
FAMILY: MOTACILLIDAE (Wagtails and Pipits)
American Pipit (*Anthus rubescens*)
FAMILY: BOMBYCILLIDAE (Waxwings)
Cedar Waxwing (*Bombycilla cedrorum*)
FAMILY: PARULIDAE (Wood Warblers and Relatives)

Yellow-rumped Warbler (*Dendroica coronata*)

FAMILY: EMBERIZIDAE (Sparrows and Relatives)

Lark Sparrow (*Chondestes grammacus*)

Savannah Sparrow (*Passerculus sandwichensis*)

*White-crowned Sparrow (*Zonotrichia leucophrys*)

FAMILY: ICTERIDAE (Blackbirds, Orioles and Allies)

Red-winged Blackbird (*Agelaius phoeniceus*)

Tricolored Black Bird (*Agelaius tricolor*)

*Western Meadowlark (*Sturnella neglecta*)

Brewer's Blackbird (*Euphagus cyanocephalus*)

Brown-headed Cowbird (*Molothrus ater*)

FAMILY: PASSERIDAE (Old World Sparrows)

House Finch (*Carpodacus mexicanus*)

House Sparrow (*Passer domesticus*)

CLASS: MAMMALIA (Mammals)

ORDER: DIDELPHIMORPHIA (Marsupials)

FAMILY: DIDELPHIDAE (Opossums)

Virginia Opossum (*Didelphis virginiana*)

ORDER: CHIROPTERA (Bats)

FAMILY: PHYLLOSTOMIDAE (Leaf-nosed Bats)

Southern Long-nosed Bat (*Leptonycteris curasoae*)

FAMILY: VESPERTILIONIDAE (Evening Bats)

Yuma Myotis (*Myotis yumanensis*)

California Myotis (*Myotis californicus*)

Townsend's Western Big-eared Bat (*Corynorhinus townsendii townsendii*)

Western Pipistrelle (*Pipistrellus hesperus*)

Big Brown Bat (*Eptesicus fuscus*)

Hoary Bat (*Lasiurus cinereus*)

Pallid Bat (*Antrozous pallidus*)

ORDER: LAGOMORPHA (Rabbits, Hares, and Pikas)

FAMILY: LEPORIDAE (Rabbits and Hares)

Audubon cottontail rabbit (*Sylvilagus audubonii*)

Black-tailed (Hare) Jackrabbit (*Lepus californicus*)

ORDER: RODENTIA (Rodents)

FAMILY: SCIURIDAE (Squirrels, Chipmunks, and Marmots)

*California Ground Squirrel (*Otospermophilus beecheyi*)

FAMILY: GEOMYIDAE (Pocket Gophers)

Botta's Pocket Gopher (*Thomomys bottae*)

FAMILY: MURIDAE (Old World Rats and Mice)

Western Harvest Mouse (*Reithrodontomys megalotis*)

Deer Mouse (*Peromyscus maniculatus*)

Norway Rat (*Rattus norvegicus*)

House Mouse (*Mus musculus*)

California Vole (*Microtus californicus*)

ORDER: CARNIVORA (Carnivores)

FAMILY: CANIDAE (Foxes, Wolves, and relatives)

Coyote (*Canis latrans*)

Feral Dog (*Canis lupus familiaris*)

Red Fox (*Vulpes vulpes*)

FAMILY: PROCYONIDAE (Raccoons and relatives)

Raccoon (*Procyon lotor*)

FAMILY: MEPHITIDAE (Skunks)

Striped Skunk (*Mephitis mephitis*)

FAMILY: FELIDAE (Cats)

Feral Cat (*Felis domesticus*)

APPENDIX C: SELECTED SITE PHOTOGRAPHS

Photo 1: View of sulfur residue on site soils. Much of the site was devoid of vegetation as shown in this photo.

Photo 2: Perimeter fence and eucalyptus trees and residential area beyond.

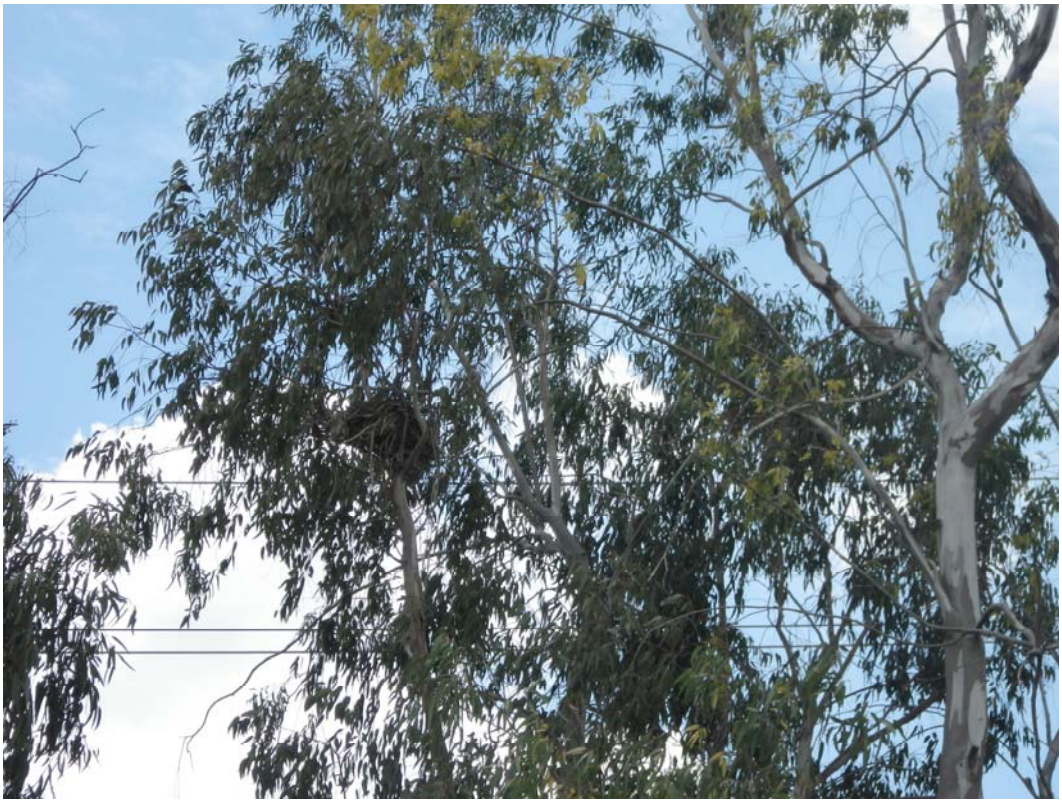


Photo 3: One of three stick nests observed on the site.

Photo 4: One of only a few locations where ground squirrel burrows were present.

Photo 5: Scattered grass clumps in foreground, debris pile in background, and perimeter eucalyptus in background.

Photo 6: Northeast corner of site; barren ground representative of most of the site.

Appendix D

Archaeological Survey

SIERRA VALLEY CULTURAL PLANNING

21 July 2013

Don Watson
Vice President, U.S. Operation
ImMODO International Corporation
3904 West Caldwell Avenue
Visalia, CA 93277

Re: Archaeological Survey, ImMODO Solar, Hanford 12 Proposed Solar Development Site, 11375 and 11436 Avenue 9 ¾, Assessor Parcel Numbers 016-016-024 and 016-016-069, ~18 acres, Kings County, CA.

Dear Mr. Watson,

On Thursday, July 11, 2013, I completed an archaeological survey of the proposed ~18-acre proposed solar project site referenced above (see attached map location and aerial view). The Hanford 12 project area is located north of Orchard Drive and at the south end of Avenue 9 ¾, east of the City of Hanford in eastern Kings County. No significant cultural resources were identified on the site surface as a result of this inspection.

The results of a records search for the project area, completed in June 2013, showed that one cultural resources study has been conducted within the project area, and two additional studies have been conducted within ¼-mile radius of the project area. No recorded archaeological or historic sites have been recorded within or adjacent to the project area (see attached).

The project site is located in an open field adjacent to the Central Valley Cotton Cooperative. The field is marked by a diffuse scatter of relatively modern refuse including metal machine parts, bottle glass fragments, buttons, golf balls, ceramic pieces, cut and burned bone, rodent bones, rubber, wire cut nails, bolts, brick and concrete pieces. A few pieces of sun-tinted glass were noted. A utility line is located along the southern parcel boundary. Eucalyptus trees ring the parcel on the south, west and north. Surrounding land use includes a residence and various outbuildings (to the north-center), the Cotton Cooperative to the west, vineyard to the east and a corn field to the southeast. Visibility of surface soils was excellent. Photos 1 and 2 depict select overviews of the project area.

In the event that buried archaeological deposits are encountered during trenching, all activity within the project area should cease until the finds have been evaluated by a qualified archaeologist. Should human remains be encountered, the County Coroner must be contacted immediately; if the remains are determined to be Native American, then the Native American Heritage Commission must be contacted as well.

Please feel free to contact me if you require additional information or assistance with this project. Thank you for asking Sierra Valley Cultural Planning to assist with your project needs.

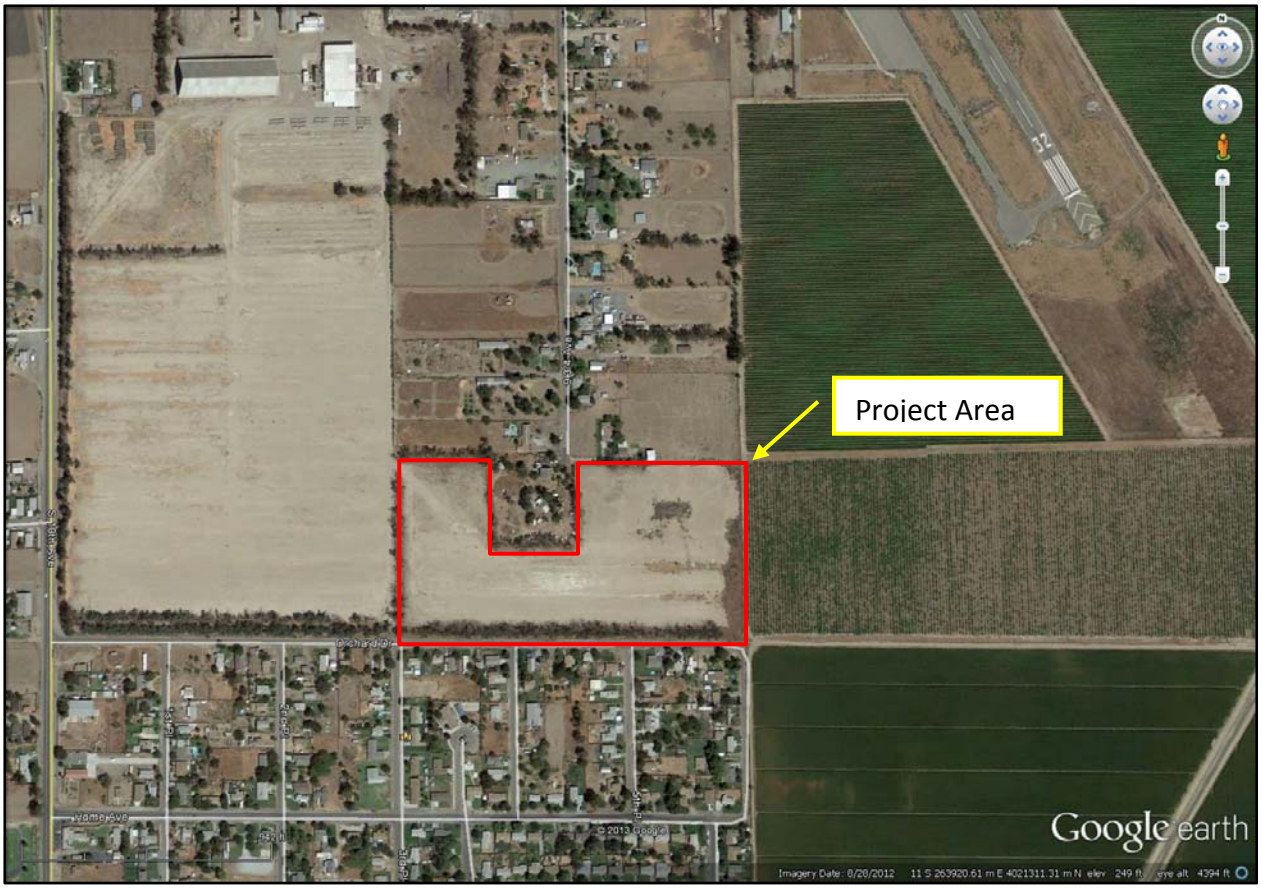
Sincerely,

C. Kristina Roper, M.A., RPA
Principal Archaeologist / Owner

41845 Sierra Drive, Three Rivers, CA 93271 Tel.: (559) 561-3816 / Fax: (559) 561-6041 kroper@wildblue.net

Photo 1. View southeast across parcel (fenced residence at left).

Photo 2. View west across parcel.



Hanford 12 Project, Aerial Map View

CALIFORNIA HISTORICAL RESOURCES INFORMATION SYSTEM

FRESNO KERN KINGS MADERA TULARE

Southern San Joaquin Valley Information Center
California State University, Bakersfield
Mail Stop: 46 MEC
9001 Stockdale Highway
Bakersfield, California 93311-1022
(661) 654-2289 FAX (661) 654-2415
E-mail: ssjvic@csub.edu

(RS# 13-232)

TO: C. Kristina Roper
Sierra Valley Cultural Planning
41845 Sierra Drive
Three Rivers, CA 93271

DATE: June 27, 2013

RE: Hanford 12 Solar Project

County: Kings

Map(s): Hanford & Remnoy 7.5's

The Southern San Joaquin Valley Information Center is under contract to the State Office of Historic Preservation and is responsible for the local management of the California Historical Resources Inventories. The Center is funded by research fees and a grant from the State Office of Historic Preservation. The Information Center does not conduct fieldwork and is not affiliated with any archaeological consultants who conduct fieldwork.

CULTURAL RESOURCES RECORDS SEARCH

The Information Center files include known and recorded archaeological and historic resources, inventory and excavation reports, and properties listed on the National Register of Historic Places, the Historic Property Data File (3/18/13), the California Register, the California Historical Landmarks, the California Inventory of Historic Resources, and the California Points of Historical Interest. The following summarizes the known historical resources information currently available for this subject property based in part on the sources outlined above.

PRIOR CULTURAL RESOURCE INVENTORIES WITHIN THE PROJECT AREA AND A ONE-QUARTER MILE RADIUS

According to the information in our files, there has been one (1) cultural resource studies conducted within the project area, KI-00017. There have been two (2) additional studies conducted within a one-quarter mile radius, KI-00023 and KI-00055. The study locations and their associated report numbers are shown on the project map.

(RS# 13-232)

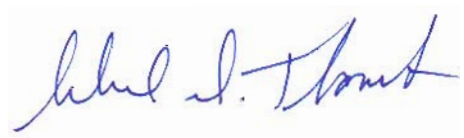
KNOWN AND/OR RECORDED CULTURAL RESOURCES WITHIN THE PROJECT AREA AND A ONE-QUARTER MILE RADIUS

There are no recorded cultural resources within the project area or within a one-quarter mile radius.

There are no known cultural resources within the project area or one-quarter mile radius that are listed in the National Register of Historic Places, the California Register, California Inventory of Historic Resources, California Points of Historical Interest, or the California State Historic Landmarks.

COMMENTS

Requested documents are enclosed. If you have any questions, comments, or need any additional information, please don't hesitate to contact our office at (661) 654-2289.

By 

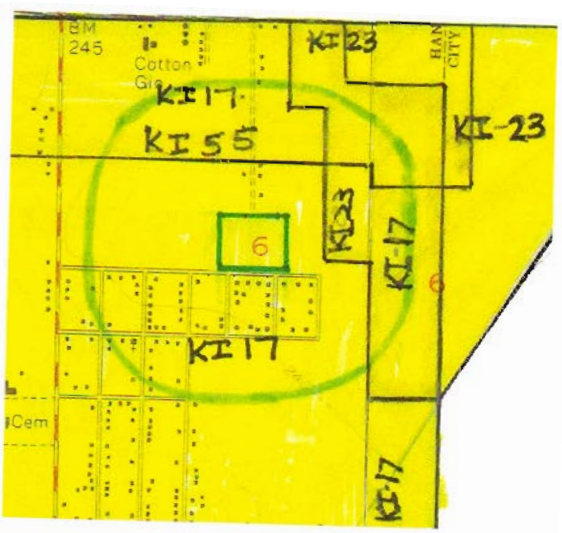
Celeste M. Thomson, MBA
Assistant Coordinator

Date: June 27, 2013

Fee: $225.00/hr. (Priority Service)

Please note that invoices for Information Center services will be sent under separate cover from the California State University, Bakersfield Accounting Office.

Record Search 13-232
Hanford 7.5' & Remnoy 7.5'
Kings County, CA



SSJVIC Detail Record: KI-00017

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Year: 1977
Title: Assessment of Archaeological Resources for the Proposed Installation of Collection Systems, Kings County, California
Affiliation: CSU Fresno
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No. Pages: 7
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Associated Resources

Notes

Location Info

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Address:

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BEFORE THE KINGS COUNTY PLANNING COMMISSION
COUNTY OF KINGS, STATE OF CALIFORNIA

IN THE MATTER OF CONDITIONAL USE PERMIT NO. 13-05 (ImMODO California 1 LLC)	**)**	**RESOLUTION NO. 14-01**
	)	**RE: 11375 9 ¾ Avenue, Hanford**

WHEREAS, on August 7, 2013, ImMODO California 1 LLC filed Conditional Use Permit No. 13-05; to develop, own, and operate a 3 megawatt (MW) photovoltaic (PV) solar generation farm (SGF) and associated infrastructure on an 18.26 acre parcel located at 11375 9 ¾ Avenue., Hanford; and

WHEREAS, the application was determined to be complete on August 8, 2013; and

WHEREAS, a Notice of Intent to Adopt a Mitigated Negative Declaration was published on November 15, 2013, providing notice that the Initial Study/Mitigated Negative Declaration (IS/MND) had been completed for the proposed Project and was available for public review and comment; and

WHEREAS, the IS/MND was circulated for public review and comment on November 15, 2013; and

WHEREAS, the Kings County Community Development Agency distributed copies of the IS/MND to those public agencies that have jurisdiction by law with respect to the Project, as well as to other interested persons and agencies, and sought the comments of such persons and agencies; and

WHEREAS, on December 17, 2013, the public review period for the proposed IS/MND for this project closed; and

WHEREAS, during the public review period for the proposed IS/MND six sets of comments were received before the end of the public review period from the Building Division of the Kings County Community Development Agency, the Kings County Fire Department, the Kings County Environmental Health Department, the Kings County Public Works Department, the San Joaquin Valley Air Pollution Control District, the Native American Heritage Commission and the California Department of Fish and Wildlife; and

WHEREAS, these comments resulted in minor changes to the IS/MND, none of the comments identified a new, unavoidable significant effect, nor did they result in a finding that the proposed mitigation measures in the IS/MND will not reduce potential effects to less than significant; and

WHEREAS, pursuant to CEQA Guidelines § 15073.5, recirculation of the IS/MND is not required; and

WHEREAS, on December 18, 2013, the Kings County Community Development Agency recommended that the Mitigated Negative Declaration be approved for the proposal; and

WHEREAS, on December 18, 2013, the Kings County Community Development Agency staff notified the applicant of the proposed recommendation on this project; and

WHEREAS, on January 6, 2014, the Planning Commission held a duly noticed public hearing for CUP Number 13-05 in the Board of Supervisors Chambers of the Kings County Government Center, 1400 W. Lacey Blvd., Hanford, California; and

WHEREAS, at the January 6, 2014, public hearing the Planning Commission received 1) a report presented by County staff that included the staff recommendation, 2) testimony from the applicant, and 3) testimony from members of the general public; and

WHEREAS, the Planning Commission received testimony prior to the close of the public hearing; and

WHEREAS, on January 6, 2014, after the conclusion of public testimony the Planning Commission closed the public hearing and deliberated; and

WHEREAS, in order to approve CUP Number 13-05 the Planning Commission is required to make the following findings and certifications with regards to the California Environmental Quality Act: (1) The Planning Commission has reviewed and considered the IS/MND, together with the comments received during the public review and comment period, before approving the project; (2) Based on the whole record before it, including the IS/MND and the comments received during the public review period, there is no substantial evidence in the record that the proposed Project will have a significant effect on the environment; (3) The IS/MND for this Project has been completed in compliance with CEQA and is adequate; and (4) The IS/MND reflects the Planning Commission's independent judgment and analysis; and

WHEREAS, the Planning Commission has reviewed the IS/MND in its entirety, and has determined that the document reflects the independent judgment of the County; and

WHEREAS, the IS/MND identified certain significant effects on the environment that, absent the adoption of mitigation measures, would be caused by the construction and operation of the Project; and

WHEREAS, the Planning Commission is required, pursuant to CEQA, to adopt all feasible mitigation measures or feasible project alternatives that can substantially lessen or avoid any significant project-related environmental effects; and

WHEREAS, the Planning Commission is required by Public Resources Code Section 21081.6, subdivision (a), to adopt a Mitigation Monitoring and Reporting Plan to ensure that the mitigation measures adopted by the County are actually carried out; and

WHEREAS, as demonstrated by the Mitigation Monitoring and Reporting Plan, attached as Exhibit "A" to this Resolution, all of the Project's significant environmental effects can be either substantially lessened or avoided through the adoption of feasible mitigation measures; and

WHEREAS, the Planning Commission determines it appropriate to certify and adopt the Mitigated Negative Declaration, to adopt the Mitigation Monitoring and Reporting Plan, and to approve CUP Number 13-05.

NOW, THEREFORE, BE IT RESOLVED AND CERTIFIED, by the Kings County Planning Commission that:

I. SECTION 1: Recitals

1. The above recitals are true and correct, and the Planning Commission hereby so finds.

II. SECTION 2: Findings Related to Proceedings

1. The Notice of Intent to Adopt a Mitigated Negative Declaration for the Project was duly prepared, noticed and properly circulated in accordance with the provisions of CEQA.

2. An Initial Study/Mitigated Negative Declaration has been conducted for the proposed Project by the Lead Agency to evaluate the potential for any adverse environmental impact in compliance with the California Environmental Quality Act of 1970 (California Public Resources Code Section 21000 et seq.), as amended, and the State Guidelines thereto (California Code of Regulations Section 15000 et seq.).

3. The Initial Study/Mitigated Negative Declaration was duly prepared, properly circulated and completed in accordance with CEQA.

4. After providing adequate public notice, the Initial Study/Mitigated Negative Declaration was duly circulated in accordance with the provisions of CEQA, and a public hearing was properly noticed and was conducted by the Planning Commission in compliance with CEQA.

5. All comments received during and after the period of public review have been duly considered and incorporated into the Initial Study/Mitigated Negative Declaration, and when necessary, replied to in accordance with the provisions of CEQA.

6. The comments resulted in minor changes to the Initial Study/Mitigated Negative Declaration, none of the comments identified a new, unavoidable significant effect, nor did they result in a finding that the proposed mitigation measures in the Initial Study/Mitigated Negative Declaration will not reduce potential effects to less than significant.

7. The minor changes serve merely to clarify, amplify and make insignificant modifications to the Initial Study/Mitigated Negative Declaration.

8. Pursuant to CEQA Guidelines § 15073.5, recirculation of the Initial Study/Mitigated Negative Declaration is not required.

9. The Initial Study/Mitigated Negative Declaration was presented to this Commission, and it was independently reviewed and considered, together with the comments received during the public review period, by this Commission prior to acting on the proposed Project.

10. The Kings County Community Development Agency provided written responses to all comments received on the Initial Study/Mitigated Negative Declaration before certification of the Initial Study/Mitigated Negative Declaration pursuant to the provisions of CEQA.

11. The Mitigated Negative Declaration for the Project has been properly completed and has identified all significant environmental effects of the Project, and there are no known potential environmental effects that are not addressed in the Mitigated Negative Declaration.

12. The Project has been modified with mitigation measures to eliminate significant impacts or to reduce such impacts to a level of insignificance in all instances.

13. The proposed Project may have significant adverse impacts on the environment; however, those impacts can be mitigated to an insignificant level by implementing the Mitigation Monitoring and Reporting Program attached to this resolution as Exhibit "A." Based on the whole record, including the Initial Study/Mitigated Negative Declaration and the comments received during the public review period, there is no substantial evidence that the proposed Project will have a significant effect on the environment. The Initial Study/Mitigated Negative Declaration reflects the Planning Commission's independent judgment and analysis.

14. The Planning Commission has used its own independent judgment in adopting this Resolution, in approving the Project, in adopting and certifying the Initial Study/Mitigated Negative Declaration, and in adopting the Mitigation Monitoring and Reporting Plan.

III. SECTION 3: Certification of the Initial Study/Mitigated Negative Declaration and Adoption of the Mitigation Monitoring and Reporting Plan

1. It is hereby certified that the Initial Study/Mitigated Negative Declaration has been completed in compliance with CEQA and is adequate.

2. It is hereby certified that the Initial Study/Mitigated Negative Declaration has been presented to the Planning Commission, which has reviewed and considered the information and analysis contained therein.

3. It is hereby certified that the Initial Study/Mitigated Negative Declaration reflects the independent judgment of the Planning Commission of the County of Kings.

4. The Planning Commission herby adopts the Mitigation Monitoring and Reporting Plan for this Project.

5. The Planning Commission authorizes and directs County staff to prepare and file a Notice of Determination within five working days following the date of adoption of this Resolution with the County Clerk of the County of Kings and with the State of California and directs that copies of the Initial Study/Mitigated Negative Declaration be retained at the office of the Kings County Community Development Agency.

IV. SECTION 4: Consistency with the *Kings County General Plan*

1. The proposed Project, as recommended for approval, is consistent with the objectives and the policies of the *2035 Kings County General Plan*, specifically:

   A. Page LU-4, Section I.D of the "Land Use Element" of the *2035 Kings County General Plan* states that "Urban Fringe" represents the residential, commercial and industrial land uses immediately adjacent to the Cities of Corcoran, Hanford and Lemoore, and includes the County unincorporated islands surrounded by the City of Hanford. The project site is located within the Light Industrial (LI) land use designation and the Light Industrial (ML) Zone District, which is within the "Urban Fringe" adjacent to the City of Hanford. Therefore, the proposed project is considered an urban type. Section 303.G of the *Kings County Improvement Standards* contains the requirements for parking lots and states that "Heavy Use" shall be considered to be in effect if the development is an Urban type.

   B. Page LU-16, Section III.A.5. of the "Land Use Element" of the *2035 Kings County General Plan* states industrial land use designations are intended to achieve the following purposes: to reserve appropriately located areas for various types of industrial plants and related activities; to protect areas appropriate for industrial use from intrusion by residences and other inharmonious uses; to protect residential and commercial properties and to protect nuisance-free non-hazardous industrial uses from noise, odor, dust, dirt, smoke, vibration, heat, glare, fire, explosion, noxious fumes, radiation and other hazardous and objectionable influences incidental to certain industrial uses; to provide opportunities for certain types of industrial plants to concentrate in mutually beneficial relationships to each other; to provide adequate space to meet the needs of modern industrial development, including off-street parking and truck loading areas, and to provide industrial employment opportunities for residents of the County.

   C. Page LU-16, Section III.A.5. of the "Land Use Element" of the *2035 Kings County General Plan* states the Light Industrial designation is intended for less intensive industrial and manufacturing operations that may be located within closer proximity to residential and commercial areas. Light Industrial is designated primarily within Community Districts and Urban Fringe areas.

D. Page LU-38, LU Policy B7.1.3 of the "Land Use Element" of the *2035 Kings County General Plan* states that power generation facilities for commercial markets shall be allowed and regulated through the Conditional Use Permit approval process, and include thermal, wind, and solar photovoltaic electrical generating facilities that produce power.

E. Page RC-50, Section G, Objective G1.2 of the "Resource Conservation Element" states that the County will promote the development of sustainable and renewable alternative energy sources, including wind, solar, hydroelectric and biomass energy.

F. Page RC-51, Section G, Policy G1.2.7 of the "Resource Conservation Element" states the County will require commercial solar and wind energy systems to be reviewed as a conditional use permit pursuant to the procedures of the Kings County Zoning Ordinance.

V. SECTION 5: Consistency with the *Kings County Zoning Ordinance*

1. The use complies with the applicable provisions of the ordinance, specifically: The proposed Project, as recommended for approval, is consistent with the *Kings County Zoning Ordinance*.

   A. Article 13, Section 1305.D.7 of the Commercial Service (CS) District lists solar photovoltaic electrical generating facilities that commercially produce power for sale, which comply with all local, regional, State, and Federal regulations as a conditional use subject to Kings County Planning Commission approval.

   B. Article 14, Section 1402.D.2 of the Light Industrial (ML) District lists all uses in Section 1305.D of the CS Commercial Service District as conditional uses subject to Kings County Planning Commission approval.

   C. The eight criteria outlined within Article 19, Section 1908.H of the Kings County Zoning Ordinance do not apply to this project since the proposed photovoltaic electrical generating facility is being sited on industrial zoned land and not agricultural zoned land.

VI. SECTION 6: Consistency with the *California Land Conservation (Williamson) Act*

A. The project site is not located within an established agricultural preserve.

VII. SECTION 7: Consistency with the *Flood Damage Prevention Ordinance* (Chapter 5A of the *Kings County Code of Ordinances*)

1. The site is within Other Areas Zone X as shown on the National Flood Insurance Program, Flood Insurance Rate Map (FIRM), Map Number 06031C0195C, dated June 16, 2009. There are no development restrictions associated with Other Areas Zone X since these are areas determined to be outside the 0.2 percent annual chance floodplain.

VIII. SECTION 8: Kings County Enterprise Zone

1. The Project site is not located within the Kings County Enterprise Zone.

IX. SECTION 9: Consistency with the *Kings County Airport Land Use Compatibility Plan*

1. The project site is located within Airport Compatibility Zone B2 (Extended Approach/Departure Zone) and the proposed project is consistent with the *Kings County Airport Compatibility Plan*.

a. Page LU-7, Section I.E.4 of the Land Use Element states that all land use decisions for projects located within the Airport Operational Area of Influence, as identified by Figure HS-22 and HS-23, will be subject to the criteria of Table HS 4 of the Health & Safety Element.

(1) According to Table HS4 of the *Kings County Airport Land Use Compatibility Plan*, Airport Compatibility Zone B2 is an Extended Approach/Departure Zone. Impact Elements include the following: 1) Moderate risk – aircraft commonly below 800 feet above ground level (AGL) and 2) Significant Noise. Normally acceptable uses include the following: 1) Uses in Zone A, 2) Agricultural uses except ones attracting birds, 3) Single-family residences on existing lots, 4) Warehousing, truck terminals, and low intensity manufacturing, 5) Single-story offices, and 6) Low-intensity retail (e.g. auto, furniture sales). Development conditions include the following: 1) Locate structures maximum distance from extended runway centerline, 2) Minimum Noise Level Reduction of 25 dBA in residential and office buildings, and 3) Dedication of avigation easement.

b. Page HS-34, Section VI.D of the "Health and Safety Element" of the *2035 Kings County General Plan* states that "Airport planning boundaries define areas near airports within which safety or noise restrictions are imposed. Only two airports within the County are identified for public use, the Hanford Municipal Airport and the Corcoran Airport." The Kings County Airport Land Use Compatibility Plan establishes procedures and criteria by which the County of Kings and the Cities of Corcoran and Hanford can address compatibility issues when making land use decisions within the operational areas of public use airports. The criteria is intended to ensure that local general plans, specific plans, and zoning ordinances take into account airport and surrounding land use compatibility.

(1) See Finding III.G.1.a.(1) above.

c. Page HS-51, HS Objective 3.2 of the "Health and Safety Element" of the *2035 Kings County General Plan* states that the County shall "Increase public safety by designating an "Airport Area of Influence" around public and implementing policies of the *Kings County Airport Land Use Compatibility Plan*."

(1) See Finding III.G.1.a.(1) above.

d. Page HS-51, Policy C3.2.2 of the "Health and Safety Element" of the *2035 Kings County General Plan* states that the County shall "Regulate properties adjacent to the Hanford Municipal Airport and Corcoran Airport according to the Primary Compatibility Criteria of the Health and Safety Element, and Kings County Airport Land Use Compatibility Plan maps."

(1) See Finding III.G.1.a.(1) above.

X. SECTION 10: Consistency with the Kings County Septic Tank Absorption Field Minimum Requirements

1. The Project site <u>is not located</u> within an area requiring engineering for any new septic systems that are installed.

XI. SECTION 11: Conditions of Approval

The Commission adopts the following conditions of approval for CUP Number 13-05:

KINGS COUNTY COMMUNITY DEVELOPMENT AGENCY - PLANNING DIVISION Contact Dan Kassik of the Kings County Community Development Agency at (559) 852-2655 regarding the following requirements:

1. All proposals of the applicant shall be conditions of approval if not mentioned herein.

2. The site plan for the project is approved in concept. However, it is understood that during the actual design of the project that either of the following minor alterations to the site plan may be necessary: 1) structural alterations; and/or 2) alterations to the location of structures. Any minor alterations shall comply with the following requirements:

   A. The site shall be developed in substantial compliance with the conceptually approved site plan. Development of the site shall be considered substantially consistent with the approved conceptual site plan if any minor structural alteration is within ten (10) percent of the square footage shown on the conceptually approved site plan or up to a 2,500 square foot increase in structural size, whichever is less, and the minor structural alteration complies with coverage standards.
   B. A minor alteration of the location of a structure shall be considered substantially consistent with the approved conceptual site plan if the new location of the structure complies with all setback requirements for the zone district that the project site is located in.
   C. Any minor alteration that would make it necessary to modify or change any condition of approval placed on the project would require resubmittal of the application to amend the approval of the Conditional Use Permit.
   D. No expansion of use, regardless of size, which would increase the projected scale of operations beyond the scope and nature described in this Conditional Use Permit application, will be allowed. Any expansion that is a substantial change from the conceptually approved site plan, will require either an amendment to the approved Conditional Use Permit or a new zoning permit.

3. The development shall comply with all regulations of *Zoning Ordinance No. 269*, with particular reference to the Light Industrial (ML) Zone District standards contained in Article 14 and the standards contained in Article 19.

4. Pursuant to Section 1605.B.1.a.1 of the Kings County Zoning Ordinance, No solid fence, wall, hedge or shrub exceeding three (3) feet in height shall be erected, planted or maintained within a required Traffic Safety Visibility Area. Traffic Safety Visibility Area is defined as a space set aside on a lot in which all visual obstructions, such as structures, fences and plantings that inhibit visibility and thus have the potential to cause a hazard to traffic and pedestrian safety are prohibited, as follows:

   a. **Area adjacent to a driveway on any lot** - the Traffic Safety Visibility Area is that area on the street side of a diagonal line connecting points, measured from the intersection of the driveway (located on the property or adjoining parcel) and the street right of way line, twenty (20) feet along the side of the driveway and twenty (20) feet along the street side of a lot.
   b. **On a corner lot** - the Traffic Safety Visibility Area also includes that area of a corner lot on the street side of a diagonal line connecting points, measured from the property corner where the streets intersect, set back one (1) foot for every one (1) mile per hour of the posted speed limit along each street.

5. Pursuant to Section 1606.C.12 of the Kings County Zoning Ordinance unless otherwise stated, the following signs are allowed as permitted use and do not require a sign permit, site plan review or conditional use permit. All signs shall be located outside of the public right-of-way and shall not be located within a traffic safety visibility area if over three (3) feet in height. Unless a different setback is specified for a particular zone district, the minimum setback distance for all signs over three (3) feet in height shall be ten (10) feet from property lines.

a.	District	Maximum permitted aggregate structural area per use	Maximum permitted aggregate copy area per use
	ML	12.5 feet by 25 feet	240 square feet on each side

b. Directional signs for off-street parking and loading facilities.
c. One real estate sign pertaining to the sale, lease, rental or display of a structure or land, not exceeding one hundred (100) square feet in area per Section 1606.B.2.a.
d. Any sign, when attached to a structure, which is directly across a street from property situated in any RR, R or RM District or which may be established on any lot facing directly across a street from property situated in any RR, R or RM District may not exceed sixty (60) square feet in aggregate area and shall not be directly illuminated, glaring or flashing.
e. No sign other than a directional sign shall project more than two (2) feet into a required rear yard or required interior side yard, or more than fifteen (15) feet into a required front yard.
f. No red, green, or amber lights or illuminated signs may be placed in such position that they could reasonably be expected to interfere with or be confused with any official traffic-control device or traffic signal or official directional guide signs.
g. Signs may have copy on both sides of the structure, provided that the copy area on each side does not exceed the maximum area specified above in Sections 1404.A.1. and 1404.B.1. for the zone district that the site is located in.
h. Non-illuminated temporary construction signs in accordance with Section 1606.B.2.c.
i. Political and Campaign Signs in accordance with Section 1606.B.3.
j. Murals
k. Temporary Advertising/Promotional Signs per Section 1606.B.2.b.
l. Temporary Special Event Signs per Section 1606.B.2.a.
m. Window signs shall cover no more than 15 percent of a single window's surface area.
n. All signs shall comply with the yard requirements of the districts in which they are located.

6. Exterior lighting shall be hooded so as to be directed only on site.

7. Off-street parking space shall be provided in accordance with Article 15, Section 1502.A.5 of the *Kings County Zoning Ordinance* and shall be maintained in accordance with *Kings County Improvement Standards* and the approved site plan.

8. All drive approaches, parking areas, aisles, and driveways (if not already existing) shall be provided prior to either: 1) initial occupancy of the site or 2) the final inspection (Note: The applicant is responsible for contacting the Building Division to request a final inspection of the structure prior to startup of the operation).

9. Pursuant to Section 303.G of the *Kings County Improvement Standards* all parking areas, aisles, and driveways shall be surfaced and maintained so as to provide a durable, dustless surface. Section 303.G. and Drawing 3036 of the *Kings County Improvement Standards* requires two (2) inches of Type "B" Asphalt Concrete over six (6) inches of R-70 Native @ 95% compaction under the "Heavy Use (Alternative Design)".

10. All open and unlandscaped portions of the lot shall be maintained in good condition, free from weeds, dust, trash and debris.

11. The minimum yard requirements from property line to a structure shall be as follows:

    A. The minimum front yard shall be twenty-five (25) feet.

    B. There are no rear yard or side yard requirements except as follows:

        (1) The minimum year yard abutting a RR, R, or RM District shall be fifteen (15) feet.

(2) On a reversed corner lot adjoining a key lot in a RR, R, or RM District, the minimum side yard adjoining the street shall not be less than one-half (1/2) the required front yard on the key lot.

(3) The minimum side yard abutting a RR, R, or RM District shall be fifteen (15) feet.

12. The minimum distance between a dwelling unit and another structure shall be ten (10) feet. However, greater minimum distances between structures may be required if fire code regulations require greater separation between structures for safety and fire protection. Construction methods using higher fire ratings may be substituted to satisfy all or part of such fire-related separation requirements.

13. Prior to any ground-disturbing activities occurring within the Project area, the applicant shall follow the United States Fish and Wildlife Service's *"Standard Recommendations for Protection of the Endangered San Joaquin Kit Fox Prior to or During Ground Disturbance"* (USFWS 2011) and incorporate into the Project construction plan.

14. The applicant shall comply with all requirements of, and obtain any necessary permits from, the San Joaquin Valley Air Pollution Control District (SJVAPCD).

15. The applicant shall comply with all requirements of, and obtain any necessary permits from, the California Regional Water Quality Control Board (CRWQCB).

16. The applicant shall comply with all adopted rules and regulations of the Kings County Public Works Department, Fire Department, and the Environmental Heath Services Division of the Health Department, and all other local and state regulatory agencies.

17. Pursuant to Section 14-38(d) of the *Kings County Code of Ordinances*, a "Notice of Disclosure and Acknowledgment of Agricultural Land Use Protection and Right to Farm Policies of the County of Kings" shall be signed, notarized, and recorded.

18. Pursuant to Section 66020(d)(1) of the *California Government Code*, the owner is hereby notified that the 90-day approval period in which the applicant may protest the imposition of fees, dedications, reservations, or other exactions, begins on the date that Planning Commission Resolution No. 13-05 is adopted.

19. Sales or use tax may apply to business activities on the site. The applicant may seek written advice regarding the application of tax to your particular business by writing to the nearest State Board of Equalization office. For general information, please call the Board of Equalization at 1-800-400-7115.

20. Additional annual service impact fees affecting the Kings County Fire and Sheriff departments will not be billed to the applicant. Instead, the applicant will be responsible to pay for services rendered by the two departments during times of emergency when services are provided.

21. All mitigation measures in the Initial Study/Mitigated Negative Declaration and the Mitigation Monitoring and Reporting Plan that pertain to CUP No. 13-05 are adopted as conditions of this approval, and included in the Conditional Use Permit.

22. Within eight (8) days following the date of the decision of the Kings County Planning Commission, the decision may be appealed to the Kings County Board of Supervisors. The appeal shall be filed with the Clerk of the Board of Supervisors.

23. This Conditional Use Permit shall lapse and shall become null and void three (3) years following the date that the Conditional Use Permit became effective, unless prior to the expiration of three (3) years the proposed use has been established. A Conditional Use Permit involving construction shall lapse and shall

become null and void three (3) years following the date that the Conditional Use Permit became effective, unless prior to the expiration of three (3) year a building permit is issued by the Building Official and construction is commenced and diligently pursued toward completion on the site that was subject of the Conditional Use Permit application.

24. This Conditional Use Permit may be renewed for additional periods of time, if an application (by letter) for renewal of the Conditional Use Permit is filed with the Planning Commission prior to the permit's expiration date.

XII. SECTION 12: Other Agency's Comments, Standards and Regulations

The following departments and agencies have provided comments, standards, and regulations concerning the proposed project. The Planning Commission has no authority to modify, amend, or delete any of these comments, standards, and regulations but lists them here as information to the applicant. Appeals for relief of other agency's standards and regulations must be made through that department's or agency's procedures, not through the Zoning Ordinance procedures. However, the applicant shall comply with all adopted rules and regulations of the Kings County Public Works Department, Fire Department, and the Environmental Heath Services Division of the Health Department, and all other local and state regulatory agencies. Failure of the applicant to comply with all adopted standards and regulations of all other local and state regulatory agencies is a violation of this conditional use permit (see Condition No. 15 above) and could result in revocation of this conditional use permit.

KINGS COUNTY COMMUNITY DEVELOPMENT AGENCY - BUILDING DIVISION Contact Darren Verdegaal at the Kings County Community Development Agency - Building Division at (559) 852-2683, regarding the following comments:

1. Building permits must be obtained from the Building Division of the Kings County Community Development Agency for any structures, plumbing, electrical, or mechanical work.

2. Failure to obtain a building permit for any structure, prior to commencing construction, which requires a building permit, will result in the payment of a double fee. Payment of such double fee shall not relieve any person from fully complying with the requirements of Kings County Code of Ordinances, Chapter 5 in the execution of the work or from any other penalties prescribed therein.

3. A minimum of (2) sets of plans and calculations signed by an architect or engineer licensed to practice in the Sate of California shall be required for the proposed work.

4. All special inspection reports shall be provided to the Building Division prior to requesting a final inspection.

5. The applicant is responsible for contacting the Building Division to request a final inspection of the structures prior to occupying the structures and prior to startup of the operation. No building or structure shall be used or occupied until the Building Division has issued a Certificate of Occupancy.

6. All drive approaches and durable dustless surfaces shall be installed prior to the final inspection and maintained as per County Standards.

7. If the facility will have employees on-site for maintenance of the system an accessible restroom shall be provided and shall comply with Section 1115B of the *California Building Code*. This may

be accomplished by either construction of a permanent structure or use of a chemical toilet with a regular maintenance schedule.

8. Pursuant to Section 1129B of the *California Building Code* one (1) van accessible parking space, allowing room for individuals in wheelchairs, on braces or crutches to get in and out of an automobile onto a level surface, suitable for wheeling and walking shall be provided. The parking space shall be 9' x 20' with an 8' wide loading and unloading aisle placed on the side opposite the driver's side. The surfacing of the parking space, loading and unloading aisle and the accessible path from the space to the entrance of the building shall be either asphalt concrete or concrete.

9. The development shall comply with all applicable *Americans with Disability's Act* (*ADA*) requirements, especially Section 1127B of the *California Building Code*, which states that site development and grading shall be designed to provide access to all entrances and exterior ground-floor exits, and access to normal paths of travel. The accessible route of travel shall be the most practical direct route between accessible building entrances, accessible site facilities and the accessible entrance to the site, including but not limited to access from the accessible parking space to accessible building entrances.

10. A soils report, prepared by a qualified soils engineer, shall be provided to the Building Division prior to issuance of building permits.

11. The facility shall meet the requirements of the State of California Model Water Efficient Landscape Ordinance. Landscape and irrigation plans shall be provided to the Community Development Agency for review and approval prior to building permit issuance.

12. All construction shall conform to the 2010 California Code of Regulations Title 24 which consist of the California Building Code, California Electrical Code, California Mechanical Code, California Plumbing Code, and California Energy Code, California Fire Code and California Green Building Standards Code.

KINGS COUNTY PUBLIC WORKS DEPARTMENT: Contact Mike Hawkins of the Kings County Public Works Department at (559) 852-2708 for the following comments:

1. That all requirements hereafter conform to the Kings County Improvement Standards.

2. That all other alternatives to Public Works requirements must be approved by the Kings County Public Works Department.

3. Additional right-of-way shall be dedicated and constructed for a turn around area capable of accommodating fire apparatus at the terminus of 9 ¾ Avenue. Surfacing shall match the existing roadway in which it connects. Orchard Drive shall be dedicated to a 40-foot width. Fencing within the right-of-way shall be removed. No building permits or zoning permit shall be issued until right-of-way has been dedicated and if the dedication is not made within 30 days of approval of any zoning permits, then said permit(s) shall be revoked.

4. Right-of-way, access lanes, and easements shall be cleared of all obstructions. The clearing of all right-of-way obstructions shall be at the expense of the owner.

5. An encroachment permits shall be secured prior to any work within the County right-of-way.

6. Asphalt concrete approaches shall be provided.

7. All drainage shall be contained on-site.

8. Trees along Orchard Drive are the responsibility of the property owner. Trees shall be maintained and trimmed as to not interfere with traffic on Orchard Drive.

9. The gate access from Orchard Drive shall be identified to allow for unobstructed traffic flow when trucks access site.

KINGS COUNTY FIRE DEPARTMENT: Contact Bill Lynch of the Kings County Fire Department at (559) 852-2880 for the following comments:

1. Rows of solar panels shall not exceed 300 feet in length.

2. There shall be a minimum of 4 feet of separation between rows to allow access for fire suppression personnel.

3. There shall be access roads of an all-weather surface capable of supporting heavy fire apparatus between the 300 foot sections of solar panels to allow fire apparatus access to the panels so that no portion of any panel is greater than 150 feet from fire suppression access. The access roads shall be maintained and completely surround the solar panels to allow access from any side or end. Access roads shall not be less than 20' in width and provide vertical clearance of not less than 13'6".

4. The solar field shall be kept clear of combustible weeds and debris.

5. The solar fields shall be protected to prevent public access.

6. Fire Department requires a Knox box or other approved system to store and secure keys for any fence or buildings within the property.

7. Applicant shall provide training for fire personnel to be able to interrupt electrical power safely for emergency incidents requiring fire suppression or rescue activities.

8. Architects, Engineers and Designers shall provide detailed plans for review of the project and shall meet with the Fire Marshal in a timely manner upon his request for clarification of any issues.

9. Any fire suppression systems or fire flow requirements will be dependent upon project facilities and review of the project specifications.
10. Solar fields shall comply with the California Fire Code.

11. Fire Department reserves the right to add additional comments or requirements depending upon the hazards involved with the project.

KINGS COUNTY HEALTH DEPARTMENT: Contact Lee Johnson of the Kings County Department of Environmental Health Services at (559) 852-2631 regarding the following comments:

1. If hazardous materials at or above threshold reporting quantities (55 gallons of a liquid, 500 pounds of a solid, or 200 cubic feet of a gas) will be kept on site, the facility must file a Hazardous Materials Business Plan online at http://cers.calepa.ca.gov within 30 days of beginning operations. Hazardous materials are broadly defined, and include fuel, lubricants, antifreeze, motor vehicle batteries, welding gases, paints,

solvents, glues, agricultural chemicals, etc. Please contact our office if you require assistance with the online registration process.

2. Any quantities of hazardous wastes generated by the facility operation must be managed in accordance with Federal, State, and local laws and regulations. Hazardous wastes cannot be disposed of into the municipal waste stream or onsite sewage disposal system. The owner/operator must contact our office at with any questions regarding proper management and reporting of any hazardous wastes associated with this operation.

3. The fungus that causes valley fever, a serious, potentially long-term respiratory illness, is present in soils in Kings County. Construction activities that disturb soils containing the fungus can put workers and the nearby public at risk. Effective dust control must be maintained on the job site at all times in order to reduce the risk of valley fever to workers and to residents of the neighborhood immediately to the south of the job site. More information regarding the prevention of work related valley fever is available at www.cdph.ca.gov/programs/hesis/Documents/CocciFact.pdf. Contact the San Joaquin Valley Air Pollution Control District for more information on dust control techniques.

4. Given the proximity of the Hanford airport and frequent air traffic over the site, as well as adjacent highway and road traffic, the sites must be designed and constructed so as to minimize light reflectivity that might be hazardous for aircraft or vehicles.

SAN JOAQUIN VALLEY AIR POLLUTION CONTROL DISTRICT Contact Jessica Willis of the SJVAPCD at (559) 230-5818 regarding the following comments:

1. Based on information provided in the MND, project specific criteria pollutant emissions are not expected to exceed District significance thresholds of 10 tons/year NOx, 10 tons/year ROG, and 15 tons/year PM10. Therefore, the District concludes that project specific criteria pollutant emissions would have a less than significant adverse impact on air quality.

2. As indicated in the MND, the project is subject to District Rule 9510 (Indirect Source Review). Any applicant subject to District Rule 9510 is required to submit an Air Impact Assessment (AIA) application to the District no later than applying for final discretionary approval, and to pay any applicable off-site mitigation fees before issuance of the first building permit. The District received AIA Application C-20130039 on February 12, 2013. The District approved the application on March 1, 2013. For more information about District Rule 9510, please visit the District's website at: http://www.valleyair.org/ISR/ISRHome.htm.

3. The proposed project may be subject to District Rules and Regulations, including: Regulation VIII (Fugitive PM10 Prohibitions), Rule 4102 (Nuisance), and Rule 4601 (Architectural Coatings). The above list of rules is neither exhaustive nor exclusive. Certain equipment on the project site may be subject to District permitting requirement (e.g. generators). To identify other District rules or regulations that apply to this project or to obtain information about District permit requirements, the applicant is strongly encouraged to contact the District's Small Business Assistance Office at (559) 230-5888. Current District rules can be found on the District's website at: www.valleyair.org/rules/1ruleslist.htm.

The foregoing Resolution was adopted on a motion by Commissioner _____ and seconded by Commissioner _____, at a regular meeting held on January 6, 2014, by the following vote:

AYES: COMMISSIONERS
NOES: COMMISSIONERS
ABSTAIN: COMMISSIONERS
ABSENT: COMMISSIONERS

KINGS COUNTY PLANNING COMMISSION

_____
R. G. Trapnell, Chairperson

WITNESS, my hand this ____ day of _____, 2014.

_____
Gregory R. Gatzka
Secretary to the Commission

cc: Kings County Board of Supervisors
Kings County Counsel
Kings County Community Development Agency – Building Division
Kings County Public Works Department
Kings County Fire Department
Kings County Health Department – Division of Environmental Health Services
State of California, Governor's Office of Planning and Research
Regional Water Quality Control Board
State of California, Department of Fish and Wildlife
San Joaquin Valley Air Pollution Control District
Central Valley Cooperative, P.O. Box 1850, Hanford, CA 93232
ImMODO CA 1, LLC, 3904 West Caldwell Avenue, Visalia, CA 93277

Attachment: Exhibit "A" Mitigation Monitoring and Reporting Plan

Table 8

Mitigation Monitoring Plan

Mitigation Measure/Condition of Approval	When Monitoring is to Occur	Frequency of Monitoring	Agency Responsible for Monitoring	Method to Verify Compliance	Verification of Compliance		
Biological Resources:							
BIO-1: (avoidance). In order to avoid impacts to all nesting raptors and other migratory birds from tree removal, grading, and construction, these activities shall occur between September 1 and January 31. This will ensure that construction does not coincide with the nesting season (February 1 to August 31).	Prior to construction	During construction and closure	Kings County	Field inspection			
BIO-2: (pre-construction surveys). If brushing, grading, or construction must occur between February 1 and August 31, a qualified biologist shall conduct pre-construction surveys for active raptor and migratory bird nests within 30 days of the onset of these activities. Pre-construction surveys for Swainson's Hawk shall be based on the method developed by the Swainson's Hawk Technical Advisory Committee.	Prior to construction	Monthly monitoring during construction	Kings County	Field Inspection			
BIO-3: (establish buffers). Should any active nests be discovered in or near proposed construction zones, the biologist shall identify a suitable construction-free buffer around the nest. This buffer shall be identified on the ground with flagging or fencing, and will be maintained until the biologist has determined that the young have fledged.	Prior to construction	Monthly monitoring during construction	Kings County	Field Inspection			
BIO-4: (prevent entrapment). Should any vertical tubes, such as solar mount poles, chain link fencing poles, or any other hollow poles be utilized on site, the vertical pole shall be capped immediately after installation to prevent avian fatalities.	Prior to and during construction	Monthly monitoring during construction	Kings County	Field Inspection			

Mitigation Measure/Condition of Approval	When Monitoring is to Occur	Frequency of Monitoring	Agency Responsible for Monitoring	Method to Verify Compliance	Verification of Compliance		
BIO – 5: Should a known Swainson's Hawk nest be discovered in a tree on the Project site, the tree should be left standing. If avoiding the tree is not practicable, the tree should be replaces, onsite at a 3:1 ratio, with a species of tree known to be used for nesting by local Swainson's Hawk.	Prior to construction	During construction and reclamation	Kings County	Field Inspection			
Cultural Resources:							
CUL-1: If, in the course of Project construction or operation, any archaeological or historical resources are uncovered, discovered, or otherwise detected or observed, activities within fifty (50) feet of the find shall be ceased. A qualified archaeologist shall be contacted and advise the County of the site's significance. If the findings are deemed significant by the Kings County Community Development Agency, appropriate mitigation measures shall be required prior to any resumption of work in the affected area of the Project.	During construction	During construction	Kings County	Field inspection			
CUL-2: If cultural resource remains are encountered during construction or land modification activities work shall stop and the County shall be notified at once to assess the nature, extent, and potential significance of any cultural remains. If such remains are determined to be significant, appropriate actions shall be determined. Depending upon the nature of the find, mitigation could involve avoidance, documentation, or other appropriate actions to be determined by a qualified archaeologist. For example, activities within 50 feet of the find shall be ceased.	Ongoing	During construction	Kings County	Field inspection			

Mitigation Measure/Condition of Approval	When Monitoring is to Occur	Frequency of Monitoring	Agency Responsible for Monitoring	Method to Verify Compliance	Verification of Compliance		
Hazards and Hazardous Materials:							
HAZ-1 The constructor and operator of the Project shall develop an Injury and Illness Prevention Program and project-specific health and safety plans. These plans should include but not be limited to the following: • Compliance with the SJVAPCD's Regulation VIII and SJVAPCD-approved Dust Control Plan; • Train workers and supervisors on how to recognize symptoms of illness related to Valley Fever; • Provide pre-construction training and instruction regarding requirements for on-site construction pursuant to the approved Dusts Control Plan; • Limit workers' exposure to outdoor dust in disease-endemic areas; • When soil will be disturbed by heavy equipment or vehicles, wet the soil with water or other permitted soil stabilizer before disturbing it and continuously wet it while digging to keep dust levels down; • Heavy equipment, trucks, and other vehicles generating heavy dust should have enclosed cabs equipped with air filters; and • When exposure to dust is unavoidable, provide NIOSH-approved respiratory protection to all employees.	Prior to construction	During construction and closure	Kings County	Field inspection			

KINGS COUNTY PLANNING COMMISSION
STAFF REPORT

CUP Addendum No. 2
Conditional Use Permit No. 11-06
Zoning Ordinance No. 269.69
January 6, 2014

APPLICANT: RE Kansas LLC, 300 California Street, 7th Floor, San Francisco, CA 94104

PROPERTY OWNER: RE Kansas LandCo LLC, San Francisco, CA 94104

LOCATION: 15515 21st Avenue, Lemoore, CA (Assessor's Parcel Numbers 024-100-006 and 015)

GENERAL PLAN DESIGNATION: General Agriculture (AG-20)

ZONE DISTRICT CLASSIFICATION: General Agriculture (AG-20)

CONDITIONAL USE PROPOSED: The applicant is proposing to establish a 20 megawatt (MW) photovoltaic solar facility on 200 acres.

DISCUSSION:

On December 9, 2013, CUP Addendum No. 2 was received to revise CUP 11-06 (RE Kansas LLC). Addendum No. 2 is attached to Planning Commission Resolution No. 14-02 as Exhibit No. 1. The purpose of Addendum No. 2 is to: analyze a revision to the Project's CUP that would allow the Project to demonstrate Farmland Security Zone (FSZ) contract compatibility by maintaining reasonably foreseeable agricultural operation onsite determined by site-specific soil and water analysis. Consistent with Kings County Board of Supervisors Resolution No. 13-058, Addendum No. 2 would remove the current CUP's requirement that agricultural compatibility be achieved by maintaining commercial agriculture on a minimum of 90% of the Project site that would provide an economic output similar to the historical economic output of the site. Addendum No. 2 also clarifies the description of the project substation and gen-tie location.

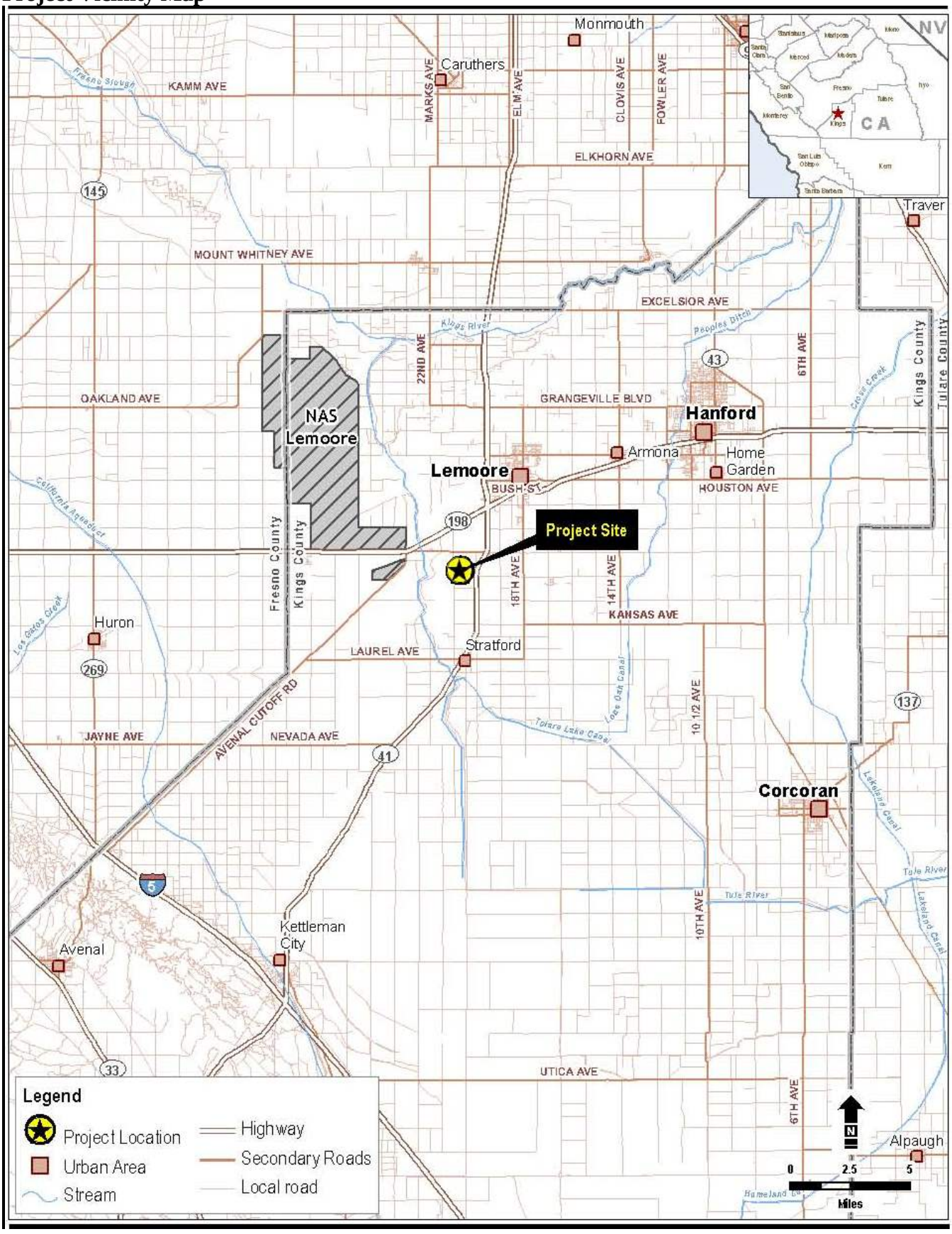
Conditional Use Permit ("CUP") No. 11-06 was originally approved by the Kings County Planning Commission on May 7, 2012 when Resolution No. 12-06 was adopted. CUP No. 11-06 was approved to be constructed and operate a photovoltaic solar facility on 200 acres of Assessor's Parcel Numbers (APNs) 024-100-006 and 015. The Project consists of three main components that were previously in the Mitigated Negative Declaration (MND).

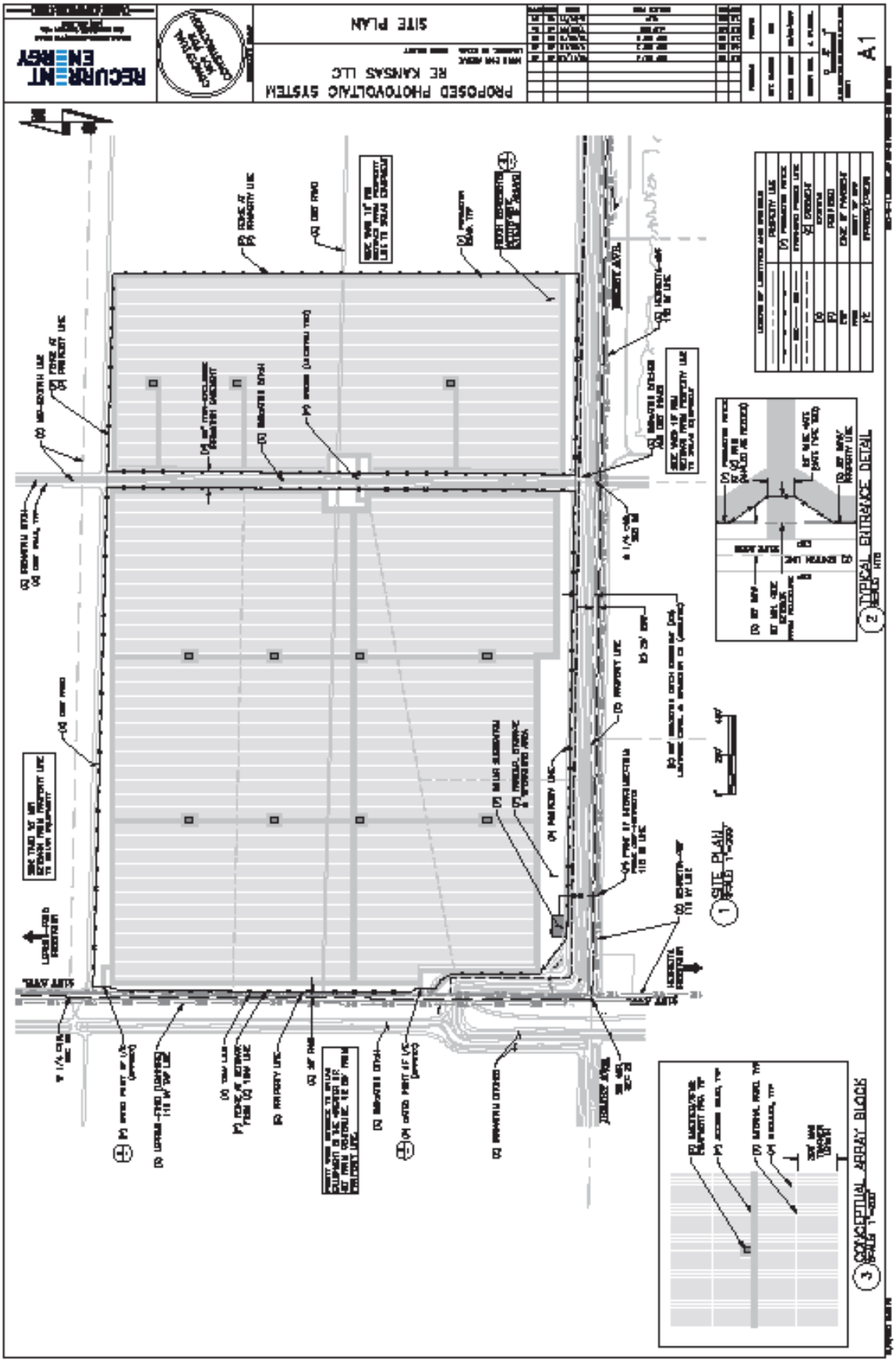
1. Solar panels, inverters, intermediate-voltage transformers, access driveways, and electrical wiring necessary for collecting and consolidating power across the Project site.
2. A medium-voltage substations, which would receive intermediate voltage input from the collections system and step up the voltage to 115 kilovolts (kV) via a high-voltage transformer bank.

3. The interconnection from the Solar Generation Facility (SFG) to a local electrical power line, which would consist of a short (100- to 200-foot) generation tie line.

On May 6, 2013, a CUP Addendum No. 1 was received to revise CUP 11-06 (RE Kansas, LLC) to simply revise the CUP boundaries to match the final project footprint boundaries and to provide a time extension for the applicant allowing the applicant more time to obtain contracts and permits from PG&E and state agencies. As a result of Addendum No. 1 the southernmost border of the Project was shifted approximately 108 feet north to exclude the existing ditch and canal infrastructure. On July 1, 2013, the Kings County Planning Commission adopted Resolution No. 13-06 approving Addendum No. 1.

Project Vicinity Map




SITE PLAN
PROPOSED PHOTOVOLTAIC SYSTEM
RE KANSAS LLC
RECURRENT ENERGY
A1
SITE PLAN
TYPICAL ENTRANCE DETAIL
CONCRETE ARRAY BLOCKS

With Addendum No. 2 the Project will remain a 20-MW solar facility on 200 acres of disturbed agricultural land and will connect into a local electrical power line. The main Project components would apply to the revised Project; no changes to the type of Project infrastructure, construction, maintenance, or use of the facility as described for the Original Project would occur. The location of the substation and gen-tie described in the Original Project would shift from the northwest corner of the Project site to the southwest corner to maximize reliability of the electrical transmission system. The substation would remain within the previously analyzed Original Project footprint. The substation would connect to the existing local electrical power line along either 21st Avenue or Jersey Avenue.

The shift in substation location will require the gen-tie line to extend approximately 300 feet from the substation to the existing power line to accommodate the existing ditch and canal infrastructure. The modified substation and gen-tie line location would maintain the same proposed height, materials, and ground-disturbing activities as previously analyzed for the Original Project. The modified Project substation and gen-tie line would fall on land under the same agricultural use and cultivation practices as the Project footprint assessed within the MND. Additionally, the modified Project footprint falls within the biological and cultural resources survey boundary; thus, the analysis and impact discussion for biological and cultural resources found in the MND also pertains to the revised Project footprint. The revised location of the substation and the gen-tie line will remain consistent with the approved CUP and will not cause any changes to the Conditions of Approval and Mitigation Measures that were previously approved by the County Planning Commission.

The revised Project is located on land subject to a Farmland Security Zone (FSZ) contract. A solar facility to be located on Williamson Act or FSZ contracted land may only receive a conditional use permit if it meets the principles of compatibility under Government Code Section 51238.1.a, or if the contract is proposed for cancellation, or is eligible and converts to a Solar Use Easement. The Project applicant would fulfill one of three options to meet the requirements of the Zoning Ordinance and ensure the Project has no significant impacts related to the Williamson Act: Option 1) cancel the FSZ contract, Option 2) convert the FSZ contract into a "Solar Use Easement" pursuant to Government Code Section 51255.1 (Senate Bill 618), or Option 3) maintain a use onsite that meets the principles of compatibility pursuant to Government Code Section 51238.1(a) by maintaining reasonably foreseeable agricultural operations onsite as determined by site-specific soil and water analysis. As part of this revised Project description, the Project applicant may pursue these options in any order, such that an attempt to cancel or convert the FSZ contracts (Options 1 and 2) would not need to occur prior to pursuing compatibility (Option 3).

On November 26, 2013, the Board of Supervisors adopted Resolution No. 13-058, recognizing that circumstances exist on agricultural preserves located within that portion of Kings County south of State Route 198, west of State Route 41, and east of I-5, including water availability and soil conditions that limit the reasonably foreseeable agricultural use of certain parcels. If specified findings can be made, compatibility of solar development with certain reasonably foreseeable agricultural uses can be achieved.

Addendum No. 2 provides site specific evidence of impaired soil quality, water quality, and drainage on the Project site, as well as severe limitations to surface water allocations, as evidence that a foreseeable agricultural operation on the Project footprint is season sheep grazing. A full soil and water analysis conducted by Provost & Pritchard Consulting Group and Dellavalle Labs Inc. for the SGF may be found in Appendix A of Addendum No. 2. A summary of the findings can be found in Table 3 of Addendum No. 2.

Modifications to Section 3.2.2 of the Initial Study/Mitigated Negative Declaration:

Proposed modifications to Section 3.2.2 of the Initial Study/Mitigated Negative Declaration are attached to Planning Commission Resolution No. 14-02 as Exhibit No. 2. The modifications are shown in track changes mode, with deletions shown with ~~red strikethrough~~ and additions shown with red underline.

Modification to the Findings:

Proposed modifications to Finding No. 5 of Planning Commission Resolution No. 12-06 are attached to Planning Commission Resolution No. 14-02 as Exhibit No. 3. The modifications are shown in track changes mode, with deletions shown with ~~red strikethrough~~ and additions shown with red underline.

Modifications to Planning Division Conditions of Approval:

Proposed modifications to Planning Division Condition Numbers 24 and 25 are listed below. The modifications are shown in track changes mode, with deletions shown with ~~red strikethrough~~ and additions shown with red underline.

24. If Cancellation of Farmland Security Zone Contract No. 201 or conversion into a "Solar Use Easement" fails, and the applicant chooses to continue with the project by continuing to farm ~~at least 90% of the land~~a reasonably forseeable agricultural use, then the applicant shall submit an Agricultural Management Plan (AMP) to the Kings County Community Development Agency for approval prior to the issuance of building permits. The AMP shall include all of the information specified in Addendum No. 2 for CUP No. 11-06.

27. If the applicant 1) does not continue ~~an intensive agricultural operation~~ a reasonably foreseeable agricultural use on ~~at least 90 percent of~~ the project site ~~at an intensity equivalent to the existing agriculture use of the project site~~ for the entire life of the project, ~~and if the applicant~~ or 2) is successful in cancelling the Farmland Security Zone contract, or 3) is successful in entering into a "Solar Use Easement," the applicant shall then provide written evidence of funding and/or purchase of agricultural mitigation land (which will be managed and maintained by an appropriate entity) for the life of the project to mitigate the loss of Farmland of Statewide Importance at a ratio of 1:1. Every acre of agricultural land removed from production would be mitigated by the applicant. The agricultural land preserved shall be of equal or greater quality as defined by the California Department of Conservation Farmland Mapping and Monitoring Program (i.e., if Farmland of Statewide Importance is converted to solar then the agricultural land preserved must not be in a classification indicating a lower quality than Farmland of Statewide Importance).

California Environmental Quality Act Guidelines section 15164:

California Environmental Quality Act Guidelines section 15164, found in the California Code of Regulations, allows for an Addendum to an approved IS/MND to be prepared when minor technical changes or additions are necessary and if the Addendum does not meet any of the requirements stated in Section 15162. The Environmental Review section below details how the conditions of Section 15162 have not been met.

Addendum No. 2, attached to Planning Commission Resolution No. 14-02 as Exhibit No. 1, provides minor alterations to the site plan to accommodate the shift in substation location from the northwest corner of the Project site to the southwest corner of the Project site.

The revised Project will remain a 20-MW solar facility on 200 acres of disturbed agricultural land and will connect into a local electrical power line. The main Project components would apply to the revised Project. No changes to the Project infrastructure, construction, maintenance, or use as described in the MND would occur. The modified Project footprint would fall on land under the same agricultural use and cultivation practices as the Project footprint assessed within the MND. Additionally, the modified Project footprint falls within the biological and cultural resources survey boundary; thus, the analysis and impact discussion for biological and cultural resources found in the MND also pertains to the revised Project footprint. The revised Project will remain consistent with the approved CUP and will continue to be subject to the same Conditions of Approval and Mitigation Measures as previously approved by the County Planning Commission, except for the modification of Mitigation Measure AG-3 and Planning Division Condition Numbers 24 and 27 modified by Addendum No. 2.

The revised Project would not result in any effects to environmental resources that are more severe than those described in the original IS/MND. All Mitigation Measures and Conditions associated with the original Project would be applied to the revised Project, except for the modification of Mitigation Measure AG-3 and Planning Division Condition Numbers 24 and 27 modified by Addendum No. 2. As with the approved Project, the revised Project would have a less than significant impact with the implementation of the approved mitigation identified for agriculture, biological resources, cultural resources, and traffic. As required by CEQA Guidelines Section 15162, the County has evaluated each of these circumstances in the Addendum and that evaluation is included in this staff report in the following table:

Potential for Impacts	**Original Footprint of Projects**	**Revised Footprint of Projects**
Aesthetics	Project would not substantially degrade existing visual quality of the site and surroundings as the scenic value of the area is low. Impacts would less than significant.	No change. Project elements are unchanged and the modified location of the substation and gen-tie line remain within a land use area characterized by low vividness, intactness, and unity. Impacts would remain less than significant.
Agriculture	Project would remove 200 acres of Farmland of Statewide Importance from agricultural use. Project would implement Mitigation Measures (MMs) AG 1-3 and impacts would be less than significant. The Project site is subject to a Farmland Security Zone (FSZ) contract; Project would pursue one of three options to reduce potential impacts to less than significant	Impacts remain less than significant with mitigation. Minor technical changes to clarify how the Project would maintain compatibility with an FSZ contract. Additional environmental analysis on this topic area can be found below.

Air Quality	Emissions generated during Project construction and operation would be less than the significance thresholds for criteria pollutants. Impacts to air quality would be less than significant.	No change. Project would require the same number of employees and vehicles during Project construction and operation. Existing and proposed land use is equivalent as well. Impacts would remain less than significant.
Biology	Implementation of the MMs Bio 1-7 addressing biological resources would be sufficient to protect special status plants and animals, as well as other common wildlife, found in the SGF Project area, and would reduce potential impacts to less-than-significant levels. Plants of certain special status species have potential to occur within the drainages in and adjacent to the Project area.	No change. Project would adhere to the same MMs and impacts would remain less than significant.
Cultural Resources	A historical record search identified no cultural resources within the SGF area and agricultural activity has disturbed the surface of the SGF area. Ground-disturbing activities associated with the construction phase of the SGF Project could impact unknown cultural resources. Implementation of MMs CR 1 through CR-4 would address impacts to potential historical, archaeological, and paleontological resources during Project construction activities. Therefore, potential impacts under this criterion would be reduced to less than significant levels with mitigation.	No change. The modified location of substation and gen-tie line was evaluated in the cultural resources section of the MND. Project would implement MMs CR 1-4 and impacts would be less than significant.
Geology	Project is not located within an Alquist-Priolo Earthquake Fault Zone. Project would adhere to all federal, state, and local ordinances. Impacts would be less than significant.	No change. Project would occur on the same geologic conditions and would adhere to all federal, state, and local ordinances. Impacts would remain less than significant.
Greenhouse Gases	Project would result in a minor but beneficial impact, and a less than significant adverse impact.	No change. The total energy production capacity and life of the Project remains identical to the Original Project. Impacts would remain less than significant.

Hazards and Hazardous Materials	Hazardous and other materials would be used during construction and operation of the Project. Any use or disposal of hazardous materials during construction activities would be conducted according to all applicable local, state, and federal regulations. Potential impacts from the use of or exposure to hazards and hazardous materials as result of the Project would less than significant.	No change. Construction and operation of the Project would adhere to the conditions and materials as analyzed in the Initial Study. Any use or disposal of hazardous materials during construction activities would be conducted according to all applicable local, state, and federal regulations. Impacts would remain less than significant.
Hydrology and Water Quality	Project construction would require approximately 37 acre-feet for construction-related activities and approximately 1 acre-foot per year of water for Project operations. This included approximately 200,000 gallons per year to support water consumption requirements of onsite sheep. Impacts related to water quality or waste discharge are not anticipated with the implementation of the SWPP and construction BMPs. Impacts to water quality or availability as a result of the Project would be less than significant.	No change. Project would have the same water requirements and make use of the same water sources as previously analyzed, which included a provision of water for sheep grazing. BMPs and a SWPPP would be implemented. Impacts would remain less than significant.
Land Use and Planning	Project is consistent with local land use and zoning designations, plans, and policies. The Project would not divide an established community or conflict with a habitat or natural community conservation plan. Potential impacts would be less than significant.	No change. Project would be located on the same parcels as analyzed for the Original Project. Construction and operation of the solar facility is consistent with local plans, policies, and regulations. Impacts would remain less than significant.
Noise	Project construction and operation would not result in the generation of noise levels in excess of established local standards or permanently increase ambient noise levels. Persons would not be subject to excessive noise or groundborne vibrations. Impacts from noise would be less than significant.	No change. Project construction and operation schedule and equipment would not change as result of the footprint modification. Project would not exceed any local noise standards or exposure persons to excessive noise or vibrations.
Population and Housing	Project construction would require an average of 56 workers, and up to 116 workers during peak construction; maintenance would require up to 15 workers onsite periodically throughout the year. Workers would be hired from the local labor pool to the maximum extent practicable. Worker relocation and permanent housing options would not be required; therefore, impacts to population and housing would be less than significant.	No change. Project acreage and capacity are unchanged so the anticipated workforce to construct and operate the Project would be the same as assessed in the IS-MND. Impacts would remain less than significant.

Public Services, Utilities, and Service Systems	Project is not anticipated to increase demand for fire and sheriff protection. Workers associated with the Project are anticipated to come from neighboring communities and would not result in a substantial increase in population that may increase demand for schools, parks, or other public facilities. Water use associated with the Project would be less than historic use for agriculture. Impacts under these criteria would less than significant. Existing waste facilities with sufficient capacity to hand Project waste exist proximate to the Project site; no impacts would occur.	No change. Project acreage and capacity are unchanged so the anticipated workforce, water requirements, and waste generated to construct and operate the Project would be the same as assessed in the IS-MND. Impacts would remain less than significant.
Recreation	Project workforce would not result in a substantial increase in population or demand for recreational facilities in the Project region. Impacts to existing parks would be less than significant. No new recreational facilities, or expansions of existing facilities, would be required.	No change. Project acreage and capacity are unchanged so the anticipated workforce to construct and operate the Project would be the same as analyzed for the Original Project. Impacts would remain less than significant.
Transportation and Traffic	Project is not expected to cause a significant short-term or long-term increase in traffic volumes on area roads due to the nature and scope of the construction and maintenance activities required. Project would implement MM TT-1 to reduce potential impacts to a less than significant level. Project would not result in inadequate parking capacity or conflict with adopted policies or plan supporting alternative transportation.	No change. Project acreage and capacity are unchanged so the anticipated traffic associated with constructing and operating the Project would be the same as analyzed for the Original Project. The Project would adhere to the ingress/egress points evaluated with the Original Project. Impacts would remain less than significant.

CURRENT USE OF SITE: Agricultural production producing various field and row crops.

LAND USE SURROUNDING SITE: The site is surrounded by field and row crop agricultural production to the north, south, and west. The eastern boundary is primarily undisturbed natural habitat.

ENVIRONMENTAL REVIEW:

On April 11, 2012, the environmental review period ended for this proposal. A review of this project in compliance with the *California Environmental Quality Act (CEQA)* indicates that there will not be significant adverse impacts to the environment. Evidence in the record indicates that the project has the potential for adverse effects on agriculture, wildlife, and resources or habitat for wildlife. To mitigate this impact the applicant has incorporated several project design features and mitigation measures that will mitigate the environmental impacts to less than significant. The Initial Study/Mitigated Negative Declaration for CUP 11-06 was certified by the Planning Commission on May 7, 2012, and is hereby incorporated by reference.

California Environmental Quality Act Guidelines Section 15164, found in the California Code of Regulations, allows for an Addendum to an approved IS/MND be prepared when minor technical changes or additions are necessary and if the project does not meet any of the requirements stated in Section 15162. The County has determined that none of the conditions described in Section 15162, calling for the preparation of a subsequent EIR or negative declaration, have occurred as described below:

1. No substantial changes are proposed in the project which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;
2. No substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or
3. No new information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or the negative declaration was adopted, shows any of the following:
    a. The project will have one or more significant effects not discussed in the previous EIR or negative declaration;
    b. Significant effects previously examined will be substantially more severe than shown in the previous EIR or negative declaration;
    c. Mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or
    d. Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR or negative declaration would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

As stated in CEQA section 15164(c), an addendum need not be circulated for public review but can be included in or attached to the final EIR or adopted negative declaration.

PROJECT REVIEW:

<u>Original CUP Application</u>

June 3, 2011	Application submitted
June 17, 2011	Application certified complete
March 12, 2012	Begin 30-day review period for environmental review
April 11, 2012	30 day environmental review period ends
May 7, 2012	Planning Commission hearing

CUP Addendum Application No. 1

May 6, 2013	Application submitted
May 28, 2013	Application certified complete
July 1, 2013	Planning Commission hearing

CUP Addendum Application No. 2

December 9, 2013	Application submitted
December 16, 2013	Application certified complete
January 6, 2014	Planning Commission hearing

STAFF ANALYSIS:

With regard to this addendum, staff comments that:

1. CUP application 11-06 (Kansas) was found to be consistent with both the 2035 Kings County General Plan and Zoning Ordinance on May 7, 2012. This action will: analyze a revision to the Project's CUP that would allow the Project to demonstrate Farmland Security Zone (FSZ) contract compatibility by maintaining reasonably foreseeable agricultural operation onsite determined by site-specific soil and water analysis. Consistent with Kings County Board of Supervisors Resolution No. 13-058, Addendum No. 2 would remove the current CUP's requirement that agricultural compatibility be achieved by maintaining commercial agriculture on a minimum of 90% of the Project site that would provide an economic output similar to the historical economic output of the site. Addendum No. 2 also clarifies the description of the project substation and gen-tie location.

2. All findings and adopted conditions of approval in Resolution No. 12-06 concerning CUP No. 11-06 remains in full force and effect, except for the modifications to Section 3.2.2 of the Initial Study/Mitigated Negative Declaration, the modifications to Finding No. 5 of Planning Commission Resolution No. 12-06, the modification Planning Division Condition Numbers 24 and 27, and the modifications to the Mitigation Monitoring and Reporting Plan as described in Exhibit Numbers 1, 2, 3, and 4 of Planning Commission Resolution No. 14-02.

3. The use should not be detrimental to public health and safety, nor materially injurious to properties in the vicinity. An IS/MND was approved for this Project on May 7, 2012. An addendum to the IS/MND has been prepare to analyze potential environmental impacts associated with CUP 11-06 Addendum No. 2. No potential impacts were identified beyond those identified in the IS/MND. The proposed project may have significant adverse impacts on the environment; however, those impacts can be mitigated to an insignificant level by implementing the adopted project design features and mitigation measures identified in the Mitigation Monitoring and Reporting Plan (MMRP) adopted by the Planning Commission on May 7, 2012, and as modified in Exhibit No. 4 of Planning Commission Resolution No. 14-02. The Original IS/MND and MMRP are incorporated herein by reference. The Addendum to the IS/MND is attached to Planning Commission Resolution No. 14-02 as Exhibit No. 1.

RECOMMENDATIONS:

It is recommended that the Commission approve the proposed Addendum to Conditional Use Permit No. 11-06 as described above and adopt Resolution No. 14-02. Approval of this Resolution will:

1. Find that the proposed Addendum to CUP No. 11-06 will not have significant adverse impacts on the environment, and approves Addendum No. 2 to the adopted ***Mitigated Negative Declaration***.

2. Find that Planning Commission Resolution No. 12-06 concerning CUP No. 11-06 remains in full force and effect, except for the modifications to Section 3.2.2 of the Initial Study/Mitigated Negative Declaration, the modifications to Finding No. 5 of Planning Commission Resolution No. 12-06, the modifications to Planning Division Condition Numbers 24 and 27, and the modifications to the Mitigation Monitoring and Reporting Plan as described in Exhibit Numbers 1, 2, 3, and 4 of Planning Commission Resolution No. 14-02.

3. Approve Addendum No. 2 to CUP No. 11-06 with specified conditions of approval.

PREPARATION:

Prepared by the Kings County Community Development Agency (Sandy Roper) on December 17, 2013. Copies are available for review at the Kings County Community Development Agency, Government Center, Hanford, California, or at the Kings County Clerk's Office, Government Center, Hanford, California.

H:\PLANNING\LAND DEVELOPMENT SECTION\ZONING ADMIN\CUP\2010 TO 2019\2011\CUP 11-06 KANSAS (RECURRENT ENERGY)\ADDENDUM2\CUP 11-06 ADDENDUM 2 SR.DOC

BEFORE THE KINGS COUNTY PLANNING COMMISSION
COUNTY OF KINGS, STATE OF CALIFORNIA

IN THE MATTER OF ADDENDUM NO. 2 TO CONDITIONAL USE PERMIT NUMBER 11-06 (RECURRENT ENERGY)	**RESOLUTION NO. 14-02 RE: RE Kansas, LLC**

WHEREAS, on June 3, 2011, RE Kansas, LLC filed Conditional Use Permit Number 11-06 (Kansas) to establish a solar energy facility; and

WHEREAS, the Kansas solar generation facility (CUP 11-06), as originally approved by the Planning Commission on May 7, 2012, would be approximately 200 acres in size and include solar photovoltaic electrical facilities to support the generation of 20 Megawatts (MW) of renewable energy; and

WHEREAS, the original application was determined to be complete on June 17, 2011; and

WHEREAS, a Notice of Intent to Adopt a Mitigated Negative Declaration was published on March 12, 2012, providing notice that the Initial Study/Mitigated Negative Declaration had been completed for the proposed Project and was available for public review and comment; and

WHEREAS, the Initial Study/Mitigated Negative Declaration which analyzed the environmental impacts associated with the project was circulated for a 30 day public review comment period beginning on March 12, 2012; and

WHEREAS, the Kings County Community Development Agency distributed copies of the Initial Study/Mitigated Negative Declaration to those public agencies that have jurisdiction by law with respect to the Project, as well as to other interested persons and agencies, and sought the comments of such persons and agencies; and

WHEREAS, on April 11, 2012, the thirty day public review period for the proposed Initial Study/Mitigated Negative Declaration for this Project closed; and

WHEREAS, on April 18, 2012, the Kings County Community Development Agency made a recommendation to the Planning Commission that the Initial Study/Mitigated Negative Declaration was adequate; and

WHEREAS, on April 25, 2012, the Kings County Community Development Agency staff notified the applicant of the proposed recommendation on this Project; and

WHEREAS, on May 7, 2012, the Planning Commission held a duly noticed public hearing for CUP Number 11-06 in the Board of Supervisors Chambers of the Kings County Government Center, 1400 W. Lacey Blvd., Hanford, California; and

WHEREAS, at the May 7, 2012, public hearing the Planning Commission received 1) a report presented by County staff that included the staff recommendation, 2) testimony from the applicant, and 3) testimony from members of the general public; and

WHEREAS, the Planning Commission received testimony prior to the close of the public hearing; and

WHEREAS, on May 7, 2012, after the conclusion of public testimony the Planning Commission closed the public hearing and deliberated; and

WHEREAS, on May 7, 2012, the Kings County Planning Commission approved CUP Number 11-06 and made the following findings and certifications with regards to the California Environmental Quality Act: (1) The Planning Commission reviewed and considered the Initial Study/Mitigated Negative Declaration before approving the project; (2) Based on the whole record before it, including the Initial Study/Mitigated Negative Declaration, there was no substantial evidence in the record that the proposed Project would have a significant effect on the environment; (3) The Initial Study/Mitigated Negative Declaration for this Project was completed in compliance with CEQA and was determined to be adequate; and (4) The Initial Study/Mitigated Negative Declaration reflected the Planning Commission's independent judgment and analysis; and

WHEREAS, the Initial Study/Mitigated Negative Declaration identified certain significant effects on the environment that, absent the adoption of mitigation measures, would be caused by the construction and operation of the Project; and

WHEREAS, the Planning Commission was required, pursuant to CEQA, to adopt all feasible mitigation measures or feasible project alternatives that can substantially lessen or avoid any significant project-related environmental effects; and

WHEREAS, the Planning Commission was required by Public Resources Code Section 21081.6, subdivision (a), to adopt a Mitigation Monitoring and Reporting Plan to ensure that the mitigation measures adopted by the County are actually carried out; and

WHEREAS, as demonstrated by the Mitigation Monitoring and Reporting Plan, attached as Attachment "A" to Planning Commission Resolution 12-06, all of the Project's significant environmental effects could be either substantially lessened or avoided through the adoption of feasible mitigation measures; and

WHEREAS, on May 6, 2013, CUP Addendum No. 1 was received to revise CUP 11-06 (RE Kansas, LLC) to simply revise the CUP boundaries to match the final project footprint boundaries and to provide a time extension for the applicant allowing the applicant more time to obtain contracts and permits from PG&E and state agencies; and

WHEREAS, the revision would exclude acreage supporting water ditches and canals used by the current property owner and/or the Lemoore Canal District located along the southern border of the Project site and the footprint of the Project would remain at 200 acres; and

WHEREAS, the California Environmental Quality Act (CEQA) Guidelines Section 15164, found in the California Code of Regulations, allows for an addendum to an approved IS/MND be prepared when minor technical changes or additions are necessary and if the project does not meet any of the requirements stated in Section 15162; and

WHEREAS, the CUP revision application included Addendum No. 1 to the IS/MND originally approved for CUP 11-06; and

WHEREAS, the County determined that none of the conditions described in Section 15162 calling for the preparation of a subsequent EIR or negative declaration have occurred; and

WHEREAS, CEQA section 15164(c) states that an addendum need not be circulated for public review but can be included in or attached to the final EIR or adopted negative declaration; and

WHEREAS, the Planning Commission has reviewed Addendum No. 1 in its entirety, and determined that the document reflects the independent judgment of the Commission; and

WHEREAS, on July 1, 2013, the Planning Commission held a duly noticed public hearing for Addendum No. 1 to CUP Number 11-06 in the Board of Supervisors Chambers of the Kings County Government Center, 1400 W. Lacey Blvd., Hanford, California; and

WHEREAS, on July 1, 2013, after the conclusion of public testimony the Planning Commission closed the public hearing and deliberated; and

WHEREAS, on July 1, 2013, the Planning Commission adopted Resolution No. 13-06 approving Addendum No. 1 to CUP No. 11-06; and

WHEREAS, on November 26, 2013, the Board of Supervisors adopted Resolution No. 13-058 amending Section "I" of that part of the Implementation Program entitled "County of Kings Implementation Procedures for the California Land Conservation 'Williamson' Act of 1965 Including Farmland Security Zones" and determined that it is reasonably foreseeable that certain parcels located south of State Highway 198 and west of State Highway 41 that currently are used for more intensive agricultural activities will be used in the near future for less intensive uses, including dry farm seasonal grazing; and

WHEREAS, on November 26, 2013, the Board of Supervisors determined that a solar generation facility maintaining a concomitant agricultural use such as dry farm seasonal grazing or a similar agricultural activity may be deemed a compatible use within this region of the County if the applicant provides a soil reclamation plan and financial assurances, and if a finding can be made, based upon substantial evidence, and taking into account surface water availability, ground water quality and availability, and soil conditions, that the proposed concomitant commercial agricultural operation is a reasonably foreseeable use of the land; and

WHEREAS, on December 6, 2013, Addendum No. 2 to CUP No. 11-06 was received to revise CUP 11-06 (RE Kansas LLC) to simply shift the location of the substation within the previously considered CUP boundaries; to extend the gen-tie an additional 100 feet within the previously evaluated CEQA footprint; to provide substantial evidence that surface water availability, soil conditions, and groundwater availability make dry farm seasonal grazing a reasonably foreseeable agricultural use of the

land such that Project could meet the principles of compatibility with an FSZ contract pursuant to Government Code Section 51238.1 with the implementation of dry farm seasonal sheep grazing; to modify Planning Division Condition Numbers 24 and 27; and to modify Mitigation Measure AG-3; and

WHEREAS, Addendum No. 2 is attached to this resolution as Exhibit No. 1; and

WHEREAS, modifications to the Williamson Act consistency findings in Section 3.2.2 of the Initial Study/Mitigated Negative Declaration are attached to this resolution as Exhibit No. 2 and the modifications are shown in track changes mode, with deletions shown with ~~red strikethrough~~ and additions shown with red underline; and

WHEREAS, modifications to the Williamson Act consistency findings in Section 6 of Planning Commission Resolution No. 12-06 are attached to this resolution as Exhibit No. 3 and the modifications are shown in track changes mode, with deletions shown with ~~red strikethrough~~ and additions shown with red underline; and

WHEREAS, modifications to Planning Division Condition Numbers 24 and 25 of Planning Commission Resolution No. 12-06 are listed below and the modifications are shown in track changes mode, with deletions shown with ~~red strikethrough~~ and additions shown with red underline:

24. If Cancellation of Farmland Security Zone Contract No. 201 or conversion into a "Solar Use Easement" fails, and the applicant chooses to continue with the project by continuing to farm ~~at least 90% of the land~~a reasonably foreseeable agricultural use, then the applicant shall submit an Agricultural Management Plan (AMP) to the Kings County Community Development Agency for approval prior to the issuance of building permits. The AMP shall include all of the information specified in Addendum No. 2 for CUP No. 11-06.

27. If the applicant 1) does not continue ~~an intensive agricultural operation~~ a reasonably foreseeable agricultural use on the project site ~~at an intensity equivalent to the existing agriculture use of the project site~~ for the entire life of the project, ~~and if the applicant~~ or 2) is successful in cancelling the Farmland Security Zone contract, or 3) is successful in entering into a "Solar Use Easement," the applicant shall then provide written evidence of funding and/or purchase of agricultural mitigation land (which will be managed and maintained by an appropriate entity) for the life of the project to mitigate the loss of Farmland of Statewide Importance at a ratio of 1:1. Every acre of agricultural land removed from production would be mitigated by the applicant. The agricultural land preserved shall be of equal or greater quality as defined by the California Department of Conservation Farmland Mapping and Monitoring Program (i.e., if Farmland of Statewide Importance is converted to solar then the agricultural land preserved must not be in a classification indicating a lower quality than Farmland of Statewide Importance).

WHEREAS, modifications to the Mitigation Monitoring and Reporting Plan are attached to this resolution as Exhibit No. 4 and the modifications are shown in track changes mode, with deletions shown with ~~red strikethrough~~ and additions shown with red underline; and

WHEREAS, the California Environmental Quality Act (CEQA) Guidelines Section 15164, found in the California Code of Regulations, allows for an addendum to an approved IS/MND be prepared when minor technical changes or additions are necessary and if the project does not meet any of the requirements stated in Section 15162; and

WHEREAS, the County determined that none of the conditions described in Section 15162 calling for the preparation of a subsequent EIR or negative declaration have occurred; and

WHEREAS, CEQA section 15164(c) states that an addendum need not be circulated for public review but can be included in or attached to the final EIR or adopted negative declaration; and

WHEREAS, the Planning Commission has reviewed Addendum No. 2 in its entirety, and determined that the document reflects the independent judgment of the Commission; and

WHEREAS, on January 6, 2014, the Planning Commission held a duly noticed public hearing for Amendment No. 2 to CUP Number 11-06 in the Board of Supervisors Chambers of the Kings County Government Center, 1400 W. Lacey Blvd., Hanford, California; and

WHEREAS, on January 6, 2014, after the conclusion of public testimony the Planning Commission closed the public hearing and deliberated; and

NOW, THEREFORE, BE IT RESOLVED AND CERTIFIED, by the Kings County Planning Commission that:

I. SECTION 1: Recitals

1. The above recitals are true and correct, and the Planning Commission hereby so finds.

II. SECTION 2: Findings Related to Prior Proceedings

1. An Initial Study/Mitigated Negative Declaration was duly prepared, properly circulated, and completed in accordance with California Environmental Quality Act of 1970 (California Public Resources Code Section 21000 et seq.), as amended, and the State Guidelines thereto (California Code of Regulations Section 15000 et seq.), and approved by the Kings County Planning Commission for the proposed Project by the Lead Agency on May 7, 2012.

2. The Initial Study/Mitigated Negative Declaration was presented to this Commission, and it was independently reviewed and considered by this Commission prior to acting on the proposed Project as was originally presented on May 7, 2012.

3. The Mitigated Negative Declaration for the Project was properly completed and identified all significant environmental effects of the Project, and there are no known potential environmental effects that are not addressed in the Mitigated Negative Declaration.

4. The Project incorporated project design features and mitigation measures to eliminate significant impacts or to reduce such impacts to a level of insignificance in all instances.

5. The proposed Project may have significant adverse impacts on the environment. However, those impacts would be mitigated to an insignificant level by implementing the mitigation monitoring and reporting program attached to Planning Commission Resolution 12-06 as Attachment "A." Based on the whole record, including the Initial Study/Mitigated

Negative Declaration and its Addendum, there is no substantial evidence that the proposed Project will have a significant effect on the environment. The Initial Study/Mitigated Negative Declaration and its Addendum reflects the Planning Commission's independent judgment and analysis.

6. The Planning Commission used its own independent judgment in adopting Resolution Number 12-06, in approving the Project, in adopting and certifying the Initial Study/Mitigated Negative Declaration and Addendum No. 1, and in adopting the Mitigation Monitoring and Reporting Plan.

III. SECTION 3: Acceptance of Addendum No. 2 to the Initial Study/Mitigated Negative Declaration

1. Addendum No. 2 to the adopted Initial Study/Mitigated Negative Declaration (IS/MND) for CUP 11-06 has been prepared in accordance with California Environmental Quality Act (CEQA) Guidelines Section 15164, found in the California Code of Regulations, which allows for an Addendum to an approved IS/MND be prepared when minor technical changes or additions are necessary and if the project does not meet any of the requirements stated in Section 15162.

2. It is hereby determined that none of the conditions described in Section 15162 calling for the preparation of a subsequent EIR or negative declaration have occurred.

3. It is hereby determined that Addendum No. 2 has been completed in compliance with CEQA and is adequate.

4. It is hereby determined that Addendum No. 2 has been presented to the Planning Commission, which has reviewed and considered the information and analysis contained therein.

5. It is hereby determined that Addendum No. 2 reflects the independent judgment of the Planning Commission of the County of Kings.

6. The Planning Commission herby attaches Addendum No. 2 to the previously approved IS/MND for CUP 11-06.

7. The Planning Commission authorizes and directs County staff to make Addendum No. 2 available to the public and have it retained, along with the original IS/MND and Addendum No. 1, at the office of the Kings County Community Development Agency.

IV. SECTION 4: Existing Conditions of Approval and CUP Time Extension

1. All findings and adopted conditions of approval in Planning Commission Resolution No. 12-06 concerning CUP No. 11-06 remain in full force and effect, except as modified herein.

2. CUP No. 11-06 shall lapse and become null and void three (3) years following the date that Resolution No. 14-02 is adopted, unless prior to the expiration of three (3) years a building permit is issued by the Building Official and construction is commenced and diligently pursued toward completion on the site that was subject of the Conditional Use Permit application. This Conditional Use Permit may be renewed for additional periods of time, if an application (by letter) for renewal of the Conditional Use Permit is filed with the Planning Commission prior to the permit's expiration date.

The foregoing Resolution was adopted on a motion by Commissioner _____ and seconded by Commissioner _____, at a regular meeting held on January 6, 2014 by the following vote:

AYES: COMMISSIONERS
NOES: COMMISSIONERS
ABSTAIN: COMMISSIONERS
ABSENT: COMMISSIONERS

KINGS COUNTY PLANNING COMMISSION

_____
R.G. Trapnell, Chairperson

WITNESS, my hand this ____ day of _____, 2014.

_____
Gregory R. Gatzka
Secretary to the Commission

cc: Kings County Board of Supervisors
Kings County Counsel
Kings County Community Development Agency – Building Division
Kings County Public Works Department
Kings County Fire Department
Kings County Health Department – Division of Environmental Health Services
California Department of Fish and Game, Lori Bono, 1234 E. Shaw Ave., Fresno, CA 93710
Recurrent Energy, Seth Israel, 300 California Street, 7th Floor, San Francisco, CA 94104

EXHIBIT NO. 1

KINGS COUNTY COMMUNITY DEVELOPMENT AGENCY

RE Kansas LLC
Solar Generation Facility

Addendum to the Mitigated Negative Declaration

December 2013

RE Kansas LLC Solar Generation Facility
Mitigated Negative Declaration Addendum

State Clearinghouse Number: 2012031029
CUP No. 11-06; Resolution No. 12-06 and Resolution No. 13-06
Assessor Parcel Numbers: 024-100-006 and 024-100-015

Lead Agency Name and Address

Kings County Community Development Agency
Kings County Government Center
1400 West Lacey Boulevard
Hanford, CA 93230

Lead Agency Contact Person and Phone Number

Sandy Roper, Principal Planner
(559) 852-2685

Project Sponsor's Name and Address

RE Kansas LLC
300 California St. 7th Floor
San Francisco, CA 94104

Seth Israel, Vice President, Real Estate and Early Stage Development
Phone: (415) 501-9406
sites_permitting@recurrentenergy.com

I. INTRODUCTION

This addendum assesses the environmental impacts of the proposed revisions to a Conditional Use Permit to establish a 20-MW photovoltaic (PV) solar power electric generation facility (Project), as required by the California Environmental Quality Act (CEQA) (California Public Resources Code 21000 et seq.) and in compliance with the State CEQA Guidelines (14 California Code of Regulations 15000 et seq.). The original Conditional Use Permit ("CUP") was approved by the Kings County (County) Planning Commission on May 7, 2012 (Resolution No. 12-06). The CUP was amended by the Planning Commission on July 1, 2013 (Resolution No. 13-06) to revise the approved acreage allotment per APN while maintaining a total Project footprint of 200 adjacent acres on APNs 024-100-006 and 024-100-015.

The County, as the lead agency under CEQA, will consider the potential environmental impacts of the revised Project when it considers whether or not to approve these changes as part of the original Project. This Addendum is an informational document, intended to be used in the planning and decision making process as provided for under Section 15164 of the CEQA Guidelines.

The conclusion of this addendum is that the proposed changes to the Original Project will not result in new significant impacts nor substantially increase the severity of previously disclosed impacts beyond those already identified in the Original Project.

II. STATUTORY BACKGROUND

This Addendum demonstrates that the environmental analysis, impacts, and mitigation requirements identified in the Mitigated Negative Declaration for the RE Kansas LLC Solar Generation Facility remains substantively unchanged, and supports the finding that the revisions to the Project do not constitute substantial changes to the Project or provide new information of substantial importance with regard to new or more significant impacts than those identified in the Mitigated Negative Declaration. There have been no changes in circumstances or disclosures of new information, as defined by CEQA Guidelines Section 15162 or any other factors that would require the preparation of a Subsequent or Supplemental Negative Declaration or the preparation of an Environmental Impact Report for the Project.

The County has determined that an Addendum is the appropriate environmental document pursuant to CEQA Guidelines Section 15164, which provides that:

1. The lead agency or a responsible agency shall prepare an addendum to a previously certified Environmental Impact Report (EIR) if some changes or additions are necessary, but none of the conditions described in Section 15162 calling for the preparation of a subsequent EIR have occurred.
2. An addendum to an adopted negative declaration may be prepared if only minor technical changes or additions are necessary and none of the conditions described in Section 15162 calling for the preparation of a subsequent EIR or negative declaration have occurred.
3. An addendum need not be circulated for public review, but can be included in or attached to the final EIR or adopted negative declaration.
4. The decision-making body shall consider the addendum with the final EIR or adopted negative declaration prior to making a decision about the Project.

5. A brief explanation of the decision not to prepare a subsequent EIR pursuant to Section 15162 should be included in an addendum to an EIR, the lead agency's required findings on the project, or elsewhere in the record. The explanation must be supported by substantial evidence.

This addendum considers the new project elements. If the County declined to approve these new project elements, there would be no effect on the already approved Projects.

III. ORIGINAL PROJECT DESCRIPTION

The Mitigated Negative Declaration (MND) for the Project was prepared to analyze the potential environmental impacts of the proposed development of a 20-MW solar PV generation facility (SGF) located on 200 acres in an unincorporated area of Kings County, California. The SGF Project site is bounded by agricultural farmland on the east and north, Jersey Avenue on the south, and 21st Avenue on the west. The MND specified that 20 acres of the 200-acre Project footprint would be built on the 20-acre APN 024-100-006 and 180 acres of the 200-acre Project footprint would be built on the 614.83-acre APN 024-100-015. An addendum to the MND, which was adopted and incorporated into the MND by Resolution 13-06, revised the approved acreage allotment per APN while maintaining a total Project footprint of 200 adjacent acres. Throughout this document, the term "Original Project" shall mean the Project as described in the MND and revised by the addendum approved by Resolution 13-06. The Original Project consisted of three main components:

1. Solar panels, inverters, intermediate-voltage transformers, access roads, and electrical wiring necessary for collecting and consolidating power across the Project site.
2. A medium-voltage substation, which would receive intermediate voltage input from the collection system and step up the voltage to 115 kilovolts (kV) via a high-voltage transformer bank.
3. The interconnection from the SGF to a local electrical power line, which would consist of a short (100- to 200-foot) generation tie line.

Operation and maintenance (O&M) activities would be managed remotely and no on-site O&M facilities are proposed as part of the Project. The Project would contract with a regional (O&M) provider, who may lease warehouse and office space in an existing facility in the surrounding community. The regional O&M provider would use this existing facility to store tools, equipment, and supplies necessary for scheduled and unscheduled maintenance, including but not limited to spare parts for inverters, electrical infrastructure, panels, and tracking systems.

Farmland Security Zone Contracts

The Original Project site is located on land currently under a 20-year Farmland Security Zone (FSZ) contract pursuant to the Land Conservation "Williamson" Act of 1965. The applicant would fulfill one of three options to reduce impacts related to the Williamson Act. The applicant intends to either cancel the FSZ contract or convert the FSZ contract into a "Solar Use Easement" under Government Code Section 51255.1 (Senate Bill 618). If either of these two options is successful the applicant will not continue an agricultural operation on the site during the duration of the Project life. The third option will only be pursued if cancellation and the "Solar Use Easement" are unsuccessful. The third option is to maintain an agricultural use on the Project site that is consistent with the principles of compatibility and

performance standards outlined in Government Code section 51238.1. The specifics of the potential agricultural operations would be detailed in an Agriculture Management Plan, subject to review by Kings County staff.

Approval of the Original Project

The original CUP was approved by the County Planning Commission in May 7, 2012 (CUP No. 11-06, Resolution 12-06). The amended CUP was approved by the County Planning Commission on July 1, 2013 (CUP No. 11-06, Resolution 13-06).

IV. MODIFIED PROJECT DESCRIPTION

This Addendum analyzes a revision to the Project's CUP that would allow the Project to demonstrate FSZ contract compatibility by maintaining reasonably foreseeable agricultural operations onsite determined by site-specific soil and water analysis. Consistent with Kings County Board of Supervisors Resolution 13-058, this amendment would remove the current CUP's requirement that agricultural compatibility be achieved by maintaining commercial agriculture on a minimum of 90% of the Project site that would provide an economic output similar to the historical economic output of the site. The Addendum also clarifies the description of the project substation and gen-tie location.

Table 1 summarizes how these were described in the original MND and are assessed in this Addendum.

Table 1 Summary of Proposed Modifications to the Project

Project Component	**Original Project MND modified by Res. 13-06**	**Modified Project Assessed in this Addendum**
Substation and gen-tie line	A project substation in the northwest corner of the project with a 100-200 ft. gen-tie to a local power line	A project substation in the southwest corner of the project with an approximately 300 ft. gen-tie to a local power line
Method of maintaining compatibility with an FSZ contract	The project would maintain an intensive agricultural operation on 90 percent of the project site that would provide an economic output similar to the historical economic output of the project site.	Pursuant to Resolution 13-058, each SGF would maintain an onsite reasonably foreseeable agricultural operation determined by site specific soil and water analysis.

SUBSTATION AND GENERATION-TIE LINE

The revised Project will remain a 20-MW solar facility on 200 acres of disturbed agricultural land and will connect into a local electrical power line. The main Project components listed above would apply to the revised Project; no changes to the type of Project infrastructure, construction, maintenance, or use of the facility as described for the Original Project would occur. The location of the substation and gen-tie described in the Original Project would shift from the northwest corner of the Project site to the southwest corner to maximize reliability of the electrical transmission system. The substation would remain within the previously analyzed Original Project footprint. The substation would connect to the existing local electrical power line along either 21st Avenue or Jersey Avenue. The shift in substation location will require the gen-tie line to extend approximately 300 ft. from the substation to the existing power line to accommodate the existing ditch and canal infrastructure. The modified substation and gen-tie line location would maintain the same proposed height, materials, and ground-disturbing activities as previously analyzed for the Original Project. The modified Project substation and gen-tie line would fall on land under the same agricultural use and cultivation practices as the Project footprint assessed within the MND. Additionally, the modified Project footprint falls within the biological and cultural resources survey boundary; thus, the analysis and impact discussion for biological and cultural resources found in the MND also pertains to the revised Project footprint. The revised location of the substation and the gen-tie line will remain consistent with the approved CUP and will not cause any changes to the Conditions of Approval and Mitigation Measures that were previously approved by the County Planning Commission.

METHOD OF MAINTAINING COMPATIBILITY WITH AN FSZ CONTRACT

The revised Project is located on land subject to a Farmland Security Zone (FSZ) contract. A solar facility to be located on Williamson Act or FSZ contracted land may only receive a conditional use permit if it meets the principles of compatibility under Government Code Section 51238.1.a, or if the contract is proposed for cancellation, or is eligible and converts to a Solar Use Easement. The Project applicant would fulfill one of three options to meet the requirements of the Zoning Ordinance and ensure the Project has no significant impacts related to the Williamson Act: Option 1) cancel the FSZ contract, Option 2) convert the FSZ contract into a "Solar Use Easement" pursuant to Government Code Section 51255.1 (Senate Bill 618), or Option 3) maintain a use onsite that meets the principles of compatibility pursuant to Government Code Section 51238.1(a) by maintaining reasonably foreseeable agricultural operations onsite as determined by site-specific soil and water analysis. As part of this revised Project description, the Project applicant may pursue these options in any order, such that an attempt to cancel or convert the FSZ contracts (Options 1 and 2) would not need to occur prior to pursuing compatibility (Option 3).

On November 26, 2013, the Board of Supervisors adopted Resolution No. 13-058, recognizing that circumstances exist on agricultural preserves located within that portion of Kings County south of State Route 198, west of State Route 41, and east of I-5, including water availability and soil conditions that limit the reasonably foreseeable agricultural use of certain parcels. If specified findings can be made, compatibility of solar development with certain reasonably foreseeable agricultural uses can be achieved.

Consistent with Resolution No. 13-058, should Option 3 be pursued, the Project applicant shall provide an Agriculture Management Plan (AMP) which will detail how the Project owner/operator will ensure an onsite use that is consistent with the principles of compatibility outlined in Government Code section

51238.1. As modified in this Addendum, and to ensure the compatibility threshold is met, the AMP shall be required for the life of the contract(s) and shall include the following information:

1) A written narrative demonstrating that agricultural practices would be limited due to chemical or physical limitations to the soils (including drainage), insufficient water availability, and/or compromised water quality that would reduce agricultural productivity. Evidence to support this narrative shall be provided in the form of:
    a) A recent soils test demonstrating that the characteristics of the soil significantly reduce its agricultural productivity, and/or
    b) An analysis of water availability demonstrating the insufficiency of water supplies for continued agricultural production, and/or
    c) An analysis of water quality demonstrating that continued agricultural production would be significantly reduced, and/or
    d) Site-pertinent reports, findings, or resolutions adopted by local, state, or federal government (and associated agencies) documenting circumstances contributing to reduced agricultural viability of the Project site and/or other beneficial purpose to neighboring agricultural land due to a non-agricultural use of the site.

2) A description of the intended agricultural operation on the site, including:
    a) Type of agricultural activity onsite (e.g., sheep grazing)
    b) Method of maintaining agricultural production (e.g., dryland pasture species groundcover and method of application)
    c) An annual monitoring and reporting plan documenting onsite agricultural use
3) If available, a description of how the onsite use is benefitting offsite agricultural uses, including:
        i. Reducing the presence of salts, pollutants, or other constituents in neighboring parcels by prohibiting onsite irrigation.
        ii. Increasing the availability of water for other agricultural users within the same water district by prohibiting onsite irrigation.

This Addendum provides site specific evidence of impaired soil quality and drainage on the Project site, as well as severe limitations to surface water allocations, as evidence that a foreseeable agricultural operation on the Project footprint is seasonal sheep grazing. A full soil and water analysis conducted by Provost & Pritchard Consulting Group and Dellavalle Labs Inc. for the SGF may be found in Appendix A. A summary of the findings can be found in Table 3.

Table 3: Agricultural Limitations of the Project Site

Project Site Characteristics	Description of Issues
Soil Conditions	
Quality	**Soils are sodic and saline**. Agricultural limitations due to high concentrations of boron and sodium.
Drainage	**Drainage limitations due to insufficient water.** Large quantities of surface water are required to leach soil contaminants from the Site. Soil salinity conditions are expected to increase due to lack of adequate surface water.
Water Availability	

Surface Water (provided by Lemoore Canal Irrigation Company)	**Consistently limited surface water availability.** Allocation from Lemoore Canal Irrigation Company in 2012 was 49% (1.4 acre-feet per acre). In years of 100% flow from Kings River, the Site's allocation from Lemoore Canal Irrigation District is ~50% of the water required to support sustainable and economically viable agricultural yields. Site requires minimum of 4 acre-feet/acre to support sustainable agricultural production
Groundwater	**Significant limitations due to groundwater availability.** The Site is unable to receive groundwater for agricultural purposes due to no proximate groundwater wells.
Water Quality	
Surface Water	The Irrigated Lands Regulatory Program of the California Valley Regional Water Quality Control Board has identified typical irrigated farming practices necessary to drain soil elements away from the crop root zone are as wastewater discharge.
Groundwater	No groundwater is applied to the Site and a groundwater well is not available for water quality testing; however, wells in the project region are subject to high boron and sodium levels.

The 2012 MND included sheep grazing as a potential future agricultural use of the site and the additional soil and water data provided in the Addendum confirm that seasonal sheep grazing is reasonably foreseeable agricultural use, and therefore, would allow for the Project to be compatible with the FSZ contracts. Upon completion of construction activities, each SGF would be revegetated with an appropriate seed mixture that would (1) reduce the presence of weeds on the site, (2) be rain-fed, and (3) provide nutritional value for sheep. No irrigation would be required to maintain the onsite agricultural use. Water for consumption by the sheep was included in the calculations of water use during operations; the presence of sheep onsite does not introduce a new water requirement not previously analyzed in the MND. The SGF applicant would be required to obtain approval from the Community Development Agency of an AMP meeting the requirements described above prior to receiving building permits.

Unavailability of surface water is the primary limiting factor to productive agriculture in the region. Removing this Site from agricultural production for solar would increase the percentage of water available for other agricultural parcels able to support higher value crops. The modified Project would accommodate for the placement of the solar project on land subject to agricultural limitations and ensure the Project site contributes to the agricultural system, to maintain compatibility with the Farmland Security Zone Contract and complying with the County's Zoning Ordinance.

V. IMPACT ANALYSIS

The initial study has been reviewed in conjunction with the revised Project and the County has determined that none of the conditions described in the CEQA Guidelines Section 15162 calling for the preparation of a subsequent EIR or negative declaration have occurred. Instead:

1. No substantial changes are proposed in the Project which will require major revisions of the negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;
2. No substantial changes occur with respect to the circumstances under which the Project is undertaken which will require major revisions of the negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or
3. No new information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous negative declaration was adopted, and none of the following apply:
    a. The Project will have one or more significant effects not discussed in the negative declaration;
    b. Significant effects previously examined will be substantially more severe than shown in the negative declaration;
    c. Mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the Project, but the Project proponents decline to adopt the mitigation measure or alternative; or
    d. Mitigation measures or alternatives which are considerably different from those analyzed in the negative declaration would substantially reduce one or more significant effects on the environment, but the Project proponents decline to adopt the mitigation measure or alternative.

As required by CEQA Guidelines Section 15162, the County has evaluated each of these circumstances below.

COMPARISON OF THE ORIGINAL AND MODIFIED PROJECT

Table 4: Comparison of the Original and Modified Project and Cumulative Impacts

Potential for Project and Cumulative Impacts	MND Conclusion, as Approved by Resolutions 12-06 and 13-06	Modified Project
Aesthetics	Project would not substantially degrade existing visual quality of the site and surroundings as the scenic value of the area is low. Impacts would less than significant.	No change. Project elements are unchanged and the modified location of the substation and gen-tie line remain within a land use area characterized by low vividness, intactness, and unity. Impacts would remain less than significant.
Agriculture	Project would remove 200 acres of Farmland of Statewide Importance from agricultural use.	Impacts remain less than significant with mitigation. Minor

	Project would implement Mitigation Measures (MMs) AG 1-3 and impacts would be less than significant. The Project site is subject to a Farmland Security Zone (FSZ) contract; Project would pursue one of three options to reduce potential impacts to less than significant.	technical changes to clarify how the Project would maintain compatibility with an FSZ contract. Additional environmental analysis on this topic area can be found below.
Air Quality	Emissions generated during Project construction and operation would be less than the significance thresholds for criteria pollutants. Impacts to air quality would be less than significant.	No change. Project would require the same number of employees and vehicles during Project construction and operation. Existing and proposed land use is equivalent as well. Impacts would remain less than significant.
Biology	Implementation of the MMs Bio 1-7 addressing biological resources would be sufficient to protect special status plants and animals, as well as other common wildlife, found in the SGF Project area, and would reduce potential impacts to less-than-significant levels. Plants of certain special status species have potential to occur within the drainages in and adjacent to the Project area.	No change. Project would adhere to the same MMs and impacts would remain less than significant.
Cultural Resources	A historical record search identified no cultural resources within the SGF area and agricultural activity has disturbed the surface of the SGF area. Ground-disturbing activities associated with the construction phase of the SGF Project could impact unknown cultural resources. Implementation of MMs CR-1 through CR-4 would address impacts to potential historical, archaeological, and paleontological resources during Project construction activities. Therefore, potential impacts under this criterion would be reduced to less than significant levels with mitigation.	No change. The modified location of substation and gen-tie line was evaluated in the cultural resources section of the MND. Project would implement MMs CR 1-4 and impacts would be less than significant.
Geology	Project is not located within an Alquist-Priolo Earthquake Fault Zone. Project would adhere to all federal, state, and local ordinances. Impacts would be less than significant.	No change. Project would occur on the same geologic conditions and would adhere to all federal, state, and local ordinances. Impacts would remain less than significant.
Greenhouse Gases	Project would result in a minor but beneficial impact, and a less than significant adverse impact.	No change. The total energy production capacity and life of the Project remains identical to the Original Project. Impacts would remain less than significant.
Hazards and Hazardous	Hazardous and other materials would be used during construction and operation of the	No change. Construction and operation of the Project would

Materials	Project. Any use or disposal of hazardous materials during construction activities would be conducted according to all applicable local, state, and federal regulations. Potential impacts from the use of or exposure to hazards and hazardous materials as result of the Project would less than significant.	adhere to the conditions and materials as analyzed in the Initial Study. Any use or disposal of hazardous materials during construction activities would be conducted according to all applicable local, state, and federal regulations. Impacts would remain less than significant.
Hydrology and Water Quality	Project construction would require approximately 37 acre-feet for construction-related activities and approximately 1 acre-foot per year of water for Project operations. This included approximately 200,000 gallons per year to support water consumption requirements of onsite sheep. Impacts related to water quality or waste discharge are not anticipated with the implementation of the SWPP and construction BMPs. Impacts to water quality or availability as a result of the Project would be less than significant.	No change. Project would have the same water requirements and make use of the same water sources as previously analyzed, which included a provision of water for sheep grazing. BMPs and a SWPPP would be implemented. Impacts would remain less than significant.
Land Use and Planning	Project is consistent with local land use and zoning designations, plans, and policies. The Project would not divide an established community or conflict with a habitat or natural community conservation plan. Potential impacts would be less than significant.	No change. Project would be located on the same parcels as analyzed for the Original Project. Construction and operation of the solar facility is consistent with local plans, policies, and regulations. Impacts would remain less than significant.
Noise	Project construction and operation would not result in the generation of noise levels in excess of established local standards or permanently increase ambient noise levels. Persons would not be subject to excessive noise or groundborne vibrations. Impacts from noise would be less than significant.	No change. Project construction and operation schedule and equipment would not change as result of the footprint modification. Project would not exceed any local noise standards or exposure persons to excessive noise or vibrations.
Population and Housing	Project construction would require an average of 56 workers, and up to 116 workers during peak construction; maintenance would require up to 15 workers onsite periodically throughout the year. Workers would be hired from the local labor pool to the maximum extent practicable. Worker relocation and permanent housing options would not be required; therefore, impacts to population and housing would be less than significant.	No change. Project acreage and capacity are unchanged so the anticipated workforce to construct and operate the Project would be the same as assessed in the IS-MND. Impacts would remain less than significant.

Public Services, Utilities, and Service Systems	Project is not anticipated to increase demand for fire and sheriff protection. Workers associated with the Project are anticipated to come from neighboring communities and would not result in a substantial increase in population that may increase demand for schools, parks, or other public facilities. Water use associated with the Project would be less than historic use for agriculture. Impacts under these criteria would less than significant. Existing waste facilities with sufficient capacity to hand Project waste exist proximate to the Project site; no impacts would occur.	No change. Project acreage and capacity are unchanged so the anticipated workforce, water requirements, and waste generated to construct and operate the Project would be the same as assessed in the IS-MND. Impacts would remain less than significant.
Recreation	Project workforce would not result in a substantial increase in population or demand for recreational facilities in the Project region. Impacts to existing parks would be less than significant. No new recreational facilities, or expansions of existing facilities, would be required.	No change. Project acreage and capacity are unchanged so the anticipated workforce to construct and operate the Project would be the same as analyzed for the Original Project. Impacts would remain less than significant.
Transportation and Traffic	Project is not expected to cause a significant short-term or long-term increase in traffic volumes on area roads due to the nature and scope of the construction and maintenance activities required. Project would implement MM TT-1 to reduce potential impacts to a less than significant level. Project would not result in inadequate parking capacity or conflict with adopted policies or plan supporting alternative transportation.	No change. Project acreage and capacity are unchanged so the anticipated traffic associated with constructing and operating the Project would be the same as analyzed for the Original Project. The Project would adhere to the ingress/egress points evaluated with the Original Project. Impacts would remain less than significant.

ENVIRONMENTAL ANLSYIS OF KEY TOPIC AREAS

Agriculture and Forest Resources

The Project footprint for the modified Project description is unchanged from the Original Project and is located on 200 acres of disturbed agricultural land in unincorporated Kings County, approximately 3 miles north of the community of Stratford, 2 miles southeast of NAS Lemoore, and 1.5 miles southwest of the City of Lemoore. The 2035 Kings County General Plan Land Use Element's land use designation for the SGF site is General Agriculture (AG), 20 acre minimum, and the zoning designation is General Agricultural (AG-20) (Kings County CDA 2008, 2010). The Project site has a 2008 California Farmland Mapping and Monitoring Program (FMMP) designation of Farmland of Statewide Importance (California Department of Conservation 2008). The site is subject to Farmland Security Zone Contract No. 201.

As explained below, this Addendum concludes that the modified Project will not result in substantially more adverse significant impacts to agriculture and forest resources:

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?

LESS THAN SIGNIFICANT IMPACT WITH MITIGATION. Addendum No. 1, which was approved when the Planning Commission adopted Resolution 13-06, made minor alterations to the site plan to accommodate the 108 foot shift to the north of the southernmost border of the Project in order to exclude acreage supporting water ditches and canals used by the current property owner and/or the Lemoore Canal District located along the southern border of both APNs. Addendum No. 1 also provided a three (3) year extension of time. The Original MND, the modifications made by Addendum No. 1, and the modifications made by Addendum No. 2 have all determined that implementation of the project would result in less than significant impacts with mitigation. The modified Project would have similar impacts as the Original Project under this criterion as no change to the Project footprint or type of infrastructure is proposed.

To address the Farmland Security Zone Contract on the Project site, the Project applicant has proposed in the modified Project description to do one of three options: 1) cancel the FSZ Contract, 2) convert the FSZ Contract to a Solar Use Easement, or 3) maintain a use onsite that meets the principles of compatibility pursuant to Government Code Section 51238.1(a). Cancellation, conversion to a Solar Use Easement, or meeting the principles of compatibility with the FSZ Contract could result in a reduced or limited agricultural use of the site. Implementation of Mitigation Measures (MM) AG-1, AG-2 and AG-3 would reduce impacts under this criterion to a less than significant level. MM AG-1 and AG-2 are unchanged from the certified MND, as amended by Resolution 13-06. This Addendum includes minor changes to MM AG-3 to clarify and amplify the applicability of MM AG-3, as shown below.

MM AG-1: Soil Reclamation Plan. Prior to the issuance of a building permit, the applicant shall submit a Soil Reclamation Plan for review and approval by Community Development Agency staff. The plan shall contain an analysis of pre-project baseline soil conditions, and shall contain specific measures to restore the soil to its pre-project condition, including removal of all fixtures, equipment, non-agricultural roads, and restoration of compacted soil. Additionally, the Soil Reclamation Plan shall discuss the retention of any surface water rights. Reclamation shall commence within two months of the expiration of the use permit and be completed within 18 months from the date the facility ceases to operate.

MM AG-2: Financial Assurance. Prior to the issuance of a building permit, the applicant shall post a performance bond or similar instrument to ensure completion of the activities under the Soil Reclamation Plan. Financial assurances for the Reclamation Plan will be reviewed every 5 years by the Kings County Community Development Agency to determine if finances are sufficient to perform reclamation of the project. The assurance must be adjusted if, during the five year review, finances are determined to be insufficient to perform reclamation of the project.

MM AG-3: Off-site Agricultural Mitigation. If the applicant 1) does not continue ~~an intensive agricultural operation~~ a reasonably foreseeable agricultural use on the Project site ~~at least 90 percent of the project site at an intensity equivalent to the existing agriculture use of the project site~~ for the entire life of the project, ~~and if the applicant~~ or 2) is successful in cancelling the Farmland Security Zone contract, or 3) is successful in entering into a "Solar Use Easement," the

applicant shall then provide written evidence of funding and/or purchase of agricultural mitigation land (which will be managed and maintained by an appropriate entity) for the life of the project to mitigate the loss of Farmland of Statewide Importance at a ratio of 1:1. Every acre of agricultural land removed from production would be mitigated by the applicant. The agricultural land preserved shall be of equal or greater quality as defined by the California Department of Conservation Farmland Mapping and Monitoring Program (i.e., if Farmland of Statewide Importance is converted to solar then the agricultural land preserved must not be in a classification indicating a lower quality than Farmland of Statewide Importance).

Should the mitigation occur within a preferred Kings County conservation area for agriculture, including but not limited to Zones defined as "AX" or the FSZ Expansion Area as shown on Figure RC-14 of the Resource Conservation Element of the Kings County 2035 General Plan, off-site mitigation shall be reduced by 50 percent to 0.5:1.

With the implementation of MM AG-1, AG-2, and AG-3 (as modified by Addendum No. 2), the modified Project would result in a less than significant impact under this criterion.

(b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?
LESS THAN SIGNIFICANT IMPACT. The MND determined that implementation of the Original Project would result in less than significant impacts. The modified Project location is unchanged from the Original Project, which was deemed consistent with the General Plan and AG-20 zone district though the conditional use permit process. To address the Farmland Security Zone contract on the Project site, the Project applicant has proposed in the modified Project description to do one of three options: 1) cancel the FSZ contract, 2) convert the FSZ contract to a Solar Use Easement, or 3) maintain a use onsite that meets the principles of compatibility pursuant to Government Code Section 51238.1(a) by maintaining reasonably foreseeable agricultural operations onsite as determined by site-specific soil and water analysis.

The following discussion addresses how the proposed solar site could satisfy the principles of compatibility of Government Code Section 51238.1(a):

Government Code Section 51238.1(a) Uses approved on contracted lands shall be consistent with all of the following principles of compatibility:

(1) The use will not significantly compromise the long-term productive agricultural capability of the subject contracted parcel or parcels or on other contracted lands in agricultural preserves.

The Project does not include elements that would compromise the long-term soil quality of the site. Additionally, the Project would be subject to MM AG-1 to return the Project site to pre-project conditions after decommissioning the site. Furthermore, the Project site is self-contained so as to not compromise long-term agricultural activity on adjacent lands. The use of herbicides in the project area shall comply with regulations set forth by the Kings County Agriculture Department.

(2) The use will not significantly displace or impair current or reasonably foreseeable agricultural operations on the subject contracted parcel or parcels or on other contracted lands in agricultural preserves. Uses that significantly displace agricultural operations on the subject contracted parcel or parcels may be deemed compatible if they relate directly to the production

of commercial agricultural products on the subject contracted parcel or parcels or neighboring lands, including activities such as harvesting, processing, or shipping.

In order to remain compatible with the Williamson Act and in compliance with the Project's conditional use permit, the owner/operator would fully commit to and ensure successful implementation of the Agriculture Management Plan which is consistent with the principles of compatibility and performance standards outlined in Government Code section 51238.1. Attachment A (Soil & Water Analysis) to Addendum No. 2 provides evidence of limitations to onsite agricultural operations such that seasonal sheep grazing is a reasonably foreseeable agricultural use. The Attachment shows that the Project site is subject to severe limitations on water availability and that soil quality is impaired by saline conditions. As a result, dry farm seasonal grazing of the sites is a reasonably foreseeable agricultural use for this site. The SGF applicant shall provide an Agriculture Management Plan (AMP) which will detail how the SGF owner/operator shall ensure the SGF continues this reasonably foreseeable agricultural use on the SGF site. To ensure this compatibility threshold is met, the AMP shall include evidence to determine reasonably foreseeable agricultural operations and describe how the owner/operator will ensure the site retains onsite agricultural activity sufficient to meet the compatibility requirements of Government Code Section 51238.1. The development and operation of the Project is self-contained, would not encourage the conversion of neighboring agricultural parcels to a non-agricultural use, and does not pose harm or create issues of incompatibility with the operation of agricultural activities on adjacent properties.

(3) The use will not result in the significant removal of adjacent contracted land from agricultural or open-space use. In evaluating compatibility a board or council shall consider the impacts on noncontracted lands in the agricultural preserve or preserves.

The modified Project would not result in the removal of adjacent contracted land from an agricultural use. The project would connect to existing electrical infrastructure and the proposed use will not induce additional solar generation facilities to site on adjacent parcels. In addition, solar generation facilities do not generate the development of new urban land uses adjacent to the site since a solar facility would not provide services or products that would draw urban uses to be sited nearby.

The modified Project would result in a less than significant impact under this criterion.

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

NO IMPACT. The MND determined that implementation of the Original Project would result in no impact under this criterion. The modified Project would also have no impact as no forest or timber land is present or zoned for on the Project site, and no forest or timber land would be affected by the Project.

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

NO IMPACT. The MND determined that implementation of the Original Project would result in no impact under this criterion. The modified Project would also have no impact as no forest or timber land is present on the Project site, and no forest or timber land would be affected by the Project.

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

LESS THAN SIGNIFICANT IMPACT WITH MITIGATION. The MND determined that implementation of the Original Project would result in a less than significant impact with mitigation under this criterion. Construction of the Project has the potential to affect the condition of onsite soils and may impact the post-project agricultural use. Implementation of mitigation measures AG-1 and AG-2 would ensure any project related impacts would remain less than significant.

No impacts not previously identified in the MND are identified with regards to the proposed revisions. Impacts would remain less than significant.

VI. Mitigation Measures

The MND, as amended by Resolution 13-06, identified mitigation measures that would reduce or eliminate potential environmental effects of the Original Project. All but one of the mitigation measure approved for the Original Project would also apply, unchanged, to the Proposed Project. One mitigation measure (AG-3) is modified by this Addendum to clarify applicability to ensure potential impacts are reduced to a less than significant level.

The revised Project would not result in any effects to environmental resources that are more severe than those described in the original MND, as amended by Resolution 13-06. All mitigation measures (as revised by this Addendum) associated with the Original Project would be applied to the modified Project.

As with the Original Project, the modified Project would have a less than significant impact with the implementation of mitigation identified for agriculture, biological resources, cultural resources, and traffic.

VII. Kings County Planning Commission Findings

It is the finding of the Planning Commission that the previous environmental document as herein amended may be used to fulfill the environmental review requirements of the current (modified) Project. Because the current Project meets the conditions for the application of State CEQA Guidelines Section 15164, preparation of a new EIR or Negative Declaration is not required for the issue areas discussed above. Specifically, the County has determined that:

Finding 1: There are no substantial changes to the Project that would require major revisions of the Initial Study-Mitigation Negative Declaration due to the new significant environmental effects or a substantial increase in the severity of impacts identified in the Initial Study.

Facts in Support of Finding: The Project has not changed substantially from the development assumptions contained in the previously adopted Initial Study-Mitigated Negative Declaration and the Project is consistent with the provisions contained in the Initial Study-Mitigated Negative Declaration to

address the FSZ contract. The Project would maintain a use that meets the consistency findings of compatibility per Government Code Section 51238.1 and would be subject to Mitigation Measure Ag-3 (offsite agricultural mitigation). Modifying the location of the substation and gen-tie would not introduce a new significant environmental effect or substantially increase the severity of environmental impacts identified in the Initial Study. Accordingly, there have been no substantial changes to the Project or in the circumstances under which the Project will be developed resulting in new or more severe significant impacts.

Finding 2: No substantial changes have occurred in the circumstances under which the Project is being undertaken that will require major revisions of the previously adopted Initial Study-Mitigated Negative Declaration to disclose new significant environmental effects or that would result in a substantial increase in the severity of the impacts identified in the Initial Study-Mitigated Negative Declaration.

Facts in Support of Finding: The circumstances under which the Project will be undertaken are accurately and adequately described in the previously adopted Initial Study-Mitigated Negative Declaration. The previously adopted Initial Study-Mitigated Negative Declaration disclosed that the Project site was subject to FSZ contracts and that the Project would not have significant impact if the respective applicants 1) cancel the FSZ contract, 2) converted the FSZ contract into a Solar Use Easement, or 3) maintained an onsite use consistent with the principles of compatibility under Government Code Section 51238.1. The modified Project description provides minor technical changes to how the Project would meet the principles of compatibility. The description provided above clarifies the location of substation and gen-tie, which falls within the survey buffer of the Project as assessed within the Initial Study-Mitigated Negative Declaration, and does not constitute a change in circumstance such that any additional review is required.

Finding 3: There is no additional new information of substantial importance, which was not known as the time of the adoption of the Initial Study-Mitigated Negative Declaration, showing any of the following: 1) The Project will have one or more significant effects not discussed in the previous Initial Study-Mitigated Negative Declaration; 2) Significant effects previously examined would be substantially more severe; 3) Mitigation measures or alternatives to the Project previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the Project, but the Project proponent decline to adopt the mitigation measure; or 4) Mitigation measures or alternatives which are considerably different from those analyzed in the previous Initial Study-Mitigated Negative Declaration would substantially reduce one or more significant effects on the environment, but the Project proponent declines to adopt the mitigation measure or alternative.

Facts in Support of Finding: No new information of substantial importance to the conclusions of the previously adopted Initial Study-Mitigated Negative Declaration has been identified with the analysis of this Addendum. All impacts will be identical to those analyzed in the Initial Study-Mitigated Negative Declaration. The clarification of Mitigation Measures AG-3 does not introduce a new or unmitigated significant effect of the Project. There are no additional mitigation measures or alternatives that could be implemented with the Project in order to substantially reduce one or more significant impacts discussed in the Initial Study-Mitigated Negative Declaration. No significant impacts are identified pursuant to this Addendum.

Finding 4: The Addendum need not be circulated for public review.

Facts in Support of Finding: Pursuant to CEQA Guidelines Section 15164(c), the Addendum need not be circulated for public review.

SUMMARY

No significant impacts to the environment as a result of this Project have been identified when considering the mitigation measures included as a part of the Project. Approval of the Project is not expected to have any significant impacts, either long-term or short-term, nor will it cause substantial adverse effect on human beings, either directly or indirectly provided all mitigation measures and normal Project conditions are followed. A Mitigation Monitoring and Reporting Program remains valid and in force, and would include minimal changes to MM AG-3, as explained above. In summary, the analysis concludes that none of the conditions described in Section 15162 of the CEQA Guidelines calling for preparation of a subsequent Negative Declaration have occurred and thus an Addendum to the RE Kansas LLC Solar Generation Facility Mitigated Negative Declaration is appropriate to satisfy CEQA requirements for the revised Project. The evidence in the file supports that no circumstances or conditions requiring the preparation of a subsequent Negative Declaration are present in this case.

ATTACHMENTS

Attachment A: RE Kansas LLC Solar Generation Facility Solar and Water Analysis

Attachment A to Exhibit No. 1

SOIL & WATER ANALYSIS

for

RE KANSAS LLC
SOLAR GENERATION FACILITY

Kings County, California

December 4, 2013

Project Summary

RE Kansas LLC intends to develop the RE Kansas Solar Generation Facility (**Project**) in Kings County, California. The Project site would consist of approximately 200 acres subject to a Farmland Security Zone (**FSZ)** Contract. The Project site is located west of State Route 41 and south of State Route 198 at the corner of 21st Avenue and Jersey Avenue, as depicted on the attached **Figure 1- Project Location Map**.

Report Summary

On November 26, 2013, the Kings County Board of Supervisors adopted Resolution No. 13-058, recognizing that due to reduced surface water deliveries, poor groundwater quality, severe groundwater overdraft, impaired soil conditions, and regulatory burdens, circumstances exist on agricultural preserves located within a portion of Kings County south of State Route 198 and west of State Route 41 that limit the use of much of the land within that territory for agricultural activities, such that it is reasonably foreseeable that certain parcels located there that currently are used for more intensive agricultural activities will be used in the near future for less intensive uses, including dry farm seasonal grazing. Kings County may determine that solar generation facilities located within this region that maintain a reasonably foreseeable agricultural use on the site in addition to the commercial solar generation facility may be compatible with a Farmland Security Zone Contract pursuant to Government Code 51238.1(a) if a finding can be made, based upon substantial evidence, and taking into account surface water availability, ground water quality and availability, and soil conditions, that the proposed agricultural operation is a reasonably foreseeable use of the land.

Provost and Pritchard Consulting Group and Dellavalle Laboratory, Inc. evaluated the existing, historic, and reasonably foreseeable soil, water quality, and water availability conditions of the Project site and determined that adverse soil conditions and water availability conditions make dry farm seasonal sheep grazing a reasonable agricultural activity to occur on the Project site.

Methodology

The methodology to develop this report utilized various data collected and interpreted for this site.

- Soil classifications were derived from the Natural Resources Conservation Service (**NRCS**).
- Soil samples were collected from multiple locations on the site and tested.
- Available water supply and quality information from sources serving the site.
- Analysis and interpretation of data.

Site Soil Classifications: Restrictive Saline Soils

According to the Natural Resources Conservation Service (Soil Survey Area: Kings County, California, Survey Area Data: Version 8, Aug 27, 2009) soils on the property consist predominantly of 137 - Lemoore sandy loam, partially drained (**Figure 2 – NRCS Soils Map**). In their native conditions these soils are neutral to alkaline.

As mapped, the property is subject to saline-sodic conditions (4.0 to 16.00 mmhos/cm) and drainage limitations. The California Revised Storie Index classification for the property is Grade Five – Very Poor. The Land Capability Class designation is 7w (non-irrigated) and 2w (irrigated). Class 7 soils have very severe limitations that make them unsuitable for cultivation and that restrict their use mainly to pasture, grazing, forestland, or wildlife habitat. Class 2 soils have moderate limitations that restrict the choice of crop or that require moderate or special conservation practices. The letter "w" indicates that water in or on the soil interferes with plant growth or cultivation.

Saline conditions are native to the Lemoore sandy loam and have been exacerbated by poor natural drainage and the application of insufficient water to leach salt from the root zone. The property owner installed a subsurface drainage system to alleviate salinity impacts due to poor drainage. Drain water collected is discharged to a nearby evaporation pond. Currently the parcel is productive. However, long term soil salinity conditions will continue to compound, should there be insufficient water to adequately leach salts from the root zone.

Soil Sampling Test Results: Soil Significantly Reduces Agricultural Productivity

On June 19, 2013 10 soil samples were collected from the parcel in one foot increments to depths of two feet. Approximate sampling locations (from GPS coordinates) are depicted on the attached map labeled **Figure 3 – Soil Sampling Location Map**. Samples were delivered to the laboratory for analysis, following proper chain of custody procedures. Results are attached as appendices and interpreted in this report.

Results of soil analysis are presented in **Table 1** and **Attachment A**. All five soil sampling locations exhibited soil quality issues due to either excessive salinity and/or sodic conditions.

Soil salinity and sodicity are limiting factors to agricultural production and are related to poor drainage conditions and lack of sufficient leaching. Soils are considered saline when the electrical conductivity of saturation extracts (**EC**) are above 4 decisiemens per meter (**dS/m**). Sodium (**Na**) levels above 10 meq/l are considered high or if Na is greater than Calcium. Soils are considered sodic when the exchangeable sodium percentage (**ESP**) is above 15. Boron (**B**) levels above 2.0 mg/l are considered high.

Table 1
Soil Sampling Test Results

Sample ID	EC (dS/m)	Sodium (meq/l)	ESP (%)	Boron (mg/l)	Interpretation
Kansas N80 E 1'	**5.91**	**13.7**	2.9	0.6	Saline with excessive sodium
Kansas N80 E 2'	**3.62**	8.3	2.2	0.4	Within normal ranges
Kansas N80 W 1'	**13.70**	**48.2**	9.3	**2.4**	Saline with excessive sodium and boron
Kansas N80 W 2'	3.99	**27.0**	14.4	**2.8**	Excessive sodium and boron
Kansas S80 E 1'	**4.66**	7.8	1.4	0.4	Saline
Kansas S80 E 2'	2.97	7.0	1.6	0.5	Within normal ranges
Kansas S80 W 1'	**14.00**	**72.2**	**15.3**	**4.0**	Saline-Sodic with excessive sodium and boron
Kansas S80 W 2'	**15.80**	**89.6**	**18.3**	**3.8**	Saline-Sodic with excessive sodium and boron
Kansas East Long 40 1'	**13.70**	**65.7**	14.0	**2.0**	Saline-Sodic with excessive sodium and boron
Kansas N80 E 2'	**7.88**	**41.7**	11.7	1.9	Saline with excessive sodium

Bold *= Above agricultural limitations*

Salinity of the soil solution has the effect of making water less available to the plant. As salinity increases above a threshold amount, the plant has to expend more energy to obtain water from the soil and plant growth slows. At sufficiently high salinity levels, the plant can no longer extract water and the plant wilts.

When plants extract water from the soil most of the salt is left in the soil. Water above the amount required by the plant must be applied to leach salt from the root zone. A subsurface drainage system has been installed at this site and drainage water is discharged to a nearby evaporation pond. If drainage is restricted or insufficient water is applied to the site, salt will accumulate in the soil.

Excess sodium disperses clay particles causing soil structure that severely limits movement of soil and water through soil. Soil salinity offsets sodicity so permeability is maintained until salinity drops to about 4 dS/m. At that point gypsum or another source of soluble calcium must be added to displace the sodium and maintain permeability. Resulting sodium salts must be leached from the root zone.

Groundwater

The site is not served by any on-site irrigation water supply wells and the property owner has stated that no off-site groundwater well directly supports this site. Groundwater samples were therefore not taken. Groundwater quality and quantity were not evaluated for the site; however, the Tulare Lake Basin is recognized by the State of California as one the most impaired groundwater regions within the State.

Surface Water Quality & Quantity Assessment: Water Availability Insufficient for Continued Agricultural Production

The site is not located or served by a public irrigation district. The property owner is within the service area of the Lemoore Canal and Irrigation Company (**LCIC**). LCIC's surface water is developed from the Kings River and has access to storage behind Pine Flat Dam. The water quality of irrigation water provided by LCIC is summarized in **Table 2**.

Table 2
LCIC at the Kings River Lemoore Weir
Supply Water Characteristics

Constituent	Result	Units	Range and Degree of Problem	Interpretation
EC	27-93	umhos/cm	750 – 3,000, high	OK
SAR	--	--	Above 9, severe	--
Sodium (Na)	--	mg/l	Above 70, high	--
Chloride (Cl)	--	mg/l	140 - 350, plant injury can occur	--
Boron (B)	0.018-1.3	mg/l	Above 1.0, high	OK to high concentrations
Nitrate (NO_3)	0.038-0.36	mg/l	Within crop agronomic limits	OK
pH	--	pH units	Between 6.5 - 8.4, normal	--

Surface water quality measured at the Lemoore Weir on the Kings River is considered adequate for supporting agricultural operations. The most limiting factor to agriculture in the region is water quantity. Average rainfall is about 8.3 inches and in most years available surface water must be supplemented with groundwater to irrigate planted crops.

Kings River Watermaster reports, quantifying LCIC historic surface water diversions, are currently available through water year 2009. Water year information runs from October of one year to September of the next year and is labeled by the year in which September occurs. In order to provide information on water years 2010 – 2012, a relationship between historic Kings River full natural flows and LCIC diversions was developed. Using this relationship estimates of annual diversions by LCIC were developed for water years 2010-2012 for the LCIC service area and were then reduced by in-district seepage losses to develop estimates of supplies available

to growers. From this annual surface water availability an average acre-feet per acre availability was estimated. Surface water available for the past 6 years is presented in **Table 3**.

Table 3
Lemoore Canal and Irrigation Company Water Quantity

Water Year	Kings River Percent of Average Flow	Kings River Full Natural Flow (AF)	LCIC Diversions (AF)	Sales to Growers (AF)	Avg. AF/Acre in Service Area
2012	49%	826,858	54,400	43,520	1.4
2011	196%	3,319,637	133,800	107,040	3.6
2010	120%	2,033,982	92,800	74,240	2.5
2009	80%	1,349,144	47,816	38,250	1.3
2008	71%	1,206,858	59,306	47,400	1.6
2007	40%	674,493	71,896	57,520	1.9

The Project site does not have access to a viable source of groundwater for agricultural purposes. A commercial farmer would have to allocate limited offsite groundwater supplies and available surface water from LCIC to support their agricultural land. Given the available supplies from these two sources, decisions must be made on how much of an owner's land holdings can viably be put into agricultural production each year. This means that in most years some of a landowner's land holdings are fallowed. This site was most recently producing tomatoes and likely requires approximately 2.5 AF/acre to maintain the current crop plus additional water to prevent accumulation of salts in the soil. Conversion of this parcel from commercial crops to a dry farm seasonal sheep grazing would allow for a shift in available water resources to support other more productive land holdings in production.

Summary of Findings

The severe limitation of reliable water availability and related soil salinity issues constitute specific circumstances under which Kings County can make the findings that a reasonably foreseeable agricultural use of the site would dry farm seasonal grazing. The Project as a concomitant use with dry farm seasonal grazing or a similar commercial agricultural activity may be deemed a compatible use with a Farmland Security Zone contract pursuant to Government Code Section 51238.1(a) and the County of Kings Implementation Procedures for the California Land Conservation "Williamson" Act of 1965.

Summary of Preparers

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dikemiya@ppeng.com
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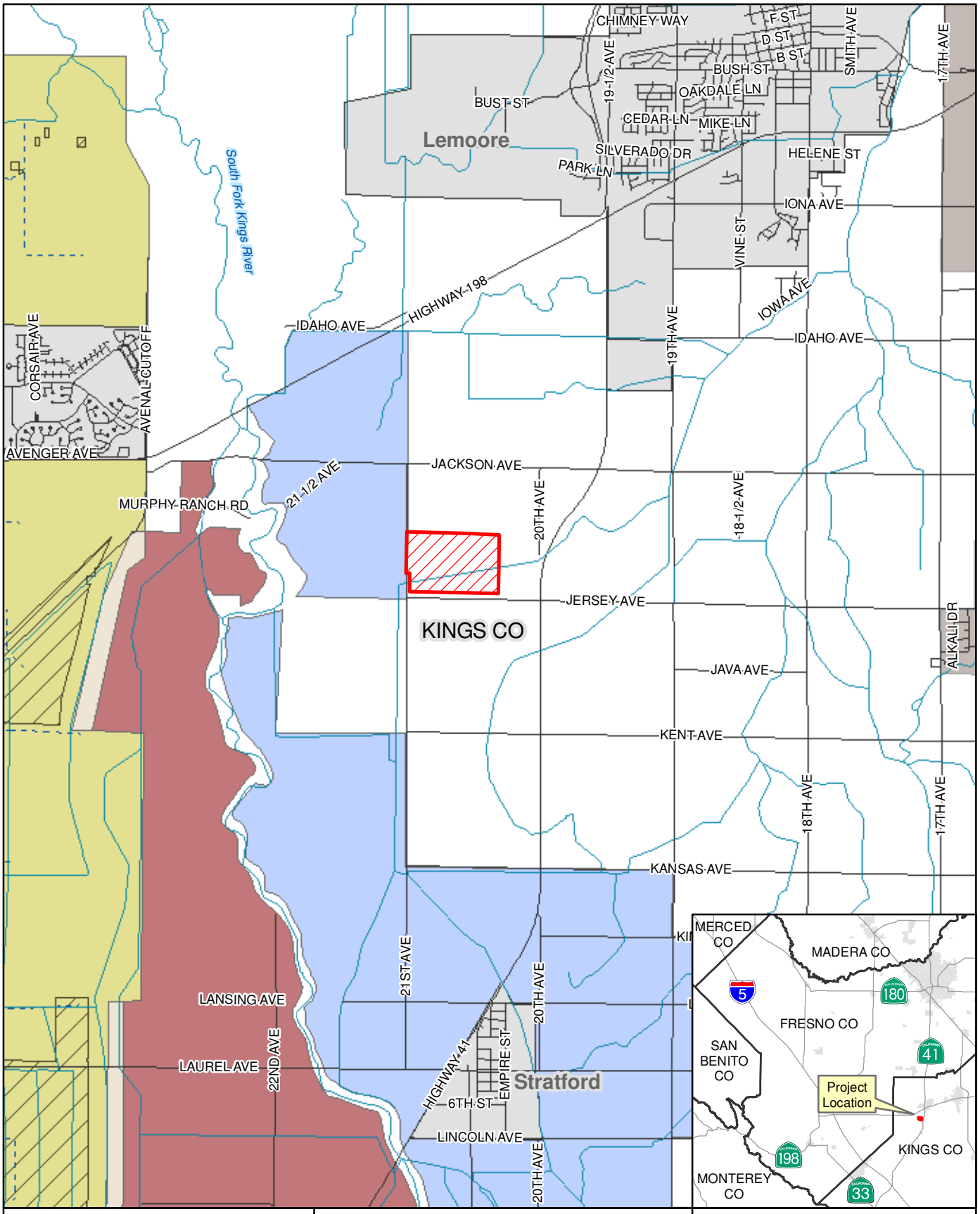
FIGURE 1
PROJECT LOCATION MAP



0 0.5 1 Miles

EST. 1968
PROVOST & PRITCHARD
CONSULTING GROUP
An Employee Owned Company

2505 Alluvial Ave
Clovis, CA 93611
(559) 326-1100

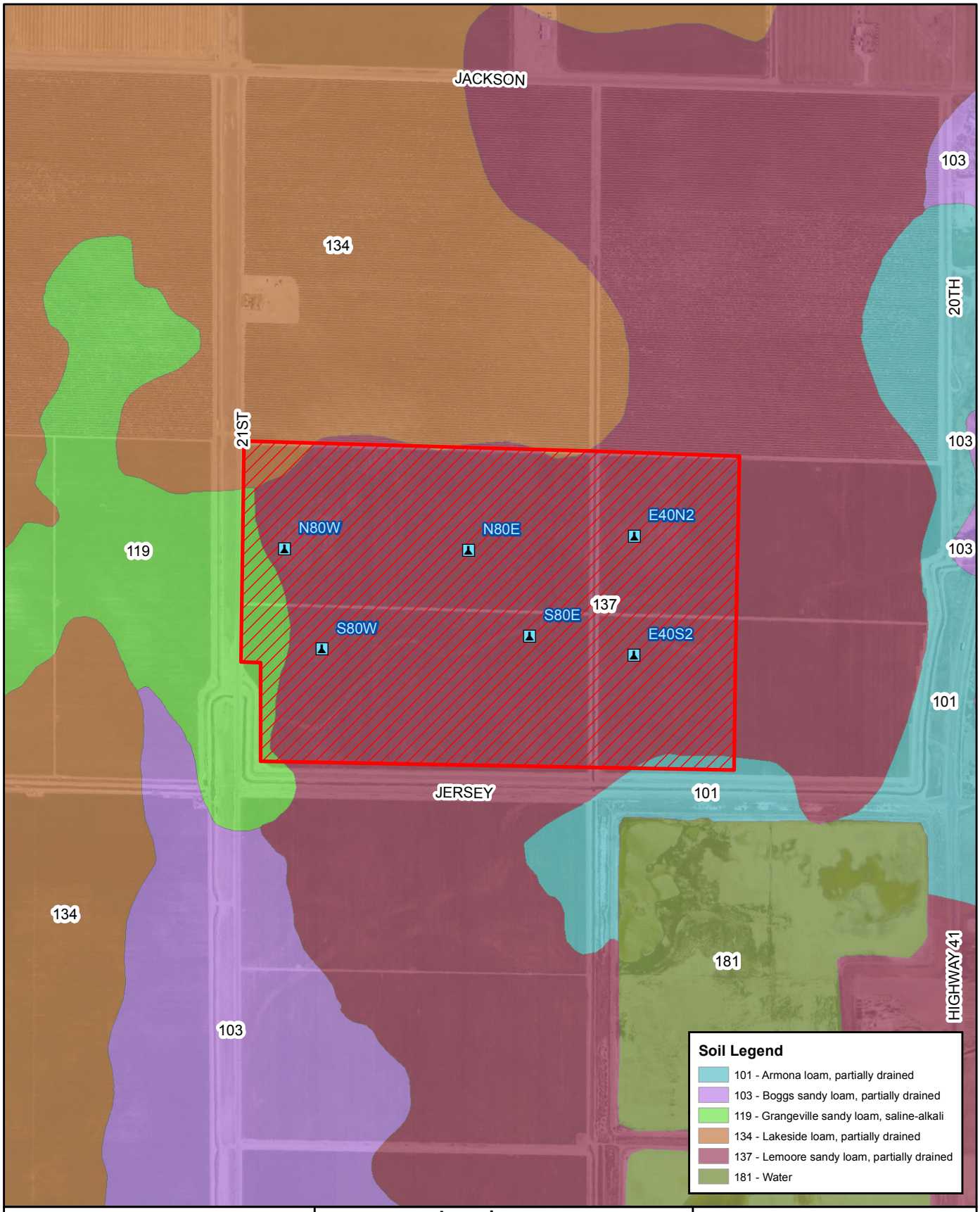
Legend

- Project Parcels
- USGS Topo Map Hydro Features
- Westlands Dist. System
- Westlands W.D.
- WWD Retired Lands
- Empire West Side I.D.
- Stratford I.D.

RE Kansas LLC
Proposed Solar Generating Facility

Project Location

FIGURE 2
NRCS SOILS MAP



0 500 1,000 Feet

EST. 1968
PROVOST& PRITCHARD
CONSULTING GROUP
An Employee Owned Company

286 W. Cromwell Ave.
Fresno, CA 93711-6162
(559) 449-2700

Legend

Project Area

Soil Sample Site

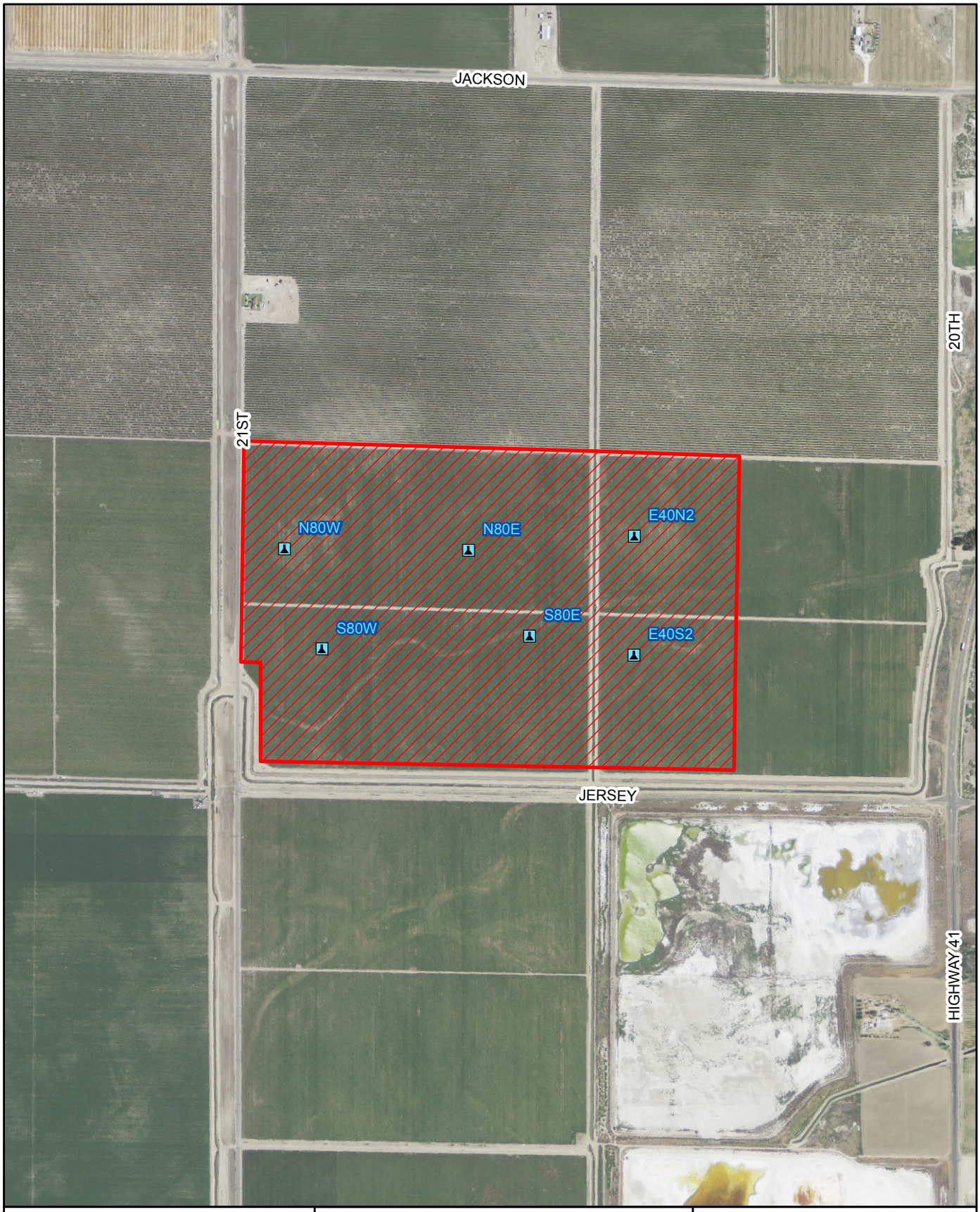
RE Kansas LLC

Proposed Solar Generating Facility

Soils Map

7/12/2013 : \\EVOLUTION\clv_clients\Clients\Recurrent Energy-2072\207211C5-RE Kansas WSA\GIS\Map\Aerial_Soils.mxd

FIGURE 3
SOIL SAMPLING LOCATION MAP



0 500 1,000 Feet

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286 W. Cromwell Ave.
Fresno, CA 93711-6162
(559) 449-2700

Legend

Soil Sample Site

Project Area

RE Kansas LLC

Proposed Solar Generating Facility

Aerial Map

7/16/2013 : \\Evolution\clv_clients\Clients\Recurrent Energy-2072\207211C5-RE Kansas WSA\GIS\Map\Aerial.mxd

ATTACHMENT A
SOIL SAMPLING LABORATORY RESULTS

Report of Soil Analysis

DELLAVALLE® Laboratory, Inc.
Chemists and Consultants

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FAX (559) 268-8174 - (800) 228-9896 - (559) 233-6129

Provost & Pritchard Eng - Visalia
130 N Garden St
Visalia CA 93291
14015
01

ID: Tomatoes

Lab No. 190318
Sampled Date 6/19/2013
Submitted Date 6/20/2013
Submitted by Donald I
Reported Date 7/2/2013
Location/Project Recurrent_Kansas
Copy To Provost & Pritchard Eng.
Fax (559) 636-1177
E-mail lgomezsloan@ppeng.com

No.	Description	% SP	units pH	dS/m EC	meq/l Ca	meq/l Mg	meq/l Na	meq/l Cl	% ESP	T/ac-6" GR	+\- Lime	lbs/ac-6" Lime	mg/l B	mg/kg NO_3-N	mg/kg PO_4-P	mg/kg K	mg/kg Acid K	mg/kg Zn
	RL--->	0.50	1.0	0.01	0.1	0.1	0.1	0.1	0.1	0.1		500	0.1	1.0	2.0	2.0	40.0	0.1
	NAPT Methods--->	S1.00	S1.10	S1.20	S1.60	S1.60	S1.60	S1.40	Calc.			S2.50	S1.50	S3.10	S4.10	S5.10		S6.10
	Handbook 60--->									Hndbk 60-22d	Hndbk 60-23a						SSSA,p5 61 mod	
1	Kansas N80 E 1'	31	7.8	5.91	36.6	9.7	13.7		2.9		+		0.6	120	28	360		2.6
2	Kansas N80 E 2'	34	7.9	3.62	18.7	5.3	8.3		2.2		+		0.4					
3	Kansas N80 W 1'	40	7.9	13.70	57.4	18.0	48.2		9.3		+		2.4	178	23	431		2.3
4	Kansas N80 W 2'	39	8.3	3.99	6.1	3.5	27.0		14.4	<0.1	+		2.8					
5	Kansas S80 E 1'	39	8.0	4.66	33.3	5.4	7.8		1.4		+		0.4	84	6	203		1.8
6	Kansas S80 E 2'	36	8.0	2.97	20.5	6.1	7.0		1.6		+		0.5					
7	Kansas S80 W 1'	42	8.0	14.00	35.1	25.3	72.2		15.3	<0.1	+		4.0	86	9	285		1.8
8	Kansas S80 W 2'	68	8.2	15.80	25.4	36.8	89.6		18.3	<0.1	++		3.8					
9	Kansas East Long 40 1'	41	8.0	13.70	45.1	15.7	65.7		14.0	1.2	+		2.0	182	10	524		2.5
10	Kansas N80 E 2'	33	8.1	7.88	28.4	7.4	41.7		11.7	<0.1	+		1.9					

Tomato Soil	"Texture"	"Acidity"	Total Salts	Calcium	Magnesium	Sodium	Chloride	"Alkali"	Gyp Req	Lime Pres	Lime Req.	Boron	Nitrate-N*	Phosphate-P*	Potassium*	Zinc*
Low	Sand<20	< 6.3	< 0.5	< 4	-	-	-	-		-		< 0.2	< 4	<24	<180	< 0.7
Normal	25-45	6.7-7.9	0.7-2.5	7-15	2-15	< 8	< 8	<8		++		.3-1.2	7-30	25-45	200-350	0.8-3.0
High	Clay>55	8.2+	3.0 +	25+	25+	Na>Ca	12+	11 +		++++		2.0 +	45 +	70+	450+	4.0+

*Tissue analysis is advised to track nutrient use during the season.

High & SI High may indicate non-economic situations or toxic situations, see report.

** = EC up to 3.5 not a problem if primarily calcium

(mg/kg & mg/L are equivalent to ppm)

*** = High & Low color levels may be differ based on consultant interpretation of the situation, including crop age, soil type, weather, irrigation system, etc.

Black = Normal	
Red = High	Green = SI Low
Orange = SI. High	Blue = Low

3.2.2 Environmental Impacts and Mitigation Measures

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

LESS THAN SIGNIFICANT IMPACT WITH MITIGATION. ~~As discussed above, all 200 acres of the SGF site are designated as Farmland of Statewide Importance by the FMMP. The entire 200-acre site would be temporarily removed from agricultural production during project construction and operation. During the life of the project less than 4 percent (7 acres) of the site would be physically covered by project elements, such as the substation, inverter, and roads; the remaining approximately 96 percent (193 acres) would be unencumbered and covered with a seed mix that could grow under solar panels and around the steel posts (see Table 3.2-3).~~

~~Table 3.2-3 Impermeable Site Coverage~~

~~Impermeable Structures~~	~~Impermeable Square Feet~~	~~Impermeable Acres*~~	~~Percent of Site~~
~~All Roads~~	~~264,000~~	~~6.1~~	~~3.0%~~
~~Parking Lot~~	~~20,000~~	~~0.5~~	~~0.3%~~
~~Substation~~	~~11,000~~	~~0.3~~	~~0.1%~~
~~Inverter Pads~~	~~10,000~~	~~0.2~~	~~0.1%~~
~~Total~~	~~305,000~~	~~7.0~~	~~3.5%~~

~~The intent of the applicant is to either cancel the FSZ contract associated with the project site or transfer the FSZ contract into a "Solar Use Easement" described under Government Code Section 50255.1 (Senate Bill 618). The applicant does not intend to perform an agricultural operation if either of these two options is successful. If both of these options are unsuccessful, the applicant would then continue an intensive agricultural practice on the site. If an agricultural operation is implemented, the 193 acres of unencumbered area of the SGF would be actively farmed (i.e., grazing on a permanent crop such as alfalfa, bee keeping or labor intensive agricultural production). If grazing is implemented on site, animals would graze on a permanent crop that is grown year-round such as alfalfa or similar forage plant grown according to standard local farming practices. It is recognized that continued farming operations within the SGF project area may pose unique challenges. For example, specialized equipment may be needed to harvest crops in between rows of solar panels and an increased labor force may be needed to harvest crops that are planted underneath solar panels. The specifics of the potential farming operations would be detailed in an Agriculture Management Plan (AMP) that is subject to review by County staff.~~

~~The temporary use of the land for solar development would represent a very small portion of the overall, currently designated farmland in Kings County. Because the project anticipates the SGF project site would be temporarily removed from agricultural production, the project would have the potential to result in an impact related to the conversion of Farmland of Statewide Importance to a non-agricultural use. Implementation of Mitigation Measures AG-1, AG-2 and AG-3 would reduce this impact to a less than significant level.~~

~~However, although it is anticipated that the SGF site would be temporarily removed from agricultural production during the life of the project, there is a possibility that if the cancellation of the FSZ contract is not approved, or if the FSZ contract is not converted into a "Solar Use Easement," then agricultural~~

~~operations would continue on the unencumbered areas of the SGF site. Please see response b. below for an expanded discussion of FSZ contract and "Solar Use Easement." If continued agricultural operations are maintained on site in a manner that is equivalent to existing (pre-project) conditions, as determined by the county-approved AMP in accordance with the performance standards outlined in Government Code section 51238.1, the project would still have the potential to result in an impact related to the conversion of Farmland of Statewide Importance to a non-agricultural use. Implementation of Mitigation Measures AG-1 and AG-2 would reduce this impact to a less than significant level.~~Addendum No. 1, which was approved when the Planning Commission adopted Resolution No. 13-06, made minor alterations to the site plan to accommodate the 108 foot shift to the north of the southernmost border of the Project in order to exclude acreage supporting water ditches and canals used by the current property owner and/or the Lemoore Canal District located along the southern border of both APNs. Addendum No. 1 also provided a three (3) year extension of time. The Original MND, the modifications made by Addendum No. 1, and the modifications made by Addendum No. 2 have all determined that implementation of the Project would result in less than significant impacts with mitigation. The modified Project would have similar impacts as the Original Project under this criterion as no change to the Project footprint or type of infrastructure is proposed.

To address the Farmland Security Zone Contract on the Project site, the Project applicant has proposed in the modified Project description to do one of three options: 1) cancel the FSZ Contract, 2) convert the FSZ Contract to a Solar Use Easement, or 3) maintain a use onsite that meets the principles of compatibility pursuant to Government Code Section 51238.1(a). Cancellation, conversion to a Solar Use Easement, or meeting the principles of compatibility with the FSZ Contract could result in a reduced or limited agricultural use of the site. Implementation of Mitigation Measures (MM) AG-1, AG-2 and AG-3 would reduce impacts under this criterion to a less than significant level. MM AG-1 and AG-2 are unchanged from the certified MND, as amended by Resolution 13-06. This Addendum includes minor changes to MM AG-3 to clarify and amplify the applicability of MM AG-3, as shown below.

MM AG-1: Soil Reclamation Plan. Prior to the issuance of a building permit, the applicant shall submit a Soil Reclamation Plan for review and approval by Community Development Agency staff. The plan shall contain an analysis of pre-project baseline soil conditions, and shall contain specific measures to restore the soil to its pre-project condition, including removal of all fixtures, equipment, non-agricultural roads, and restoration of compacted soil. Additionally, the Soil Reclamation Plan shall discuss the retention of any surface water rights. Reclamation shall commence within two months of the expiration of the use permit and be completed within 18 months from the date the facility ceases to operate.

MM AG-2: Financial Assurance. Prior to the issuance of a building permit, the applicant shall post a performance bond or similar instrument to ensure completion of the activities under the Soil Reclamation Plan. Financial assurances for the Reclamation Plan will be reviewed every 5 years by the Kings County Community Development Agency to determine if finances are sufficient to perform reclamation of the project. The assurance must be adjusted if, during the five year review, finances are determined to be insufficient to perform reclamation of the project.

MM AG-3: Off-site Agricultural Mitigation. If the applicant 1) does not continue ~~an intensive agricultural operation~~ a reasonably foreseeable agricultural use on the Project site ~~at least 90 percent of the project site at an intensity equivalent to the existing agriculture use of the project site~~ for the entire life of the project, ~~and if the applicant~~ or 2) is successful in cancelling the Farmland Security Zone contract, or 3) is successful in entering into a "Solar Use Easement," the applicant shall then provide written evidence of funding and/or purchase of agricultural mitigation land (which will be managed and maintained by an appropriate entity) for the life of the project to mitigate the loss of Farmland of Statewide Importance at a ratio of 1:1. Every acre of agricultural land removed from production would be mitigated by the applicant. The agricultural land preserved shall be of equal or

greater quality as defined by the California Department of Conservation Farmland Mapping and Monitoring Program (i.e., if Farmland of Statewide Importance is converted to solar then the agricultural land preserved must not be in a classification indicating a lower quality than Farmland of Statewide Importance).

Should the mitigation occur within a preferred Kings County conservation area for agriculture, including but not limited to Zones defined as "AX" or the FSZ Expansion Area as shown on Figure RC-14 of the Resource Conservation Element of the Kings County 2035 General Plan, off-site mitigation shall be reduced by 50 percent to 0.5:1.

With the implementation of MM AG-1, ~~through~~ AG-2, and AG-3 (as modified by Addendum No. 2), ~~solar energy generation activities that would take place on the SGF site~~the modified Project would result in a less than significant impact under this criterion.

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

LESS THAN SIGNIFICANT IMPACT. ~~According to the Kings County General Plan, solar power generation facilities are considered a "community benefiting non-agricultural use" of agricultural spaces. Additionally, solar generation facilities producing power for sale are consistent with the AG-20 zone district though the conditional use permit process. This project is thus consistent with the site's general plan and zoning designation. The project is located on parcels containing an active Farmland Security Zone (FSZ) contract. To date, the Kings County Board of Supervisors has not made a determination concerning Williamson Act compatibility in terms of a solar use. Until the Board of Supervisors determines compatibility the County is requiring impacts related to Williamson Act lands to be addressed within the project proposal.~~

~~The applicant would perform one of the following three actions: 1) the applicant shall file a FSZ cancellation application package with the County and Department of Conservation on the 200 acre project site, initiating a separate review process from the County and the Director of the Department of Conservation, or 2) the applicant shall pursue rescinding the portion of the FSZ contract containing the project site and enter into a "Solar Use Easement" if the project qualifies under the requirements of SB 618. Both of these courses of action will require approval from the California Department of Conservation and the Kings County Board of Supervisors. If the cancellation of the FSZ contract is not approved, and if the FSZ contract is not converted into a "Solar Use Easement", the applicant shall 3) conduct an on-site agricultural operation which is consistent with the principles of compatibility of California Government Code Section 51238.1 as described below. In the event that the applicant is unable to obtain approval for the cancellation of the FSZ contract and the conversion into a "Solar Use Easement," then the applicant shall provide an Agriculture Management Plan describing the commercial agricultural operations consistent with the principles of compatibility of California Government Code Section 51238.1 prior to issuance of a building permit. The Agriculture Management Plan would explain in detail how the applicant/operator will ensure the site significantly provides an equivalent intensity of agricultural output as historically provided by the site over the last decade.~~

~~Co-locating agricultural operations on a solar site is a unique opportunity to provide continued contributions to the agricultural economy in the project region while generating a clean source of renewable energy. The following discussion addresses how the proposed solar site could satisfy the principles of compatibility of Government Code Section 51238.1:~~The MND determined that implementation of the Original Project would result in less than significant impacts. The modified Project location is unchanged from the Original Project, which was deemed consistent with the General Plan and AG-20 zone district though the conditional use permit process. To address the Farmland Security Zone contract on the Project site, the Project applicant has proposed in the modified Project description to do one of three options: 1) cancel the FSZ contract, 2) convert the FSZ contract to a Solar Use Easement, or

3) maintain a use onsite that meets the principles of compatibility pursuant to Government Code Section 51238.1(a) by maintaining reasonably foreseeable agricultural operations onsite as determined by site-specific soil and water analysis.

The following discussion addresses how the proposed solar site could satisfy the principles of compatibility of Government Code Section 51238.1(a):

> *Government Code Section 51238.1. (a) Uses approved on contracted lands shall be consistent with all of the following principles of compatibility:*
>
> *(1) The use will not significantly compromise the long-term productive agricultural capability of the subject contracted parcel or parcels or on other contracted lands in agricultural preserves.*

The project does not include elements that would compromise the long-term soil quality of the site~~(see Section 3.8 Hazards and Hazardous Materials)~~. Additionally, the project would be subject to MM AG-2 to return the ~~entire 200-acre project~~ Project site to pre-project conditions after decommissioning the site~~;~~. ~~and~~ Furthermore, the ~~project~~ Project site is self-contained so as to not compromise long-term agricultural activity on adjacent lands. The use of herbicides in the project area shall comply with regulations set forth by the Kings County Agriculture Department. ~~The Agriculture Management Plan would ensure agricultural commercial operations are maintained on the site in a sustainable manner for the life of the project.~~

> *(2) The use will not significantly displace or impair current or reasonably foreseeable agricultural operations on the subject contracted parcel or parcels or on other contracted lands in agricultural preserves. Uses that significantly displace agricultural operations on the subject contracted parcel or parcels may be deemed compatible if they relate directly to the production of commercial agricultural products on the subject contracted parcel or parcels or neighboring lands, including activities such as harvesting, processing, or shipping.*

In order to remain compatible with the Williamson Act and in compliance with the ~~project's~~ Project's conditional use permit, the owner/operator would fully commit to and ensure successful implementation of the Agriculture Management Plan which is consistent with the principles of compatibility and performance standards outlined in Government Code section 51238.1. ~~Agricultural commercial operations would continue on no less than 90 percent of the project site and at an intensity equivalent to the existing agriculture use of the project site for the entire life of the project, or agricultural production would provide an economic output similar to the historical economic output of the project site. The Agriculture Management Plan will also describe, in detail, how the owner/operator will fulfill this commitment and ensure the continued use of the site for the production of food or fiber to produce an agricultural production and monetary result materially equivalent to current production levels as demonstrated over the past decade. The development and operation of the SGF is self-contained, does not include elements that would facilitate expansion (i.e., over-sized infrastructure), nor does the operation of the SGF pose harm or create issues of incompatibility with the operation of agricultural activities on adjacent properties.~~ Attachment A (Soil & Water Analysis) to Addendum No. 2 provides evidence of limitations to onsite agricultural operations such that seasonal sheep grazing is a reasonably foreseeable agricultural use. The Attachment shows that the Project site is subject to severe limitations on water availability and that soil quality is impaired by saline conditions. As a result, dry farm seasonal grazing of the sites is a reasonably foreseeable agricultural use for this site. The SGF applicant shall provide an Agriculture Management Plan (AMP) which will detail how the SGF owner/operator shall ensure the SGF continues this reasonably foreseeable agricultural use on the SGF site. To ensure this compatibility

threshold is met, the AMP shall include evidence to determine reasonably foreseeable agricultural operations and describe how the owner/operator will ensure the site retains onsite agricultural activity sufficient to meet the compatibility requirements of Government Code Section 51238.1. The development and operation of the Project is self-contained, would not encourage the conversion of neighboring agricultural parcels to a non-agricultural use, and does not pose harm or create issues of incompatibility with the operation of agricultural activities on adjacent properties.

(3) The use will not result in the significant removal of adjacent contracted land from agricultural or open-space use. In evaluating compatibility a board or council shall consider the impacts on noncontracted lands in the agricultural preserve or preserves.

~~The site is significantly surrounded by lands containing FSZ and Williamson Act contracts. In addition, the land use surrounding the site is entirely comprised of agricultural activities with no commercial, residential, or industrial uses in the near vicinity. The closest non-agricultural land use is the city of Lemoore, which is approximately 1.5 miles to the northeast and the NAS Lemoore base housing approximately 2.0 miles to the northwest.~~

~~Development of non-agricultural land uses significantly raises the potential for development of adjacent land. Development of a solar generation facility, however, would not result in the removal of adjacent contracted land for agricultural use. The primary feature required to site a solar generation facility is the nearby availability of an adequately sized transmission line containing available capacity to carry the increased energy load. Since the project would be self-contained and would not provide new available infrastructure that could be used by other power generation projects, the proposed use will not induce additional solar generation facilities to site on adjacent parcels. In addition, solar generation facilities do not generate the development of new urban land uses adjacent to the site since a solar facility would not provide services or products that would draw urban uses to be sited nearby.~~

~~The project's eastern border encompasses the vicinity's primary source of non-contracted Williamson Act land and is comprised of approximately 582 acres, assigned to 130 assessor's parcel numbers, owned by 71 separate parties. Of the 582 acres, approximately 100 acres is actively farmed. The remaining 482 acres of non-Williamson Act land is primarily undisturbed natural habitat. No feasible impacts to the non-contracted lands are anticipated for the same reasons identified above concerning the contracted land.~~ The modified Project would not result in the removal of adjacent contracted land from an agricultural use. The Project would connect to existing electrical infrastructure and the proposed use will not induce additional solar generation facilties to site on adjacent parcels. In addition, solar generation facilities do not generate the development of new urban land uses adjacent to the site since a solar facility would not provide services or products that would draw urban uses to be sited nearby.

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

NO IMPACT. ~~No forest or timber land is present in the SGF site, and no forest or timber land would be affected by the project.~~The MND determined that implementation of the Original Project would result in no impact under this criterion. The modified Project would also have no impact as no forest or timberland is present or zoned for on the Project site, and no forest or timberland would be affected by the Project.

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

NO IMPACT. ~~As discussed above under Section 3.2.2c, no forest land is present in the project area, and no forest land would be affected by the project.~~The MND determined that implementation of the Original Project would result in no impact under this criterion. The modified Project would also have no impact as no forest or timberland is present on the Project site, and no forest or timberland would be affected by the Project.

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

LESS THAN SIGNIFICANT IMPACT WITH MITIGATION. The MND determined that implementation of the Original Project would result in a less than significant impact with mitigation under this criterion. Construction of the solar generation facility has the potential to affect the condition of onsite soils and may impact the post project agricultural use. Implementation of the mitigation measures AG-1 and AG-2 would ensure any project related impacts would remain less than significant.

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EXHIBIT NO. 3

Modifications to Section 6 of Planning Commission Resolution No. 12-06
for CUP No. 11-06 pertaining to Williamson Act consistency findings

VI. SECTION 6: Consistency with the *California Land Conservation (Williamson) Act*

1. Utility-owned infrastructure associated with the Project would be compatible with the Farmland Security Zone Contract pursuant to Government Code section 51238(a)(1) since the utility-owned infrastructure would be an electric facility.

2. The project site is located within an established Agricultural Preserve and is consistent with the California Land Conservation Act of 1965 (Williamson Act) and the Kings County Uniform Rules for Agricultural Preserves pursuant to the following findings of consistency:

A. The applicant would perform one of the following three actions: 1) the applicant will file a FSZ cancellation application package with the County and Department of Conservation on the 200 acre project site, initiating a separate review process from the County and the Director of the Department of Conservation, or 2) the applicant shall pursue rescinding the portion of the FSZ contract containing the project site and enter into a "Solar Use Easement" if the project qualifies under the requirements of SB 618. Both of these courses of action will require approval from the California Department of Conservation and the Kings County Board of Supervisors. If the cancellation of the FSZ contract is not approved/completed, and if the FSZ contract is not converted into a "Solar Use Easement", the applicant shall 3) conduct an on-site agricultural operation which is consistent with the principles of compatibility of California Government Code Section 51238.1 as described below. In the event that the applicant is unable to obtain approval for the cancellation of the FSZ contract and the conversion into a "Solar Use Easement," then the applicant shall provide an Agriculture Management Plan describing the commercial agricultural operation consistent with the principles of compatibility of California Government Code Section 51238.1 prior to issuance of a building permit. The Agriculture Management Plan would provide site specific evidence that a foreseeable agricultural operation on the Project footprint is seasonal grazing due to evidence such as impaired soil quality, water quality, and drainage on the Project site.~~explain in detail how the applicant/operator will ensure the site significantly provides an equivalent intensity of agricultural output as historically provided by the site over the last decade.~~

The following discussion addresses how the proposed solar site could satisfy the principles of compatibility of Government Code Section 51238.1:

Government Code Section 51238.1. (a) Uses approved on contracted lands shall be consistent with all of the following principles of compatibility:

(1) The use will not significantly compromise the long-term productive agricultural capability of the subject contracted parcel or parcels or on other contracted lands in agricultural preserves.

The project does not include elements that would compromise the long-term soil quality of the site ~~(see Section 3.8 Hazards and Hazardous Materials)~~. Additionally, the project

would be subject to ~~a Soil Reclamation Plan~~MM AG-2 to return the ~~entire 200-acre project~~Project site to pre-project conditions after decommissioning the site~~; —~~. ~~and~~ Furthermore, the ~~project~~ Project site is self-contained so as to not compromise long-term agricultural activity on adjacent lands. The use of herbicides in the project area shall comply with regulations set forth by the Kings County Agriculture Department. ~~The Agriculture Management Plan would ensure agricultural commercial operations are maintained on the site in a sustainable manner for the life of the project.~~

(2) *The use will not significantly displace or impair current or reasonably foreseeable agricultural operations on the subject contracted parcel or parcels or on other contracted lands in agricultural preserves. Uses that significantly displace agricultural operations on the subject contracted parcel or parcels may be deemed compatible if they relate directly to the production of commercial agricultural products on the subject contracted parcel or parcels or neighboring lands, including activities such as harvesting, processing, or shipping.*

In order to remain compatible with the Williamson Act and in compliance with the ~~project's~~ Project's conditional use permit, the owner/operator would fully commit to and ensure successful implementation of the Agriculture Management Plan which is consistent with the principles of compatibility and performance standards outlined in Government Code section 51238.1. Attachment A (Soil & Water Analysis) to Addendum No. 2 provides evidence of limitations to onsite agricultural operations such that seasonal sheep grazing is a reasonably foreseeable agricultural use. The Attachment shows that the Project site is subject to severe limitations on water availability and that soil quality is impaired by saline conditions. As a result, dry farm seasonal grazing of the sites is a reasonably foreseeable agricultural use for this site. The SGF applicant shall provide an Agriculture Management Plan (AMP) which will detail how the SGF owner/operator shall ensure the SGF continues this reasonably foreseeable agricultural use on the SGF site. To ensure this compatibility threshold is met, the AMP shall include evidence to determine reasonably foreseeable agricultural operations and describe how the owner/operator will ensure the site retains onsite agricultural activity sufficient to meet the compatibility requirements of Government Code Section 51238.1. The development and operation of the Project is self-contained, would not encourage the conversion of neighboring agricultural parcels to a non-agricultural use, and does not pose harm or create issues of incompatibility with the operation of agricultural activities on adjacent properties.~~Agricultural commercial operations would continue on no less than 90 percent of the project site and at an intensity equivalent to the existing agriculture use of the project site for the entire life of the project, or agricultural production would provide an economic output similar to the historical economic output of the project site. The Agriculture Management Plan will also describe, in detail, how the owner/operator will fulfill this commitment and ensure the continued use of the site for the production of food or fiber to produce an agricultural production and monetary result materially equivalent to current production levels as demonstrated over the past decade. The development and operation of the SGF is self-contained, does not include elements that would facilitate expansion (i.e., over-sized infrastructure), nor does the operation of the SGF pose harm or create issues of incompatibility with the operation of agricultural activities on adjacent properties.~~

(3) The use will not result in the significant removal of adjacent contracted land from agricultural or open-space use. In evaluating compatibility a board or council shall consider the impacts on noncontracted lands in the agricultural preserve or preserves.

The modified Project would not result in the removal of adjacent contracted land from an agricultural use. The Project would connect to existing electrical infrastructure and the proposed use will not induce additional solar generation facilities to site on adjacent parcels. In addition, solar generation facilities do not generate the development of new urban land uses adjacent to the site since a solar facility would not provide services or products that would draw urban uses to be sited nearby.~~The site is significantly surrounded by lands containing FSZ and Williamson Act contracts. In addition, the land use surrounding the site is entirely comprised of agricultural activities with no commercial, residential, or industrial uses in the near vicinity. The closest non-agricultural land use is the city of Lemoore, which is approximately 1.5 miles to the northeast and the NAS Lemoore base housing approximately 2.0 miles to the northwest.~~

~~Development of non-agricultural land uses significantly raises the potential for development of adjacent land. Development of a solar generation facility, however, would not result in the removal of adjacent contracted land for agricultural use. The primary feature required to site a solar generation facility is the nearby availability of an adequately sized transmission line containing available capacity to carry the increased energy load. Since the project would be self-contained and would not provide new available infrastructure that could be used by other power generation projects, the proposed use will not induce additional solar generation facilities to site on adjacent parcels. In addition, solar generation facilities do not generate the development of new urban land uses adjacent to the site since a solar facility would not provide services or products that would draw urban uses to be sited nearby.~~

~~The site is significantly surrounded by lands containing FSZ and Williamson Act contracts. In addition, the land use surrounding the site is entirely comprised of agricultural activities with no commercial, residential, or industrial uses in the near vicinity. The closest non-agricultural land use is the city of Lemoore, which is approximately 1.5 miles to the northeast and the NAS Lemoore base housing approximately 2.0 miles to the northwest.~~

~~Development of non-agricultural land uses significantly raises the potential for development of adjacent land. Development of a solar generation facility, however, would not result in the removal of adjacent contracted land for agricultural use. The primary feature required to site a solar generation facility is the nearby availability of an adequately sized transmission line containing available capacity to carry the increased energy load. Since the project would be self-contained and would not provide new available infrastructure that could be used by other power generation projects, the proposed use will not induce additional solar generation facilities to site on adjacent parcels. In addition, solar generation facilities do not generate the development of new urban land uses adjacent to the site since a solar facility would not provide services or products that would draw urban uses to be sited nearby.~~

~~The project's eastern border encompasses the vicinity's primary source of non-contracted Williamson Act land and is comprised of approximately 582 acres, assigned to 130 assessor's parcel numbers, owned by 71 separate parties. Of the 582 acres, approximately~~

~~100 acres is actively farmed. The remaining 482 acres of non-Williamson Act land is primarily undisturbed natural habitat. No feasible impacts to the non-contracted lands are anticipated for the same reasons identified above concerning the contracted land.~~

B. The proposed project is consistent with the *Uniform Rules for Agricultural Preserves in Kings County*. The King County Board of Supervisors made the following determination on March 27, 2012 concerning commercial photovoltaic facilities on Williamson Act contracted land.

1. The Kings County Board of Supervisors found that commercial solar facilities are not considered compatible under Government Code section 51238(a)(1).

2. The Board determine that commercial solar facilities located on Williamson Act or Farmland Security Zone contracted land, but are not proposed for contract cancellation, must be consistent with the principles of compatibility under Government Code section 51238.1(a).

3. The Board of Supervisors voted to amend the County's Implementation Procedures for the California Land Conservation "Williamson" Act of 1965 by adding the following ~~paragraph~~ language to Section I under Uniform Rules for Agricultural Preserves:

Commercial solar photovoltaic system facilities that are designed primarily for the production of electrical energy for third party consumption are not compatible under the provisions of Government Code ~~Section~~ section 51238(a)(1). For purposes of determining compatibility, a project must be determined consistent with the principles of compatibility under Section 51238.1(a). Ordinarily, a solar project will be found compatible if the applicant provides a soil reclamation plan and financial assurances, and if the economic output of agricultural operations on the contracted parcel or parcels on which the project is located will be 90-percent of pre-project output. However, on November 26, 2013, the Board of Supervisors adopted Resolution No. 13-058, recognizing that due to reduced surface water deliveries, poor groundwater quality and severe groundwater overdrafts, impaired soil conditions, and regulatory burdens, circumstances exist on agricultural preserves located within that portion of Kings County south of State Route 198 and west of State Route 41 that limit the use of much of the land within that territory for agricultural activities, such that it is reasonably foreseeable that certain parcels located there that currently are used for more intensive agricultural activities will be used in the near future for less intensive uses, including dry farm seasonal grazing. Notwithstanding the present agricultural use of the land, solar farming as a concomitant use with dry farm seasonal grazing or a similar commercial agricultural activity may be deemed a compatible use within this region of the County if the applicant provides a soil reclamation plan and financial assurances, and if a finding can be made, based upon substantial evidence, and taking into account surface water availability, ground water quality and availability, and soil conditions, that the proposed concomitant commercial agricultural operation is a reasonably foreseeable use of the land.

This project is proposing to perform one of the following three actions:~~. First,~~ (1) the applicant will attempt to cancel the portion of Farmland Security Zone Contract No. 201 where the project is located, or ~~second,~~ (2) the applicant would convert the portion of Farmland Security Zone Contract #201 where the project is located into a "Solar Use Easement" as described under Government Code Section 50255.1 (Senate Bill 618), or (3)~~. The last option will only be pursued if the previous two options fail. If option three is implemented~~ the applicant would prepare and execute, for the ~~operational life of the project~~ life of the Contract, an Agriculture Management Plan that completely satisfies the Williamson Act principles of compatibility and the performance standards established in Government Code Section 51238.1. The Agriculture Management Plan will provide site specific evidence that a foreseeable agricultural operation on the Project footprint is seasonal grazing due to evidence such as impaired soil quality, water quality, and drainage on the Project site, as well as severe limitations to surface water allocations.~~would require that the project maintain commercial agriculture production on a minimum of 90 percent of the project site and would maintain commercial agricultural production that would provide an economic output similar to the historical economic output of the project site.~~

4.0 Mitigation Monitoring and Reporting Plan

The purpose of this Mitigation Monitoring and Reporting Plan (MMRP) is to ensure effective implementation of the mitigation measures required by the Kings County Community Development Agency and that the applicant has agreed to implement as part of the RE Kansas Solar Generation Facility project. The applicant will perform the measures outlined in Table 4-1. The MMRP table includes the:

- Mitigation measures that the applicant is required to implement as part of the project;
- California Environmental Quality Act (CEQA) checklist questions to which the mitigation measures apply;
- Responsibility for compliance; and
- Timing for implementation of the mitigation measures.

Table 4-1 Mitigation Monitoring and Reporting Plan for RE Kansas SGF Project

CEQA Checklist Questions	Mitigation Measures (MMs)	Responsibility for Compliance	Timing
3.1 Aesthetics			
	No applicable mitigation measures.		
3.2 Agriculture and Forest Resources			
a. *Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?*	MM AG-1: Soil Reclamation Plan. Prior to the issuance of a building permit, the applicant shall submit a Soil Reclamation Plan for review and approval by Community Development Agency staff. The plan shall contain an analysis of pre-project baseline soil conditions, and shall contain specific measures to restore the soil to its pre-project condition, including removal of all fixtures, equipment, non-agricultural roads, and restoration of compacted soil. Additionally, the Soil Reclamation Plan shall discuss the retention of any surface water rights. Reclamation shall commence within two months of the expiration of the use permit and be completed within 18	Applicant, Kings County Community Development Division	Plan submittal prior to construction with plan performance within 12 months of CUP expiration.

Table 4-1 Mitigation Monitoring and Reporting Plan for RE Kansas SGF Project

CEQA Checklist Questions	Mitigation Measures (MMs)	Responsibility for Compliance	Timing
	months from the date the facility ceases to operate. MM AG-2: Financial Assurance. Prior to the issuance of a building permit, the applicant shall post a performance bond or similar instrument to ensure completion of the activities under the Soil Reclamation Plan. Financial assurances for the Reclamation Plan will be reviewed every 5 years by the Kings County Community Development Agency to determine if finances are sufficient to perform reclamation of the project. The assurance must be adjusted if, during the five year review, finances are determined to be insufficient to perform reclamation of the project. MM AG-3: Off-site Agricultural Mitigation. If the applicant 1) does not continue ~~an intensive agricultural operation~~ a reasonably foreseeable agricultural use on the Project site ~~at least 90 percent of the project site at an intensity equivalent to the existing agriculture use of the project site~~ for the entire life of the project, ~~and if the applicant~~ or 2) is successful in cancelling the Farmland Security Zone contract, or 3) is successful in entering into a "Solar Use Easement," the applicant shall then provide written evidence of funding and/or purchase of agricultural mitigation land (which will be managed and maintained by an appropriate entity) for the life of the project to mitigate the loss of Farmland of Statewide Importance at a ratio of 1:1. Every acre of agricultural land removed from production would be mitigated by the applicant. The agricultural land preserved shall be of equal or greater quality as defined by the California Department of Conservation Farmland Mapping and Monitoring Program (i.e., if Farmland of Statewide Importance is converted to solar then	Applicant, Kings County Community Development Division	Prior to issuance of building permits.

Table 4-1 Mitigation Monitoring and Reporting Plan for RE Kansas SGF Project

CEQA Checklist Questions	Mitigation Measures (MMs)	Responsibility for Compliance	Timing
	the agricultural land preserved must not be in a classification indicating a lower quality than Farmland of Statewide Importance). Should the mitigation occur within a preferred Kings County conservation area for agriculture, including but not limited to Zones defined as "AX" or the FSZ Expansion Area as shown on Figure RC-14 of the Resource Conservation Element of the Kings County 2035 General Plan, off-site mitigation shall be reduced by 50 percent to 0.5:1.		
e. *Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use?*	MM AG-1: Soil Reclamation Plan. Prior to the issuance of a building permit, the applicant shall submit a Soil Reclamation Plan for review and approval by Community Development Agency staff. The plan shall contain an analysis of pre-project baseline soil conditions, and shall contain specific measures to restore the soil to its pre-project condition, including removal of all fixtures, equipment, non-agricultural roads, and restoration of compacted soil. Additionally, the Soil Reclamation Plan shall discuss the retention of any surface water rights. Reclamation shall commence within two months of the expiration of the use permit and be completed within 18 months from the date the facility ceases to operate. MM AG-2: Financial Assurance. Prior to the issuance of a building permit, the applicant shall post a performance bond or similar instrument to ensure completion of the activities under the Soil Reclamation Plan. Financial assurances for the Reclamation Plan will be reviewed every 5 years by the Kings County Community Development Agency to determine if finances are sufficient to perform reclamation of the project. The assurance must be adjusted if, during the five	Applicant, Kings County Community Development Division	Plan submittal prior to construction with plan performance within 12 months of CUP expiration.

Table 4-1 Mitigation Monitoring and Reporting Plan for RE Kansas SGF Project

CEQA Checklist Questions	Mitigation Measures (MMs)	Responsibility for Compliance	Timing
	year review, finances are determined to be insufficient to perform reclamation of the project.		
3.3 Air Quality			
	No applicable mitigation measures		
3.4 Biological Resources			
a. *Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?*	MM BIO-1: Pre-construction Wildlife Surveys. A qualified biologist will perform pre-construction surveys for nesting birds and other common and special status wildlife in suitable habitats (including the irrigation ditches) in and adjacent to (i.e., within 250 feet of) the project area. Pre-construction surveys for raptor species shall extend 0.5 miles from the project boundary. Pre-construction wildlife clearance surveys will be conducted no more than 30 days in advance of construction (i.e., initial site clearing or other activity that removes vegetation or disrupts soils). If special status wildlife species are identified on site during pre-construction wildlife surveys, the applicant will implement MM BIO-2 (species avoidance measures). If species avoidance measures cannot be applied, the applicant shall work in concert with the CDFG to determine the appropriate management requirements for the species and act on the recommendations of the CDFG. MM BIO-2: Nesting Bird Avoidance Measures. Construction activities that cannot be conducted without undertaking clearing or grading or placing equipment or personnel in occupied wildlife habitats, including riparian areas, woodlands, and jurisdictional drainages, will be timed to avoid nesting birds. During the avian nesting season, which generally occurs from February 1 to September 15, where pre-construction surveys identify active nests of protected bird species,	Applicant	Not more than 30 days prior to construction; prior to construction; post-construction

Table 4-1 Mitigation Monitoring and Reporting Plan for RE Kansas SGF Project

CEQA Checklist Questions	Mitigation Measures (MMs)	Responsibility for Compliance	Timing
	exclusion areas will be marked with stakes and colored flagging tape will be maintained around all active nests until birds have fledged. Buffers from nesting birds ~~of~~ (non-raptor) shall be a minimum of 250 feet. ~~and buffers from raptors shall be a minimum of 300 feet and up to 500 feet from project construction activities. Exclusion areas (buffers) will be determined prior to project construction.~~ If an active Swainson's hawk nest(s) is found within 0.5 miles or any other active raptor nest within 500 feet of the project site, the project proponent shall apply appropriate avoidance/protective measures as determined by the qualified biologist in consultation with the CDFG. MM BIO-3: Pre-construction Clearance Surveys for Burrowing Owls. A qualified biologist will conduct pre-construction clearance surveys for burrowing owls in all potential habitats throughout the project area; thus, any action that disrupts surface soils (e.g., clearing and grubbing, rough grading, excavation, compaction for temporary staging areas or permanent construction sites) will be subject to pre-construction surveys. Surveys will be undertaken not more than 30 days prior to ground-disturbing activity to ensure avoidance of burrowing owls during construction. For activities that will be initiated between March and June, inclusively, pre-construction surveys will be completed not more than 14 days prior to the onset of such activities. All areas within 250 feet of the project area will be surveyed where site access and visibility allows. MM BIO-4: Burrowing Owl Impact Avoidance. If pre-construction clearance surveys reveal the presence of any active burrowing owls outside		

Table 4-1 Mitigation Monitoring and Reporting Plan for RE Kansas SGF Project

CEQA Checklist Questions	Mitigation Measures (MMs)	Responsibility for Compliance	Timing
	the breeding season, then the occupied burrows will be avoided by creating a 250-foot buffer between the burrows and the construction area. Alternatively, passive relocation of any owls prior to commencing construction (see CBOC 1993 and CDFG 1995) may be permissible, but only when owls are not breeding (i.e., between September 1 and January 31). If the surveys reveal the presence of burrowing owls during the nesting season (i.e., February 1 to August 31) and construction is to be initiated during the nesting season, then a qualified biologist will observe the owls' behavior to determine their breeding status. If the owls are breeding, no construction will occur within 75 meters (250 feet) of any occupied burrow. Any construction planned within this 250-foot buffer zone will be delayed until August 31, or until a biologist can document that affected nests are no longer occupied or that young have fledged and can be safely relocated, whichever occurs first. If occupied burrows are identified outside the breeding season or if a biologist determines during the breeding season that either the resident owls have not yet begun egg laying or incubation or that the juveniles are foraging independently and capable of independent survival, then the project applicant may passively relocate the owls. Owls would be excluded from any burrows within 50 meters (160 feet) of the direct impact zone by installing one-way doors in burrow entrances. One-way doors (e.g., modified dryer vents) would be left in place 48 hours to insure owls have left the burrow before construction begins. If surveys reveal, either within 50 meters (160 feet) of the direct impact zone in the non-breeding		

Table 4-1 Mitigation Monitoring and Reporting Plan for RE Kansas SGF Project

CEQA Checklist Questions	Mitigation Measures (MMs)	Responsibility for Compliance	Timing
	season or within 75 meters (250 feet) of the direct impact zone in the breeding season, any unoccupied burrows, crevices, or holes made by other animals, which could provide habitat for burrowing owls, then access to these burrows would be barred either through installation of one-way doors or through collapsing of the burrows prior to construction. After a thorough inspection, a qualified biologist will determine whether the potential burrow can be safely collapsed or whether it may contain another resident species that requires relocation. By blocking burrowing owls' access to these burrows, the applicant will ensure that no un-surveyed burrowing owls are adversely impacted by the project. MM BIO-5: Burrowing Owl On- or Off-Site Mitigation. For each occupied burrow rendered inaccessible during breeding season by construction and operation of the project, the project applicant will provide two artificial burrows outside the 50 meter (160 foot) buffer zone. The project area will be monitored daily for one week to confirm the owls are using their new, alternative burrows before construction begins. During construction, sections of flexible plastic pipe will be inserted into occupied tunnels to maintain an escape route for any animals inside the burrows. If suitable nesting habitat is determined to be available on site, compensatory measures may be required to ensure that no undue impacts on nesting owl habitat occurs. Compensatory mitigation may be required by the CDFG as a precursor to granting authorization to evict owls during the breeding season from construction sites. Based on recent conversations between the CDFG and the applicant, the CDFG has indicated compensation is determined on a		

Table 4-1 Mitigation Monitoring and Reporting Plan for RE Kansas SGF Project

CEQA Checklist Questions	Mitigation Measures (MMs)	Responsibility for Compliance	Timing
	case-by-case basis as opposed to the original 6.5 acres per pair ratio described in the 1993 protocol (CBOC 1993). MM BIO-6: San Joaquin Kit Fox Protection Measures. Prior to and during any ground-disturbing activities occurring within the project area, the applicant will adopt and include the following applicable "Standardized recommendations for protection of the San Joaquin kit fox prior to or during ground disturbance" (USFWS 1999) into the project construction plan: 1. Project-related vehicles will observe a 20-mile-per-hour speed limit in all project areas, except on county roads and state and federal highways; this is particularly important at night, when San Joaquin kit foxes are most active. To the greatest extent practicable, nighttime construction will be minimized. <u>However, if nighttime construction does occur, then the speed limit should be reduced to 10-mph.</u> Off-road traffic outside of designated project areas will be prohibited. 2. To prevent inadvertent entrapment of San Joaquin kit foxes during the construction phase of the project, all excavated, steep-walled holes or trenches more than 2 feet deep will be covered at the close of each working day by plywood or similar materials or provided with 1 or more escape ramps constructed of earth fill or wooden planks. Before such holes or trenches are filled, they will be thoroughly inspected for trapped animals. If at any time a trapped or injured San Joaquin kit fox is discovered, the procedures under numbers 8, 11, 12 and 13		

Table 4-1 Mitigation Monitoring and Reporting Plan for RE Kansas SGF Project

CEQA Checklist Questions	Mitigation Measures (MMs)	Responsibility for Compliance	Timing
	of this section will be followed. 3. San Joaquin Kit foxes are attracted to den-like structures such as pipes and may enter stored pipes and become trapped or injured. All construction pipes, culverts, or similar structures with a diameter of 4 inches or greater that are stored at the construction site for 1 or more overnight periods will be thoroughly inspected for San Joaquin kit foxes before the pipe is subsequently buried, capped, or otherwise used or moved in any way. If a San Joaquin kit fox is discovered inside a pipe, then that section of pipe will not be moved until the USFWS has been consulted. If necessary, and under the direct supervision of the biologist, the pipe may be moved once to remove it from the path of construction activity until the fox has escaped. 4. All food-related trash items such as wrappers, cans, bottles, and food scraps will be disposed of in securely closed containers and removed at least once a week from the construction/SGF site. 5. No firearms will be allowed on the SGF site, except for onsite security purposes and law enforcement personnel. 6. To prevent harassment or mortality of San Joaquin kit foxes or destruction of dens by dogs or cats, no pets will be permitted on the SGF site. 7. The use of rodenticides and herbicides in project areas will be restricted. This is necessary to prevent primary or secondary poisoning of San Joaquin kit foxes and the depletion of prey populations on which they depend. All uses of such compounds will		

Table 4-1 Mitigation Monitoring and Reporting Plan for RE Kansas SGF Project

CEQA Checklist Questions	Mitigation Measures (MMs)	Responsibility for Compliance	Timing
	observe label and other restrictions mandated by the U.S. Environmental Protection Agency, California Department of Food and Agriculture, and other state and federal legislation, as well as additional project-related restrictions deemed necessary by the USFWS. If rodent control must be conducted, zinc phosphide will be used because of its proven lower risk to San Joaquin kit foxes. 8. The applicant will appoint a representative who will be the contact source for any employee or contractor who might inadvertently kill or injure a San Joaquin kit fox or who finds a dead, injured, or entrapped individual. This representative will be identified during the employee education program. The representative's name and telephone number will be provided to the USFWS. 9. An employee education program will be conducted for the project. The program will consist of a brief presentation by persons knowledgeable in San Joaquin kit fox biology and legislative protection to explain endangered species concerns to contractors, their employees, and agency personnel involved in the project. The program will include the following: a description of the San Joaquin kit fox and its habitat needs; a report of the occurrence of San Joaquin kit fox in the project area; an explanation of the status of the species and its protection under the ESA; and a list of measures being taken to reduce impacts on the species during construction and implementation. A fact sheet conveying this		

Table 4-1 Mitigation Monitoring and Reporting Plan for RE Kansas SGF Project

CEQA Checklist Questions	Mitigation Measures (MMs)	Responsibility for Compliance	Timing
	information will be prepared for distribution to the above-mentioned people and anyone else who may enter the SGF site. 10. Upon completion of the project, all areas subject to temporary ground disturbances, including storage and staging areas, temporary roads, pipeline corridors, etc., will be recontoured, if necessary, and revegetated to promote restoration of the area to pre-project conditions. An area subject to "temporary" disturbance means any area that is disturbed during project construction but which, after completion, will not be subject to further disturbance and has the potential to be revegetated. Appropriate methods and plant species used to revegetate such areas ~~will~~ should be determined on a site-specific basis in consultation with the Service, CDFG, and a revegetation expert. 11. In the case of trapped animals, escape ramps or structures will be installed immediately to allow the animal(s) to escape, or the USFWS will be contacted for advice. 12. Any contractor, employee, or agency personnel who inadvertently kills or injures a San Joaquin kit fox will immediately report the incident to their representative. This representative will contact the CDFG immediately in the case of a dead, injured, or entrapped San Joaquin kit fox. The CDFG contact for immediate assistance is State Dispatch at (916) 445-0045. They will contact the local warden or ~~biologist~~ Mr. Paul Hoffman, the wildlife biologist, at (530)934-9309. The Service should be		

Table 4-1 Mitigation Monitoring and Reporting Plan for RE Kansas SGF Project

CEQA Checklist Questions	Mitigation Measures (MMs)	Responsibility for Compliance	Timing
	contacted at the numbers below. 13. The Sacramento Fish and Wildlife Office and CDFG will be notified in writing within three working days of the accidental death of or injury to a San Joaquin kit fox during project-related activities. Notification must include the date, time, and location of the incident or of the finding of a dead or injured animal and any other pertinent information. The USFWS contact is the Chief of the Division of Endangered Species, at ~~(916) 414-6630~~ the addresses and telephone numbers below. The CDFG contact is Mr. ~~Ron Schlorff~~ Paul Hoffman at ~~1416 9th Street, Sacramento, California 95814, at (916) 654-4262~~ 1701 Nimbus Road, Suite A, Rancho Cordova, California 95670, (530) 934-9309. Any project-related information required by the Service or questions concerning the above conditions or their implementation may be directed in writing to the U.S. Fish and Wildlife Service at: Endangered Species Division 2800 Cottage Way, Suite W2605 Sacramento, California 95825-1846 (916) 414-6620 or (916) 414-6600 MM BIO-7: Protection of Western Spadefoot. If construction activities occur during the wet season, temporary silt fencing will be installed and maintained around suitable irrigation drainages to prevent amphibians from moving into the work areas. The location of the fencing will be determined by the biological monitor and the construction supervisor. Plastic monofilament		

Table 4-1 Mitigation Monitoring and Reporting Plan for RE Kansas SGF Project

CEQA Checklist Questions	Mitigation Measures (MMs)	Responsibility for Compliance	Timing
	netting (erosion control matting) or similar material will not be used for erosion control or other purposes in the construction area to prevent the possibility that amphibians could become entangled or trapped. Acceptable substitutes include jutte matting or mesh, coconut coir matting, or hydro-seeding. Project Design Feature (Note): Common and special status species have the potential to become entrapped in hollow vertical poles and fences posts. All hollow vertical poles and fence posts will be capped in a manner that prevents birds from entering these structures. For visual reference please see Figure 1-6 Project Elevations and Details, located in the projects Initial Study.		
d. Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	MM BIO-3: Pre-construction Clearance Surveys for Burrowing Owls. MM BIO-4: Burrowing Owl Impact Avoidance. MM BIO-5: Burrowing Owl On- or Off-Site Mitigation. MM BIO-6: San Joaquin Kit Fox Protection Measures. MM BIO-7: Protection of Western Spadefoot.	Applicant, Kings County Community Development Division, CDFG	Prior to construction (30 days); during construction

Table 4-1 Mitigation Monitoring and Reporting Plan for RE Kansas SGF Project

CEQA Checklist Questions	Mitigation Measures (MMs)	Responsibility for Compliance	Timing
3.5 Cultural Resources			
a. *Would the project cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?*	MM CR-1: Preparation of a Construction Monitoring Plan. Prior to construction, the applicant will retain the services of a cultural resources consultant who meets the Professional Qualifications Standards established by the U.S. Secretary of the Interior (per the Standards and Guidelines for Archeology and Historic Preservation, 48 FR 44716). The consultant will prepare a Construction Monitoring and Unanticipated Cultural Resources Discovery Plan to be implemented if an unanticipated discovery is made. This plan will include the following provisions: 1. If subsurface historical or archeological resources are encountered during construction, construction activities at the SGF site will cease in the immediate vicinity of the find, and a qualified archaeologist will be retained to evaluate the significance of the resources. 2. If human remains are encountered during construction of the SGF, construction activities at the site will cease in the immediate vicinity of the discovered remains, and the County coroner and a qualified archaeologist will be notified according to the provisions of California Public Resources Code Sections 5097.98 and 5097.99. 3. If paleontological resources are discovered during excavation activities at the SGF site, work in the immediate vicinity of the find will cease, and a qualified professional paleontologist will be retained to evaluate the significance of the resources.	Applicant	Prior to and during construction

Table 4-1 Mitigation Monitoring and Reporting Plan for RE Kansas SGF Project

CEQA Checklist Questions	Mitigation Measures (MMs)	Responsibility for Compliance	Timing
	At a minimum, the Construction Monitoring and Unanticipated Cultural Resources Discovery Plan will detail the following elements: • Worker and supervisor training in the identification of cultural resources that could be found in the project area, and the implications of disturbing and collecting cultural resources pursuant to the Archaeological Resources Protection Act of 1979. Training will include guidance in identifying signs that cultural resources may be present and a notification protocol to ensure that construction can be immediately halted in any affected areas and that appropriate (applicant and other) personnel can be quickly notified. • Worker and supervisor response procedures to be followed in the event of an unanticipated discovery, including appropriate points of contact for professionals qualified to make decisions about the potential significance of any find. If subsurface cultural (historical, archeological, paleontological) resources are encountered during construction, construction activities at the SGF site will cease in the immediate vicinity of the find, and a qualified archaeologist will be retained to evaluate the significance of the resource. • Identities of persons authorized to stop or redirect work that could affect the discovery and their on-call contact information. • Procedures for monitoring construction activities in archaeologically sensitive areas. • A minimum radius around any discovery within which work will be halted until the		

Table 4-1 Mitigation Monitoring and Reporting Plan for RE Kansas SGF Project

CEQA Checklist Questions	Mitigation Measures (MMs)	Responsibility for Compliance	Timing
	significance of the resource has been evaluated and mitigation implemented as appropriate. • Procedures for identifying and evaluating the historical significance of a discovery. • Procedures for consulting Native Americans when identifying and evaluating the significance of discoveries involving Native American cultural materials. • Procedures to be followed for treatment of discovered human remains in accordance with current State law and protocol developed in consultation with Native Americans. If human remains are encountered during construction of the SGF, construction activities at the site will cease in the immediate vicinity of the discovered remains and the County coroner and a qualified archaeologist will be notified according to the provisions of California Public Resources Code Sections 5097.98 and 5097.99. MM CR-2: Evaluate Unavoidable Cultural Resources. Cultural resources discovered during project construction that cannot be avoided and that have not been evaluated to determine eligibility for listing in the California Register of Historic Resources (CRHR) will be evaluated to determine their historical significance. Evaluation studies will be conducted and documented according to applicable laws, regulations, guidelines, and professional standards. If a site proves to be a unique resource eligible for listing in the CRHR and unavoidable by construction activities, appropriate procedures such as data recovery excavations will be undertaken to mitigate the impact on the resource, and the	Applicant	During construction

Table 4-1 Mitigation Monitoring and Reporting Plan for RE Kansas SGF Project

CEQA Checklist Questions	Mitigation Measures (MMs)	Responsibility for Compliance	Timing
	resource will be submitted to the appropriate curation repository, pursuant to the requirements of CEQA Guidelines Section 15064.5(f).		
b. Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5	MM CR-1: Preparation of a Construction Monitoring Plan. MM CR-2: Evaluate Unavoidable Cultural Resources	Applicant Applicant	Prior to and during construction During construction
c. Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	MM CR-1: Preparation of a Construction Monitoring Plan. MM CR-3: Paleontological Resources Consultation. If paleontological resources are discovered during excavation activities at the SGF project site, work in the immediate vicinity of the find will cease, and a qualified professional paleontologist will be retained to evaluate the significance of the resource. If determined to be significant, the resource will be excavated and submitted to the appropriate curation repository.	Applicant Applicant	Prior to and during construction During construction
d. Would the project disturb any human remains, including those interred outside of formal cemeteries?	MM CR-1: Preparation of a Construction Monitoring Plan. MM CR-4: Inadvertent Discovery of Human Remains. Any human remains discovered during project activities in California will be protected in accordance with current State law, specifically Section 7050.5 of the California Health and Safety Code, Section 5097.98 of the California Public Resources Code, and Assembly Bill 2641. In the event that human remains are recovered on private land, the landholder will have the right to designate the repository for the remains if they are determined not to be Native American or if their family affiliation cannot be determined.	Applicant Applicant	During construction During construction
3.6 Geology and Soils			
	No applicable mitigation measures.		

Table 4-1 Mitigation Monitoring and Reporting Plan for RE Kansas SGF Project

CEQA Checklist Questions	Mitigation Measures (MMs)	Responsibility for Compliance	Timing
3.7 Greenhouse Gas Emissions			
	No applicable mitigation measures.		
3.8 Hazards and Hazardous Materials			
	No applicable mitigation measures.		
3.9 Hydrology and Water Quality			
	No applicable mitigation measures.		
3.10 Land Use and Planning			
	No applicable mitigation measures.		
3.11 Noise			
	No applicable mitigation measures.		
3.12 Population and Housing			
	No applicable mitigation measures.		
3.13 Public Services, Utilities and Service Systems			
	No applicable mitigation measures.		
3.14 Recreation			
	No applicable mitigation measures.		

Table 4-1 Mitigation Monitoring and Reporting Plan for RE Kansas SGF Project

CEQA Checklist Questions	Mitigation Measures (MMs)	Responsibility for Compliance	Timing
3.16 Transportation/Traffic			
a. Would the project cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?	MM TT-1: Traffic Measures. The applicant will consult with Kings County Public Works Department prior to initiation of construction activities that may affect area traffic (such as equipment and supply delivery necessitating lane closures, trenching, etc.) and will implement appropriate traffic controls in accordance with the California Vehicle Code and other state and local requirements to avoid or minimize impacts on traffic. Traffic measures that will be implemented during construction activities include the following: 1. Construction traffic will not block emergency equipment routes. 2. Construction activities will be designed to minimize work on, and use of, local streets. 3. Construction will comply with San Joaquin Valley Air Pollution Control District standards for unpaved roads, which include a requirement to keep vehicle speeds below 15 miles per hour and to have fewer than 150 trips per day per unpaved road.	Applicant, Kings County Community Development Division	Prior to and during construction
b. Would the project exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	MM TT-1: Traffic Measures.	Applicant, Kings County Community Development Division	Prior to and during construction

Table 4-1 Mitigation Monitoring and Reporting Plan for RE Kansas SGF Project

CEQA Checklist Questions	Mitigation Measures (MMs)	Responsibility for Compliance	Timing
c. *Would the project result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?*	No applicable mitigation measures.		
d. *Would the project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?*	No applicable mitigation measures.		
e. *Would the project result in inadequate emergency access?*	MM TT-1: Traffic Measures.	Applicant, Kings County Community Development Division	Prior to and during construction
f. *Would the project result in inadequate parking capacity?*	No applicable mitigation measures.		
g. *Would the project conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?*	No applicable mitigation measures.		
3.16 Mandatory Findings of Significance			
	No applicable mitigation measures other than those described in the preceding sections.		

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KINGS COUNTY PLANNING COMMISSION
STAFF REPORT

CUP Addendum
Conditional Use Permit Nos. 11-09 (RE Mustang), 12-01 (RE Orion), and 12-02 (RE Kent South)
Zoning Ordinance No. 269.69
January 6, 2014

APPLICANT: RE Kent South LLC, RE Mustang LLC, RE Orion LLC, 300 California Street, 7th Floor, San Francisco, CA 94104

PROPERTY OWNERS: Nancy Oliveira, 9235 24th Avenue, Lemoore, CA 93245
John and Sally Oliveira, 12446 Fargo Ave, Hanford, CA 93230

LOCATION: 15866 25th Avenue, Lemoore, CA (Assessor's Parcel Numbers See Table Below)

GENERAL PLAN DESIGNATION: Exclusive Agriculture (AX)

ZONE DISTRICT CLASSIFICATION: Exclusive Agriculture (AX)

CONDITIONAL USE PROPOSED: The applicant is proposing to establish three commercial solar generating facilities.

CUP	Project Entity	Project Area	Maximum Capacity
11-09	RE Mustang	1,008.01 acres	160 MW
12-01	RE Orion	210.00 acres	20 MW
12-02	RE Kent South	210.00 acres	20 MW

DISCUSSION:

On December 9, 2013, a CUP Addendum was received to revise CUP's 11-09 (RE Mustang LLC), 12-01 (RE Orion LLC), and 12-02 (RE Kent South LLC). The Addendum is attached to Planning Commission Resolution No. 14-03 as Exhibit No. 1. The purpose of the Addendum is to: analyze a revision to the Project's CUP that would allow the Project to demonstrate Farmland Security Zone (FSZ) contract compatibility by maintaining reasonably foreseeable agricultural operation onsite determined by site-specific soil and water analysis. Consistent with Kings County Board of Supervisors Resolution No. 13-058, the Addendum would remove the current CUPs' requirement that agricultural compatibility be achieved by maintaining commercial agriculture on a minimum of 90% of the Project site that would provide an economic output similar to the historical economic output of the site. The Addendum also clarifies the description and environmental analysis of the PG&E switching stations.

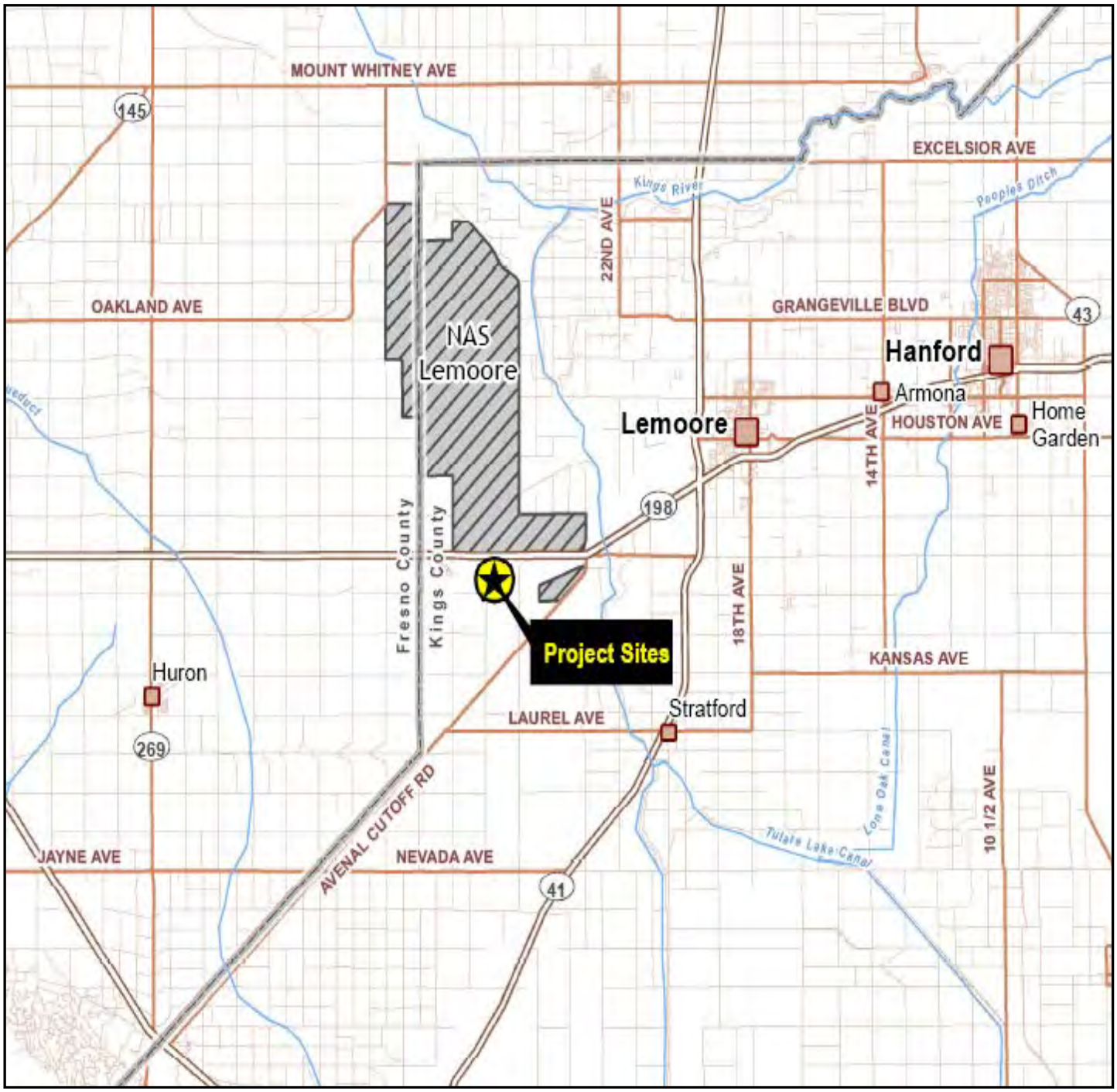
Conditional Use Permit No.'s 11-09, 12-01, and 12-02 were originally approved by the Kings County Planning Commission on August 6, 2012 when Resolution No. 12-10 was adopted. CUP No. 11-09 approved

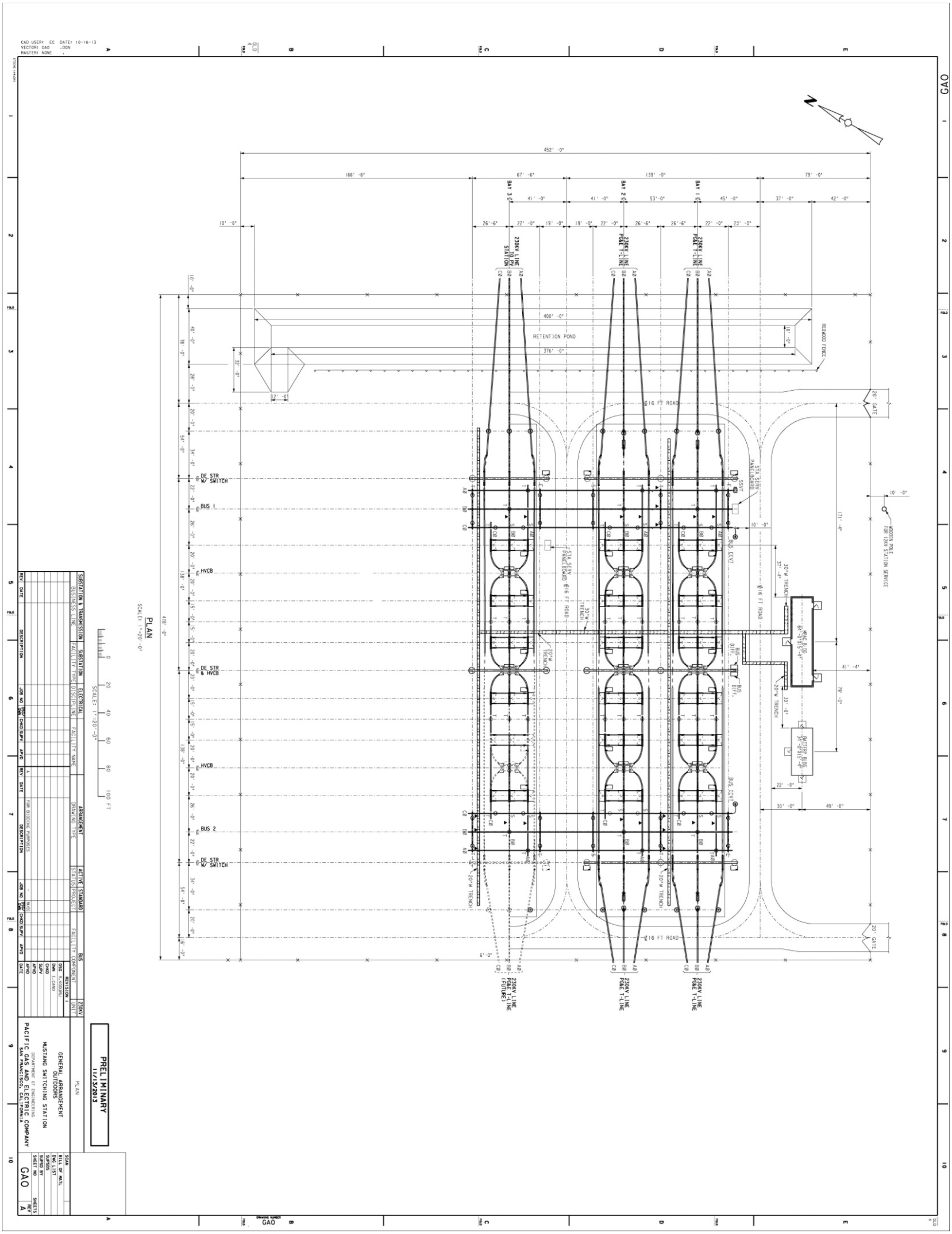
construction and operation of a 160 MW photovoltaic solar facility on 1,008 acres, CUP No. 12-01 approved construction and operation of a 20 MW photovoltaic solar facility on 210 acres, and CUP No. 12-02 approved construction and operation of a 20 MW photovoltaic solar facility on 210 acres. The Projects consist of three main components that were previously in the Mitigated Negative Declaration (MND).

1. Solar panels, inverters, intermediate-voltage transformers, access roads, and electrical wiring necessary for collecting and consolidating power across the project sites.
2. Connections to either one high-voltage substation or one medium-voltage substation.
3. The interconnection from the Solar Generation Facility (SFG) to a local electrical power line.

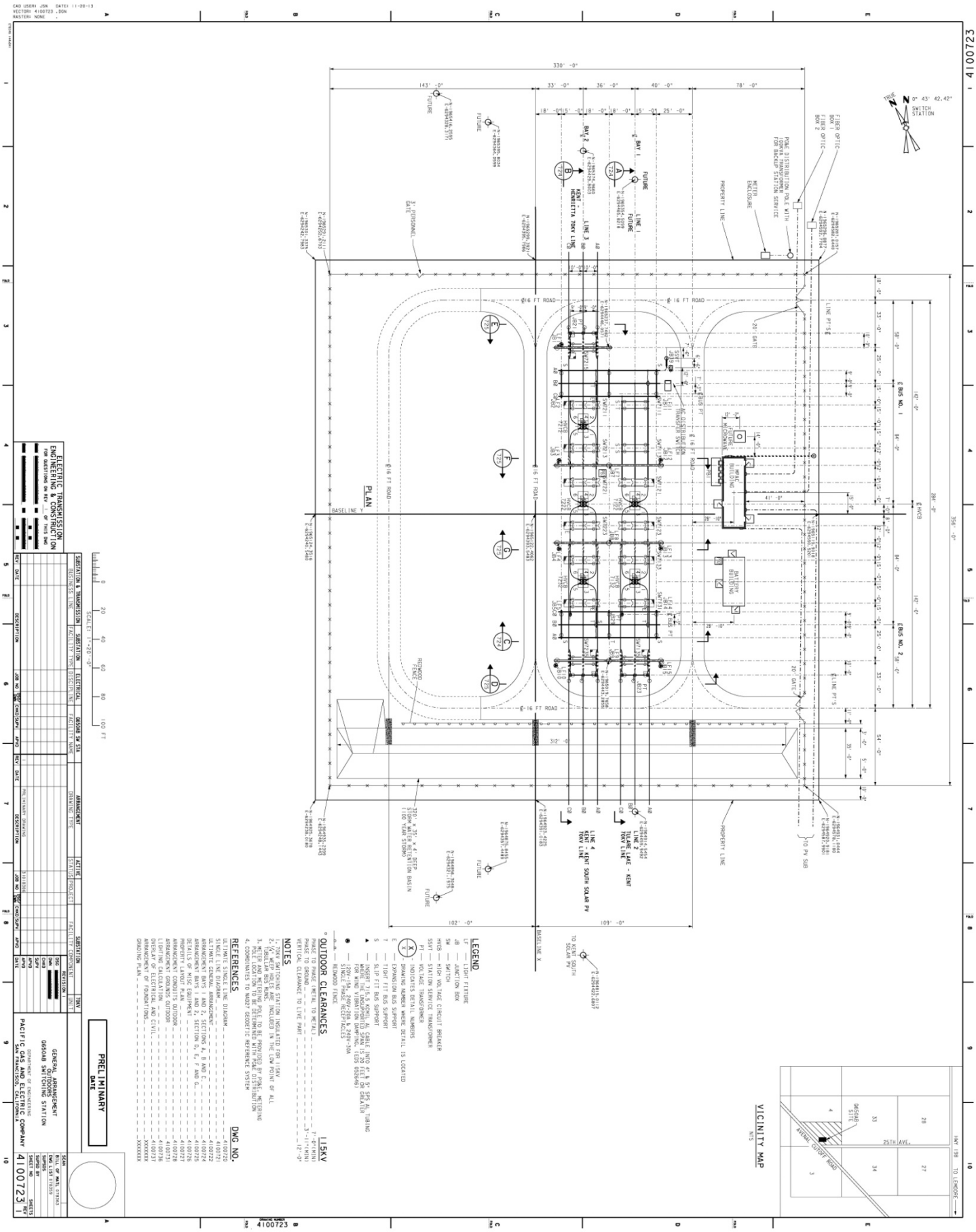
Parcel Number	Parcel Acreage	FSZ or WA	Contract No.	Effective Date
RE Mustang				
024-260-004	158.18	FSZ	FSZ00222	1/1/2002
024-260-011	160			1/1/2002
024-260-016	463.58			1/1/1985
024-260-010	160			1/1/2002
024-270-001	71.25			1/1/2002
024-270-025	1			1/1/2002
024-270-024	0.5			1/1/2002
024-270-022	2.5			1/1/2002
024-270-023	1.25			1/1/2002
024-270-018	11.25			1/1/2002
024-270-010	26.25			1/1/2002
024-270-016	2.5			1/1/2002
024-270-015	2.5			1/1/2002
024-270-006	1.5			1/1/2002
024-270-007	1			1/1/2002
024-270-008	2.5			1/1/2002
024-270-004	5			1/1/2002
RE Orion				
024-260-010	160	FSZ	FSZ00222	1/1/2002
024-260-004	158.18			1/1/2002
024-260-018	158.65	FSZ	FSZ00221	1/1/2002
RE Kent South				
024-260-018	158.65	FSZ	FSZ00221	1/1/2002
026-010-041	198.60			1/1/2002

Project Vicinity Map




PRELIMINARY
11/13/2013
PLAN
SCALE: 1"=20'-0"
RETENTION POND
REDWOOD FENCE
BAY 3
BAY 2
BAY 1
230KV LINE PG&E T-LINE
BUS 1
BUS 2
HVCB
DE STR W/ SWITCH
MEAC BLDG
BATTERY BLDG
20' GATE
16 FT ROAD
GENERAL ARRANGEMENT OUTDOORS
MUSTANG SWITCHING STATION
PACIFIC GAS AND ELECTRIC COMPANY
SAN FRANCISCO, CALIFORNIA
GAO


BY OTHER
ELEVATION B
ELEVATION A
PRELIMINARY
FOR PROPOSAL ONLY
RECURRENT ENERGY/PACIFIC GAS AND ELECTRIC COMPANY
MUSTANG SWITCHING STATION
230kV SWITCH & BUS STRUCTURE
279428
279428-003
LEGENDS
REFERENCES


PLAN
VICINITY MAP
LEGEND
NOTES
REFERENCES
OUTDOOR CLEARANCES
DWG NO.
GENERAL ARRANGEMENT OUTDOOR SWITCHING STATION
PRELIMINARY DATE
PACIFIC GAS AND ELECTRIC COMPANY
SAN FRANCISCO, CALIFORNIA
4100723

With the Addendum the Projects will remain a 160 MW photovoltaic solar facility on 1,008 acres and two 20 MW photovoltaic solar facilities each on 210 acres of disturbed agricultural land and will connect into a local electrical power line. The main Projects components would apply to the revised Project; no changes to the type of Project infrastructure, construction, maintenance, or use of the facility as described for the Original Project would occur. Two PG&E switching stations were previously analyzed: a 230-kV PG&E switching station with a footprint of the approximately 400 ft. x 600 ft. (240,000 sq. ft. or 5.51 acres) and a 70-kV PG&E switching station with a footprint of approximately 310 ft. x 320 ft. (99,200 sq. ft. or 2.28 acres). The revised area for the 230-kV PG&E switching station will have an approximate footprint of 465 ft. x 490 ft. (227,850 sq. ft. or 5.23 acres), and the revised 70-kV PG&E switching station footprint will be increased to approximately 360 ft. x 330 ft. (118,800 sq. ft. or 2.73 acres). In addition, the previous approval included up to 18 new utility poles installed on the Project site and within PG&E easements, the tallest of which will be 80 ft. and the revised project will include the replacement of up to 3 lattice steel towers up to 140 ft. in height.

The modified Projects switching stations would fall on land under the same agricultural use and cultivation practices as the Projects footprint assessed within the MND. Additionally, the modified Projects footprints fall within the biological and cultural resources survey boundary; thus, the analysis and impact discussion for biological and cultural resources found in the MND also pertains to the revised Projects footprints. The revised area of the substation and switching stations will remain consistent with the approved CUP and will not cause any changes to the Conditions of Approval and Mitigation Measures that were previously approved by the County Planning Commission.

The revised Project is located on land subject to Farmland Security Zone (FSZ) contracts. A solar facility to be located on Williamson Act or FSZ contracted land may only receive a conditional use permit if it meets the principles of compatibility under Government Code Section 51238.1(a), or if the contract is proposed for cancellation, or is eligible and converts to a Solar Use Easement. The Project applicant would fulfill one of three options to meet the requirements of the Zoning Ordinance and ensure the Project has no significant impacts related to the Williamson Act: Option 1) cancel the FSZ contract, Option 2) convert the FSZ contract into a "Solar Use Easement" pursuant to Government Code Section 51255.1 (Senate Bill 618), or Option 3) maintain a use onsite that meets the principles of compatibility pursuant to Government Code Section 51238.1(a) by maintaining reasonably foreseeable agricultural operations onsite as determined by site-specific soil and water analysis. As part of this revised Project description, the Project applicant may pursue these options in any order, such that an attempt to cancel or convert the FSZ contracts (Options 1 and 2) would not need to occur prior to pursuing compatibility (Option 3).

On November 26, 2013, the Board of Supervisors adopted Resolution No. 13-058, recognizing that circumstances exist on agricultural preserves located within that portion of Kings County south of State Route 198, west of State Route 41, and east of I-5, including water availability and soil conditions that limit the reasonably foreseeable agricultural use of certain parcels. If specified findings can be made, compatibility of solar development with certain reasonably foreseeable agricultural uses can be achieved.

The Addendum provides site specific evidence of impaired soil quality and drainage on the Projects sites, as well as severe limitations to surface water allocations, as evidence that a foreseeable agricultural operation on the Projects footprints is seasonal sheep grazing. A full soil and water analysis conducted by Provost & Pritchard Consulting Group and Dellavalle Labs Inc. for the SGFs may be found in Appendix A, B, and C of the Addendum. A summary of the findings can be found in Table 2 of the Addendum.

Modifications to Section 3.2.2 of the Initial Study/Mitigated Negative Declaration:

Proposed modifications to Section 3.2.2 of the Initial Study/Mitigated Negative Declaration are attached to Planning Commission Resolution No. 14-03 as Exhibit No. 2. The modifications are shown in track changes mode, with deletions shown with ~~red strikethrough~~ and additions shown with red underline.

Modification to the Findings:

Proposed modifications to Findings Section VI of Planning Commission Resolution No. 12-10 are attached to Planning Commission Resolution No. 14-03 as Exhibit No. 3. The modifications are shown in track changes mode, with deletions shown with ~~red strikethrough~~ and additions shown with red underline.

Modifications to Planning Division Conditions of Approval:

Proposed modifications to Planning Division Condition Numbers 23, 28 and 31 are listed below. The modifications are shown in track changes mode, with deletions shown with ~~red strikethrough~~ and additions shown with red underline.

23. Prior to the issuance of a building permit, the applicant shall submit a Soil Reclamation Plan, for each CUP, for review and approval by Community Development Agency staff. The plan shall contain an analysis of pre-project baseline soil conditions, and shall contain specific measures to restore the soil to its pre-project condition, including removal of all non-utility-owned fixtures, equipment, nonagricultural roads, and restoration of compacted soil. Reclamation shall commence within two months of the expiration of the use permit and be completed within 18 months from the date the facility ceases to operate.

28. If Cancellation of the respective Farmland Security Zone Contracts (FSZ Contracts No. 222 and No. 221) ~~and Williamson Act Contract No. 1902 fails to be~~ is not approved or conversion of the two contracts into a "Solar Use Easement" ~~fails~~ is not approved, and the applicant chooses to continue with the project by continuing to farm ~~at least 90% of the land~~ a reasonably foreseeable agricultural use, then the applicant shall submit an Agricultural Management Plan (AMP) to the Kings County Community Development Agency for approval prior to the issuance of building permits. The AMP shall include all of the respective information specified in the Addendum for the appropriate CUPs No. 11-09, 12-01, and 12-02.

31. For each SGF project, i~~I~~f the applicant 1) does not continue ~~an intensive agricultural operation~~ a reasonably foreseeable agricultural use on ~~at least 90 percent of~~ the project site ~~at an intensity equivalent to the existing agriculture use of the project site~~ for the entire life of the project, ~~and if the applicant~~ or 2) is successful in cancelling the Farmland Security Zone contracts or 3) is successful in entering into a "Solar Use Easement," the applicant shall then provide written evidence of funding and/or purchase of agricultural mitigation land (which will be managed and maintained by an appropriate entity) for the life of the project to mitigate the loss of Farmland of Statewide Importance at a ratio of 1:1. Every acre of agricultural land removed from production would be mitigated by the applicant. The agricultural land preserved shall be of equal or greater quality as defined by the California Department of Conservation Farmland Mapping and Monitoring Program (i.e., if Farmland of Statewide Importance is converted to solar then the agricultural land preserved must not be in a classification indicating a lower quality than Farmland of Statewide Importance).

    Should the mitigation occur within a preferred Kings County conservation area for agriculture, including but not limited to Zones defined as "AX" or the Farmland Security Zone Expansion Area as shown on Figure RC-14 of the Resource Conservation Element of the Kings County 2035 General Plan, off-site mitigation shall be reduced by 50 percent to 0.5:1.

California Environmental Quality Act Guidelines Section 15164

California Environmental Quality Act Guidelines Section 15164, found in the California Code of Regulations, allows for an Addendum to an approved IS/MND to be prepared when minor technical changes or additions are necessary and if the Addendum does not meet any of the requirements stated in Section 15162. The Environmental Review section below details how the conditions of Section 15162 have not been met.

The Addendum, attached to Planning Commission Resolution No. 14-03 as Exhibit No. 1, provides minor alterations to the site plan pertaining to the area in which the substations and switching stations will be developed.

The Projects will remain a 160 MW photovoltaic solar facility on 1,008 acres and two 20 MW photovoltaic solar facilities each on up to 210 acres of disturbed agricultural land and will connect into a local electrical power line. The main Projects components would apply to the revised Projects. No changes to the type of infrastructure, construction, maintenance, or use as described in the MND would occur. The modified Projects footprints would fall on land under the same agricultural use and cultivation practices as the Projects footprints assessed within the MND. Additionally, the modified Projects footprints fall within the biological and cultural resources survey boundary; thus, the analysis and impact discussion for biological and cultural resources found in the MND also pertains to the revised Projects footprints. The revised Projects will remain consistent with the approved CUP and will continue to be subject to the same Conditions of Approval and Mitigation Measures as previously approved by the County Planning Commission, except for the modification of Mitigation Measures AG-1 and AG-3 and Planning Division Condition Numbers 23, 28 and 31 modified by the Addendum.

The revised Projects would not result in any effects to environmental resources that are more severe than those described in the original IS/MND. All Mitigation Measures and Conditions associated with the original Projects would be applied to the revised Projects, except for the modification of Mitigation Measures AG-1 and AG-3 and Planning Division Condition Numbers 23, 28 and 31 modified by the Addendum. As with the approved Projects, the revised Projects would have a less than significant impact with the implementation of the approved mitigation identified for agriculture, biological resources, cultural resources, and traffic. As required by CEQA Guidelines Section 15162, the County has evaluated each of these circumstances in the Addendum and that evaluation is included in this staff report in the following table:

Potential for Impacts	**Original Footprint of Projects**	**Revised Footprint of Projects**
Aesthetics	Project would not substantially degrade existing visual quality of the site and surroundings as the scenic value of the area is low. Impacts would less than significant.	Modifications to the switching stations would maintain a similar visual impact as assessed in the MND and would remain within a land use area characterized by low vividness, intactness, and unity. Impacts would remain less than significant. Additional environmental analysis on this topic area can be found below.
Agriculture	Project would remove 1428.01 acres of Farmland of Statewide Importance from agricultural use. Project would implement Mitigation Measures (MMs) AG 1-3 and impacts would be less than significant. The Project site is subject to Farmland Security	Total acreage associated with the project substations and switching stations infrastructure is slightly larger (<1 acre more) than as originally depicted footprint in the MND. Minor technical changes to clarify how the Project

	Zone (FSZ) contracts; the Project would pursue one of three options to reduce potential impacts to less than significant.	would maintain compatibility with an FSZ contract. Impacts remain less than significant with mitigation. Additional environmental analysis on this topic area can be found below.
Air Quality	Emissions generated during Project construction and operation would be less than the significance thresholds for criteria pollutants. Impacts to air quality would be less than significant.	No change. Construction of the switching stations would require the same number of employees and vehicles during Project construction and operation. Potential air pollutant releases from the switching stations were analyzed in the original MND. See MND at 3.7-5 (regarding GHG emissions from switching gear).Switching stations will adhere to best management practices and guidelines and requirements of the San Joaquin Valley APCD. Impacts would remain less than significant.
Biology	Implementation of the MMs Bio 1-7 addressing biological resources would be sufficient to protect special status plants and animals, as well as other common wildlife, found in the SGF Project area, and would reduce potential impacts to less-than-significant levels. Plants of certain special status species have potential to occur within the drainages in and adjacent to the Project area.	No change. Modified switching stations fall within the previously analyzed Project footprint. See p. ES-1 of Biological Technical Report, Appendix C-1 of the MND (reporting completion of surveys throughout the project areas plus a 250 foot buffer); MND at 3.4-8 (same). Project would adhere to the same MMs. Impacts would remain less than significant.
Cultural Resources	A historical record search identified no cultural resources within the SGF area and agricultural activity has disturbed the surface of the SGF area. Ground-disturbing activities associated with the construction phase of the SGF Project could impact unknown cultural resources. Implementation of MMs CR-1 through CR-4 would address impacts to potential historical, archaeological, and paleontological resources during Project construction activities. Therefore, potential impacts under this criterion would be reduced to less than significant levels with mitigation.	No change. The modified switching station footprints were evaluated in the cultural resources section of the MND. See MND at p. 3.5-2 through -3 (describing 2010 cultural resources records searches, literature review, and reconnaissance surveys of the project areas). Project would implement MMs CR 1-4 and impacts would remain less than significant.
Geology	Project is not located within an Alquist-Priolo Earthquake Fault Zone. Project would adhere to all federal, state, and local ordinances. Impacts would be less than significant.	No change. Switching stations would occur on the same geologic conditions and would adhere to all federal, state, and local ordinances. Impacts would remain less than significant.
Greenhouse Gases	Project would result in a minor but beneficial impact, and a less than significant adverse	No change. Potential GHG releases from onsite equipment, including

	impact.	equipment associated with the switching stations, were analyzed in the original MND. See MND at 3.7-5 (regarding GHG emissions from switching gear). Impacts would remain less than significant.
Hazards and Hazardous Materials	Hazardous and other materials would be used during construction and operation of the Project. Any use or disposal of hazardous materials during construction activities would be conducted according to all applicable local, state, and federal regulations. Potential impacts from the use of or exposure to hazards and hazardous materials as result of the Project would less than significant.	No change. Construction and operation of the switching stations would adhere to the conditions and materials as analyzed in the Initial Study. Any use or disposal of hazardous materials during construction and operations would be conducted according to all applicable local, state, and federal regulations. Impacts would remain less than significant.
Hydrology and Water Quality	Project construction would require approximately 102 acre-feet per year for construction-related activities and approximately 9.8 acre-foot per year of water for Project operations on the 1,482.01 acre site. This included approximately 200,000 gallons per year to support water consumption requirements of onsite sheep. Impacts related to water quality or waste discharge are not anticipated with the implementation of the SWPP and construction BMPs. Impacts to water quality or availability as a result of the Project would be less than significant.	The Projects would have the same water requirements and make use of the same water sources as previously analyzed, which included a provision of water for sheep grazing. BMPs and a SWPPP would be implemented. Drainage patterns would minimally change as a result of the Project revisions. Impacts would remain less than significant. Additional environmental analysis on this topic area can be found below.
Land Use and Planning	Project is consistent with local land use and zoning designations, plans, and policies. The Project would not divide an established community or conflict with a habitat or natural community conservation plan. Potential impacts would be less than significant.	No change. Project would be located on the same parcels as analyzed for the Original Project. Construction and operation of the solar facility is consistent with local plans, policies, and regulations. Switching stations are not subject to County zoning requirements. Impacts would remain less than significant.
Noise	Project construction and operation would not result in the generation of noise levels in excess of established local standards or permanently increase ambient noise levels. Persons would not be subject to excessive noise or groundborne vibrations. Impacts from noise would be less than significant.	No change. Construction and operation schedule and equipment would not change as result of switching station modifications. Switching stations would not exceed any local noise standards or expose persons to excessive noise or vibrations. Impacts would remain less than significant.
Population and Housing	Project construction would require an average of 161 workers, and up to 250 workers during peak construction;	No change. Project acreage and capacity are unchanged so the anticipated workforce to construct and operate the

	maintenance would require up to 25 workers onsite periodically throughout the year. Workers would be hired from the local labor pool to the maximum extent practicable. Worker relocation and permanent housing options would not be required; therefore, impacts to population and housing would be less than significant.	Project would be the same as assessed in the MND. Impacts would remain less than significant.
Public Services, Utilities, and Service Systems	Project is not anticipated to increase demand for fire and sheriff protection. Workers associated with the Project are anticipated to come from neighboring communities and would not result in a substantial increase in population that may increase demand for schools, parks, or other public facilities. Water use associated with the Project would be less than historic use for agriculture. Impacts under these criteria would less than significant. Existing waste facilities with sufficient capacity to hand Project waste exist proximate to the Project site; no impacts would occur.	No change. Project acreage and capacity are unchanged so the anticipated workforce, water requirements, and waste generated to construct and operate the Project would be the same as assessed in the MND. Impacts would remain less than significant.
Recreation	Project workforce would not result in a substantial increase in population or demand for recreational facilities in the Project region. Impacts to existing parks would be less than significant. No new recreational facilities, or expansions of existing facilities, would be required.	No change. Project acreage and capacity are unchanged so the anticipated workforce to construct and operate the Project would be the same as analyzed for the Original Project. Impacts would remain less than significant.
Transportation and Traffic	Project is not expected to cause a significant short-term or long-term increase in traffic volumes on area roads due to the nature and scope of the construction and maintenance activities required. Project would implement MM TT-1 to reduce potential impacts to a less than significant level. Project would not result in inadequate parking capacity or conflict with adopted policies or plan supporting alternative transportation.	No change. Project acreage and capacity are unchanged so the anticipated traffic associated with constructing and operating the Project would be the same as analyzed for the Original Project. The Project would adhere to the ingress/egress points evaluated with the Original Project. Impacts would remain less than significant.

CURRENT USE OF SITE: Agricultural production producing various field and row crops.

LAND USE SURROUNDING SITE: The site is surrounded by field and row crop agricultural production to the west, east, and south. Lemoore Naval Air Stations base housing is located to the north.

ENVIRONMENTAL REVIEW:

On July 13, 2012, the environmental review period ended for this proposal. A review of this project in compliance with the *California Environmental Quality Act (CEQA)* indicates that there will not be significant adverse impacts to the environment. Evidence in the record indicates that the project has the potential for adverse effects on agriculture, wildlife, and resources or habitat for wildlife. To mitigate this impact the applicant has incorporated several project design features and mitigation measures that will mitigate the environmental impacts to less than significant. The Initial Study/Mitigated Negative Declaration for CUP's 11-09, 12-01, and 12-02 was certified by the Planning Commission on August 6, 2012, and is hereby incorporated by reference.

California Environmental Quality Act Guidelines Section 15164, found in the California Code of Regulations, allows for an Addendum to an approved IS/MND be prepared when minor technical changes or additions are necessary and if the project does not meet any of the requirements stated in Section 15162. The County has determined that none of the conditions described in Section 15162, calling for the preparation of a subsequent EIR or negative declaration, have occurred as described below:

1. No substantial changes are proposed in the project which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;
2. No substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or
3. No new information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or the negative declaration was adopted, shows any of the following:
    a. The project will have one or more significant effects not discussed in the previous EIR or negative declaration;
    b. Significant effects previously examined will be substantially more severe than shown in the previous EIR or negative declaration;
    c. Mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or
    d. Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR or negative declaration would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

As stated in CEQA section 15164(c), an addendum need not be circulated for public review but can be included in or attached to the final EIR or adopted negative declaration.

PROJECT REVIEW:

<u>Original CUP Application</u>

June 24, 2011	Application submitted
May 28, 2012	Application certified complete
June 13, 2012	Begin 30-day review period for environmental review
July 13, 2012	30 day environmental review period ends
August 6, 2012	Planning Commission hearing

CUP Addendum Application

December 6, 2013	Application submitted
December 6, 2013	Application certified complete
January 6, 2014	Planning Commission hearing

STAFF ANALYSIS:

With regard to this addendum, staff comments that:

1. CUP applications 11-09 (RE Mustang), 12-01 (RE Orion), and 12-02 (RE Kent South) were found to be consistent with both the Kings County General Plan and Zoning Ordinance on August 6, 2012. This action will: analyze a revision to the Projects' CUP's that would allow the Projects to demonstrate Farmland Security Zone (FSZ) contract compatibility by maintaining reasonably foreseeable agricultural operation onsite determined by site-specific soil and water analysis. Consistent with Kings County Board of Supervisors Resolution No. 13-058, the Addendum would remove the current CUPs' requirement that agricultural compatibility be achieved by maintaining commercial agriculture on a minimum of 90% of the Project site that would provide an economic output similar to the historical economic output of the site. The Addendum will also clarify the description and environmental analysis of the PG&E switching stations.

2. All findings and adopted conditions of approval in Resolution No. 12-10 concerning CUP No.'s 11-09, 12-01, and 12-02 remains in full force and effect, except for the modifications to Section 3.2.2 of the Initial Study/Mitigated Negative Declaration, the modifications to Findings Section VI of Planning Commission Resolution No. 12-10, the modification Planning Division Condition Numbers 23, 28 and 31, and the modifications to the Mitigation Monitoring and Reporting Plan as described in Exhibit Numbers 1, 2, 3, and 4 of Planning Commission Resolution No. 14-03.

3. The use should not be detrimental to public health and safety, nor materially injurious to properties in the vicinity. An IS/MND was approved for this Project on August 6, 2012. An addendum to the IS/MND has been prepare to analyze potential environmental impacts associated with the CUP Addendum. No potential impacts were identified beyond those identified in the IS/MND. The proposed project may have significant adverse impacts on the environment; however, those impacts can be mitigated to an insignificant level by implementing the adopted project design features and mitigation measures identified in the Mitigation Monitoring and Reporting Plan (MMRP) adopted by the Planning Commission on August 6, 2012, and as modified in Exhibit No. 4 of Planning Commission Resolution No. 14-03. The original IS/MND and MMRP are incorporated herein by reference. The Addendum to the IS/MND is attached to Planning Commission Resolution No. 14-03 as Exhibit 1.

RECOMMENDATIONS:

It is recommended that the Commission approve the proposed Addendum to Conditional Use Permit No's 11-09, 12-01, and 12-02 as described above and adopt Resolution No. 14-03. Approval of this Resolution will:

1. Find that the proposed Addendum to CUP No.'s 11-09, 12-01, and 12-02 will not have significant adverse impacts on the environment, and approves the Addendum to the adopted ***Mitigated Negative Declaration***.

2. Find that Planning Commission Resolution No. 12-10 concerning CUP No.'s 11-09, 12-01, and 12-02 remains in full force and effect, except for the modifications to Section 3.2.2 of the Initial Study/Mitigated Negative Declaration, the modifications to Findings Section VI of Planning Commission Resolution No. 12-10, the modification Planning Division Condition Numbers 23, 28

and 31, and the modifications to the Mitigation Monitoring and Reporting Plan as described in Exhibit Numbers 1, 2, 3, and 4 of Planning Commission Resolution No. 14-03.

3. Approve the Addendum to CUP No.'s 11-09, 12-01, and 12-02 with specified conditions of approval.

4. Approve a three year time extension for the CUP's. CUP No.'s 11-09, 12-01, and 12-02 shall lapse and become null and void three (3) years following the date that Resolution No. 14-03 is adopted, unless prior to the expiration of three (3) years a building permit is issued by the Building Official and construction is commenced and diligently pursued toward completion on the site that was subject of the Conditional Use Permit application. This Conditional Use Permit may be renewed for additional periods of time, if an application (by letter) for renewal of the Conditional Use Permit is filed with the Kings County Community Development Agency prior to the permit's expiration date.

PREPARATION:

Prepared by the Kings County Community Development Agency (Dan Kassik) on December 13, 2013. Copies are available for review at the Kings County Community Development Agency, Government Center, Hanford, California, or at the Kings County Clerk's Office, Government Center, Hanford, California.

BEFORE THE KINGS COUNTY PLANNING COMMISSION
COUNTY OF KINGS, STATE OF CALIFORNIA

IN THE MATTER OF AN ADDENDUM TO)	**RESOLUTION NO. 14-03**
CONDITIONAL USE PERMIT NUMBERS 11-09,)	**RE: RE Mustang LLC,**
12-01, and 12-02 (RECURRENT ENERGY))	**RE Orion LLC and**
	RE Kent South LLC

WHEREAS, on March 30, 2012, the applicant filed a Conditional Use Permit application whereby the applicant for three projects described as RE Mustang (Mustang) LLC, RE Orion (Orion) LLC, and RE Kent South (Kent South) LLC to establish photovoltaic electrical facilities; and

WHEREAS, the RE Mustang solar generation facility (CUP 11-09), as originally approved by the Planning Commission on August 6, 2012, would be approximately 1,008.01 acres in size and include solar photovoltaic electrical facilities to support the generation of 160 Megawatts (MW) of renewable energy; and

WHEREAS, the RE Orion solar generation facility (CUP 12-01), as originally approved by the Planning Commission on August 6, 2012, would be approximately 210 acres in size and include solar photovoltaic electrical facilities to support the generation of 20 Megawatts (MW) of renewable energy; and

WHEREAS, the RE Kent South solar generation facility (CUP 12-02), as originally approved by the Planning Commission on August 6, 2012, would be approximately 210 acres in size and include solar photovoltaic electrical facilities to support the generation of 20 Megawatts (MW) of renewable energy; and

WHEREAS, the original application was determined to be complete on May 28, 2012; and

WHEREAS, a Notice of Intent to Adopt a Mitigated Negative Declaration was published on June 13, 2012, providing notice that the Initial Study/Mitigated Negative Declaration had been completed for the proposed Project and was available for public review and comment; and

WHEREAS, the Initial Study/Mitigated Negative Declaration which analyzed the environmental impacts associated with the project was circulated for a 30 day public review comment period beginning on June 13, 2012; and

WHEREAS, the Kings County Community Development Agency distributed copies of the Initial Study/Mitigated Negative Declaration to those public agencies that have jurisdiction by law with respect to the Project, as well as to other interested persons and agencies, and sought the comments of such persons and agencies; and

WHEREAS, on July 13, 2012, the thirty day public review period for the proposed Initial Study/Mitigated Negative Declaration for this Project closed; and

WHEREAS, on July 30, 2012, the Kings County Community Development Agency made a recommendation to the Planning Commission that the Initial Study/Mitigated Negative Declaration was

adequate; and

WHEREAS, on July 27, 2012, the Kings County Community Development Agency staff notified the applicant of the proposed recommendation on this Project; and

WHEREAS, on August 6, 2012, the Planning Commission held a duly noticed public hearing for CUP Numbers 11-09, 12-01, and 12-02 in the Board of Supervisors Chambers of the Kings County Government Center, 1400 W. Lacey Blvd., Hanford, California; and

WHEREAS, at the August 6, 2012, public hearing the Planning Commission received 1) a report presented by County staff that included the staff recommendation, 2) testimony from the applicant, and 3) testimony from members of the general public; and

WHEREAS, the Planning Commission received testimony prior to the close of the public hearing; and

WHEREAS, on August 6, 2012, after the conclusion of public testimony the Planning Commission closed the public hearing and deliberated; and

WHEREAS, on August 6, 2012, the Kings County Planning Commission approved CUP Numbers 11-06, 12-01, and 12-02 and made the following findings and certifications with regards to the California Environmental Quality Act: (1) The Planning Commission reviewed and considered the Initial Study/Mitigated Negative Declaration before approving the project; (2) Based on the whole record before it, including the Initial Study/Mitigated Negative Declaration, there was no substantial evidence in the record that the proposed Project would have a significant effect on the environment; (3) The Initial Study/Mitigated Negative Declaration for this Project was completed in compliance with CEQA and was determined to be adequate; and (4) The Initial Study/Mitigated Negative Declaration reflected the Planning Commission's independent judgment and analysis; and

WHEREAS, the Planning Commission reviewed the Initial Study/Mitigated Negative Declaration in its entirety, and determined that the document reflects the independent judgment of the County; and

WHEREAS, the Initial Study/Mitigated Negative Declaration identified certain significant effects on the environment that, absent the adoption of mitigation measures, would be caused by the construction and operation of the Project; and

WHEREAS, the Planning Commission was required, pursuant to CEQA, to adopt all feasible mitigation measures or feasible project alternatives that can substantially lessen or avoid any significant project-related environmental effects; and

WHEREAS, the Planning Commission was required by Public Resources Code Section 21081.6, subdivision (a), to adopt a Mitigation Monitoring and Reporting Plan to ensure that the mitigation measures adopted by the County are actually carried out; and

WHEREAS, as demonstrated by the Mitigation Monitoring and Reporting Plan, attached as Attachment "A" to Planning Commission Resolution 12-10, all of the Project's significant environmental effects could be either substantially lessened or avoided through the adoption of feasible mitigation measures; and

WHEREAS, on November 26, 2013, the Board of Supervisors adopted Resolution No. 13-058 amending Section "I" of that part of the Implementation Program entitled "County of Kings Implementation Procedures for the California Land Conservation 'Williamson' Act of 1965 Including Farmland Security Zones" and determined that it is reasonably foreseeable that certain parcels located south of State Highway 198 and west of State Highway 41 that currently are used for more intensive agricultural activities will be used in the near future for less intensive uses, including dry farm seasonal grazing; and

WHEREAS, on November 26, 2013, the Board of Supervisors determined that a solar generation facility maintaining a concomitant agricultural use such as dry farm seasonal grazing or a similar agricultural activity may be deemed a compatible use within this region of the County if the applicant provides a soil reclamation plan and financial assurances, and if a finding can be made, based upon substantial evidence, and taking into account surface water availability, ground water quality and availability, and soil conditions, that the proposed concomitant commercial agricultural operation is a reasonably foreseeable use of the land; and

WHEREAS, on December 6, 2013, CUP Addendum applications were received to revise CUP's 11-09 (RE Mustang LLC), 12-01 (RE Orion LLC), and 12-02 (RE Kent South LLC) to provide substantial evidence that surface water availability, soil conditions, and groundwater availability make dry farm seasonal grazing a reasonably foreseeable agricultural use of the land such that Project could meet the principles of compatibility with an FSZ contract pursuant to Government Code Section 51238.1 with the implementation of dry farm seasonal sheep grazing; to modify Planning Division Condition Numbers 23, 28, and 31; and to modify Mitigation Measures AG-1 and AG-3; and to clarify the description and environmental analysis of the PG&E switching stations; and

WHEREAS, the Addendum is attached to this resolution as Exhibit No. 1; and

WHEREAS, modifications to the Williamson Act consistency findings in Section 3.2.2 of the Initial Study/Mitigated Negative Declaration are attached to this resolution as Exhibit No. 2 and the modifications are shown in track changes mode, with deletions shown with ~~red strikethrough~~ and additions shown with red underline; and

WHEREAS, modifications to Williamson Act consistency findings Section VI of Planning Commission Resolution No. 12-10 are attached to this resolution as Exhibit No. 3 and the modifications are shown in track changes mode, with deletions shown with ~~red strikethrough~~ and additions shown with red underline; and

WHEREAS, modifications to Planning Division Condition Numbers 23, 28, and 31 of Planning Commission Resolution No. 12-10 are listed below and the modifications are shown in track changes mode, with deletions shown with ~~red strikethrough~~ and additions shown with red underline:

23. Prior to the issuance of a building permit, the applicant shall submit a Soil Reclamation Plan, for each CUP, for review and approval by Community Development Agency staff. The plan shall contain an analysis of pre-project baseline soil conditions, and shall contain specific measures to restore the soil to its pre-project condition, including removal of all non-utility-owned fixtures, equipment, nonagricultural roads, and restoration of compacted soil. Reclamation shall commence within two months of the expiration of the use permit and be completed within 18 months from the date the facility ceases to operate.

28. If Cancellation of the respective Farmland Security Zone Contracts (FSZ Contracts No. 222 and No. 221) ~~and Williamson Act Contract No. 1902 fails to be~~ is not approved or conversion of the two contracts into a "Solar Use Easement" ~~fails~~ is not approved, and the applicant chooses to continue with the project by continuing to farm ~~at least 90% of the land~~ a reasonably foreseeable agricultural use, then the applicant shall submit an Agricultural Management Plan (AMP) to the Kings County Community Development Agency for approval prior to the issuance of building permits. The AMP shall include all of the respective information specified in the Addendum for the appropriate CUPs No. 11-09, 12-01, and 12-02.

31. For each SGF project, i~~I~~f the respective applicant 1) does not continue ~~an intensive agricultural operation~~ a reasonably foreseeable agricultural use on ~~at least 90 percent of~~ the project site ~~at an intensity equivalent to the existing agriculture use of the project site~~ for the entire life of the project, ~~and if the applicant~~ or 2) is successful in cancelling the Farmland Security Zone contracts or 3) is successful in entering into a "Solar Use Easement," the applicant shall then provide written evidence of funding and/or purchase of agricultural mitigation land (which will be managed and maintained by an appropriate entity) for the life of the project to mitigate the loss of Farmland of Statewide Importance at a ratio of 1:1. Every acre of agricultural land removed from production would be mitigated by the applicant. The agricultural land preserved shall be of equal or greater quality as defined by the California Department of Conservation Farmland Mapping and Monitoring Program (i.e., if Farmland of Statewide Importance is converted to solar then the agricultural land preserved must not be in a classification indicating a lower quality than Farmland of Statewide Importance).

Should the mitigation occur within a preferred Kings County conservation area for agriculture, including but not limited to Zones defined as "AX" or the Farmland Security Zone Expansion Area as shown on Figure RC-14 of the Resource Conservation Element of the Kings County 2035 General Plan, off-site mitigation shall be reduced by 50 percent to 0.5:1.

WHEREAS, modifications to the Mitigation Monitoring and Reporting Plan are attached to this resolution as Exhibit No. 4 and the modifications are shown in track changes mode, with deletions shown with ~~red strikethrough~~ and additions shown with red underline; and

WHEREAS, the California Environmental Quality Act (CEQA) Guidelines Section 15164, found in the California Code of Regulations, allows for an addendum to an approved IS/MND be prepared when minor technical changes or additions are necessary and if the project does not meet any of the requirements stated in Section 15162; and

WHEREAS, the County has determined that none of the conditions described in Section 15162 calling for the preparation of a subsequent EIR or negative declaration have occurred; and

WHEREAS, CEQA section 15164(c) states that an addendum need not be circulated for public review but can be included in or attached to the final EIR or adopted negative declaration; and

WHEREAS, the Planning Commission has reviewed the Addendum in its entirety, and determined that the document reflects the independent judgment of the Commission; and

WHEREAS, on January 6, 2014, the Planning Commission held a duly noticed public hearing for

Amendment No. 2 to CUP Number 11-06 in the Board of Supervisors Chambers of the Kings County Government Center, 1400 W. Lacey Blvd., Hanford, California; and

WHEREAS, on January 6, 2014, after the conclusion of public testimony the Planning Commission closed the public hearing and deliberated; and

NOW, THEREFORE, BE IT RESOLVED AND CERTIFIED, by the Kings County Planning Commission that:

I. SECTION 1: Recitals

1. The above recitals are true and correct, and the Planning Commission hereby so finds.

II. SECTION 2: Findings Related to Prior Proceedings

1. An Initial Study/Mitigated Negative Declaration was duly prepared, properly circulated, and completed in accordance with California Environmental Quality Act of 1970 (California Public Resources Code Section 21000 et seq.), as amended, and the State Guidelines thereto (California Code of Regulations Section 15000 et seq.), and approved by the Kings County Planning Commission for the proposed Project by the Lead Agency on August 6, 2012.

2. The Initial Study/Mitigated Negative Declaration was presented to this Commission, and it was independently reviewed and considered by this Commission prior to acting on the proposed Project as was originally presented on August 6, 2012.

3. The Mitigated Negative Declaration for the Project was properly completed and identified all significant environmental effects of the Project, and there are no known potential environmental effects that are not addressed in the Mitigated Negative Declaration.

4. The Project incorporated project design features and mitigation measures to eliminate significant impacts or to reduce such impacts to a level of insignificance in all instances.

5. The proposed Project may have significant adverse impacts on the environment. However, those impacts would be mitigated to an insignificant level by implementing the mitigation monitoring and reporting program attached to Planning Commission Resolution 12-10 as Attachment "A." Based on the whole record, including the Initial Study/Mitigated Negative Declaration and its Addendum, there is no substantial evidence that the proposed Project will have a significant effect on the environment. The Initial Study/Mitigated Negative Declaration and its Addendum reflects the Planning Commission's independent judgment and analysis.

6. The Planning Commission used its own independent judgment in adopting Resolution Number 12-10, in approving the Project, in adopting and certifying the Initial Study/Mitigated Negative Declaration and its Addendum, and in adopting the Mitigation Monitoring and Reporting Plan.

III. SECTION 3: Acceptance of the Addendum to the Initial Study/Mitigated Negative Declaration

1. An Addendum to the adopted Initial Study/Mitigated Negative Declaration (IS/MND) for CUP's 11-09, 12-01, and 12-02 has been prepared in accordance with California Environmental Quality Act (CEQA) Guidelines Section 15164, found in the California Code of Regulations, which allows for an Addendum to an approved IS/MND be prepared when minor technical changes or additions are necessary and if the project does not meet any of the requirements stated in Section 15162.

2. It is hereby determined that none of the conditions described in Section 15162 calling for the preparation of a subsequent EIR or negative declaration have occurred.

3. It is hereby determined that the Addendum has been completed in compliance with CEQA and is adequate.

4. It is hereby determined that the Addendum has been presented to the Planning Commission, which has reviewed and considered the information and analysis contained therein.

5. It is hereby determined that the Addendum reflects the independent judgment of the Planning Commission of the County of Kings.

6. The Planning Commission herby attaches the Addendum to the previously approved IS/MND for CUP's 11-09, 12-01, and 12-02.

7. The Planning Commission authorizes and directs County staff to make the Addendum available to the public and have it retained, along with the original IS/MND, at the office of the Kings County Community Development Agency.

IV. SECTION 4: Existing Conditions of Approval and CUP Time Extension

1. All findings and adopted conditions of approval in Planning Commission Resolution No. 12-10 concerning CUP No.'s 11-09, 12-01, and 12-02 remain in full force and effect, except as modified herein.

2. CUP No.'s 11-09, 12-01, and 12-02 shall lapse and become null and void three (3) years following the date that Resolution No. 14-03 is adopted, unless prior to the expiration of three (3) years a building permit is issued by the Building Official and construction is commenced and diligently pursued toward completion on the site that was subject of the Conditional Use Permit application. This Conditional Use Permit may be renewed for additional periods of time, if an application (by letter) for renewal of the Conditional Use Permit is filed with the Planning Commission prior to the permit's expiration date.

The foregoing Resolution was adopted on a motion by Commissioner _____ and seconded by Commissioner _____, at a regular meeting held on January 6, 2014 by the following vote:

AYES: COMMISSIONERS
NOES: COMMISSIONERS
ABSTAIN: COMMISSIONERS
ABSENT: COMMISSIONERS

KINGS COUNTY PLANNING COMMISSION

_____
R. G. Trapnell, Chairperson

WITNESS, my hand this ____ day of _____, 2014.

_____
Gregory R. Gatzka
Secretary to the Commission

cc: Kings County Board of Supervisors
Kings County Counsel
Kings County Community Development Agency – Building Division
Kings County Public Works Department
Kings County Fire Department
Kings County Health Department – Division of Environmental Health Services
California Department of Fish and Game, Lori Bono, 1234 E. Shaw Ave., Fresno, CA 93710
Recurrent Energy, Seth Israel, 300 California Street, 7th Floor, San Francisco, CA 94104

KINGS COUNTY COMMUNITY DEVELOPMENT AGENCY

RE Mustang, RE Orion, and RE Kent South Solar Generation Facilities

Addendum to Mitigated Negative Declaration

December 2013

RE MUSTANG, RE ORION, RE KENT SOUTH SOLAR GENERATION FACILITIES
Mitigated Negative Declaration Addendum

State Clearinghouse Number: 2012061038
CUP Nos. 11-09 (RE Mustang LLC), 12-01 (RE Orion LLC), and 12-02 (RE Kent South LLC)
Resolution No. 12-10
Assessor Parcel Numbers: 024-260-004, 024-260-011, 024-260-016, 024-260-010, 024-270-001, 024-270-025, 024-270-024, 024-270-022, 024-270-023, 024-270-018, 024-270-010, 024-270-016, 024-270-015, 024-270-006, 024-270-007, 024-270-008, 024-260-004, 024-260-018, 026-010-041

Lead Agency Name and Address
Kings County Community Development Agency
Kings County Government Center
1400 West Lacey Boulevard
Hanford, CA 93230

Lead Agency Contact Person and Phone Number
Sandy Roper, Principal Planner
(559) 852-2685

Project Sponsor's Name and Address

RE Mustang LLC
300 California St. 7th Floor
San Francisco, CA 94104

RE Kent South LLC
300 California St. 7th Floor
San Francisco, CA 94104

RE Orion LLC
300 California St. 7th Floor
San Francisco, CA 94104

Seth Israel, Vice President, Real Estate and Early Stage Development
Phone: (415) 501-9406
sites_permitting@recurrentenergy.com

I. INTRODUCTION

This addendum assesses the environmental impacts of the proposed revisions to three Conditional Use Permits to establish two 20-MW photovoltaic (PV) solar generation facilities and one 160 MW solar generation facilities (collectively, the "Projects"), as required by the California Environmental Quality Act (CEQA) (California Public Resources Code 21000 et seq.) and in compliance with the State CEQA Guidelines (14 California Code of Regulations 15000 et seq.). This addendum also provides further description and analysis for the two PG&E switching stations depicted in Figures 1-5f and 1-5g of the MND. Although these switching stations are subject to the sole jurisdiction of the California Public Utilities Commission and are exempt from County zoning requirements, they are part of the Projects and are therefore subject to CEQA. The original Conditional Use Permits ("CUPs") were approved by the Kings County (County) Planning Commission on August 6, 2012 (Resolution No. 12-10).

The County, as the lead agency under CEQA, will consider the potential environmental impacts of the revised Project when it considers whether or not to approve these changes as part of the original Project. In addition, the California Public Utilities Commission may rely on this MND and addendum as a responsible agency with permitting authority for the PG&E switching stations described below. This Addendum is an informational document, intended to be used in the planning and decision making process as provided for under Section 15164 of the CEQA Guidelines.

The conclusion of this addendum is that the proposed changes to the Original Projects will not result in new significant impacts nor substantially increase the severity of previously disclosed impacts beyond those already identified in the original IS/MND. The addendum also confirms that the PG&E switching stations will not result in any significant and unavoidable environmental impacts.

II. STATUTORY BACKGROUND

This Addendum demonstrates that the environmental analysis, impacts, and mitigation requirements identified in the Mitigated Negative Declaration for the RE Mustang, RE Orion, and RE Kent South Solar Generation Facilities remains substantively unchanged, and supports the finding that the revisions to the Project do not constitute substantial changes to the Project or provide new information of substantial importance with regard to new or more significant impacts than those identified in the Mitigated Negative Declaration. There have been no changes in circumstances or disclosures of new information, as defined by CEQA Guidelines Section 15162 or any other factors that would require the preparation of a Subsequent or Supplemental Negative Declaration or the preparation of an Environmental Impact Report for the Project.

The County has determined that an Addendum is the appropriate environmental document pursuant to CEQA Guidelines Section 15164, which provides that:

a) The lead agency or a responsible agency shall prepare an addendum to a previously certified Environmental Impact Report (EIR) if some changes or additions are necessary, but none of the conditions described in Section 15162 calling for the preparation of a subsequent EIR have occurred.

b) An addendum to an adopted negative declaration may be prepared if only minor technical changes or additions are necessary and none of the conditions described in Section 15162 calling for the preparation of a subsequent EIR or negative declaration have occurred.

c) An addendum need not be circulated for public review, but can be included in or attached to the final EIR or adopted negative declaration.

d) The decision-making body shall consider the addendum with the final EIR or adopted negative declaration prior to making a decision about the Project. A brief explanation of the decision not to prepare a subsequent EIR pursuant to Section 15162 should be included in an addendum to an EIR, the lead agency's required findings on the project, or elsewhere in the record. The explanation must be supported by substantial evidence.

This addendum considers the new project elements. If the County declined to approve these new project elements, there would be no effect on the already approved Projects.

III. ORIGINAL PROJECT DESCRIPTION

A Mitigated Negative Declaration (MND) for the Projects was prepared to analyze the potential environmental impacts of the proposed development of 200 MWs of solar PV via the establishment of three solar generation facilities (SGF) located on approximately 1,428.01 acres in an unincorporated area of Kings County, California. The SGF project sites would be located approximately 4.5 miles southwest of the City of Lemoore and approximately 5 miles northwest of the community of Stratford. The SGF project sites as a whole are bounded by State Route (SR) 198 to the north, 25th Avenue to the east, an unnamed road to the west, and the Avenal Cutoff Road to the south. Agricultural land surrounds the project sites on three sides (east, south, and west) of the project sites. Existing electrical generation and distribution infrastructure is found directly east of the project sites along 25th Avenue. SR-198 is the southern boundary of Naval Air Station (NAS) Lemoore. Each of the three SGFs evaluated in the MND—RE Mustang, RE Orion, and RE Kent South—are stand-alone SGFs that could be developed and operated independently of the other two. RE Mustang, proposed by RE Mustang LLC, would consist of the development of an up to 160-megawatt (MW) SGF on up to 1,008.01 acres; RE Orion, proposed by RE Orion LLC, would consist of the development of an up to 20-MW SGF on up to 210.00 acres; and RE Kent South, proposed by RE Kent South LLC, would consist of the development of an up to 20-MW SGF on up to 210.00 acres. Throughout this document, the term "Original Project" shall mean the three SGFs collectively, as approved by Resolution 12-10. Each SGF project would contain the following main components, as described on p. 1-9 of the MND, all of which are further described below:

1. Solar (PV) panels, inverters, intermediate-voltage transformers, access roads, and electrical wiring necessary for collecting and consolidating power across the project sites; and
2. Connections to either one high-voltage substation or one medium-voltage substation.

Photovoltaic Modules

The PV modules would be manufactured at an off-site location and then transported to the SGF project sites. The modules would likely be mounted on either galvanized metal racking systems (which would include a metal single-axis utility-scale tracker) or fixed, mounted, south-facing racking systems and would be connected to inverters. The modules would be made of a semiconductor material covered by a tempered glass pane; they would be dark colored, highly absorptive, and have minimal reflectivity. The structure supporting the PV module arrays at each SGF would consist of steel pipes, which would be driven into the soil using pneumatic techniques, similar to a hydraulic rock hammer attachment on the boom of a rubber-tired backhoe excavator. Such pipes (also known as "piles" or "standards") are typically spaced 10 feet apart and installed to a revealed height of approximately 4 feet above grade.

Panel Interconnections, Inverters, and Transformers

Panels would be electrically connected into panel strings using wiring attached to the racking, and the panel strings would be electrically connected to each other via underground wiring. Underground electrical cables (underground collection system) would be installed from groups of PV arrays configured into power blocks.

The cables would convey direct current (DC) electricity to inverters that would convert the DC to AC. The underground cables would be installed using ordinary trenching techniques, which typically include a rubber-tired backhoe excavator or trencher. Wire depths would be determined in accordance with local, State, and federal codes and would likely be buried at a minimum 18 inches below grade by excavating a trench wide enough to accommodate the conduits. The underground collection system within the confines of each site would pass through an SGF (project) substation and terminate at a step-up transformer (medium or high-voltage substation). Electricity would be routed through the transformer to the points of interconnection and into the Henrietta-Gates and Henrietta-Tulare Lake power lines. All of the electrical inverters and the transformer would be placed on concrete foundations, which would be formed with plywood and reinforced with structural rebar. The SGFs would likely be designed and laid out in 2-MW increments, each of which would include a 25- by 40-foot inverter equipment area.

SGF Substations

Each SGF would require its own project substation; however if all three projects were constructed, they would require one 34.5-kV to 230-kV step-up transformer and one 12-kV to 70-kV step-up transformer. If RE Mustang were not constructed, and only RE Orion and/or RE Kent South were constructed, they would each require one 12-kV to 70-kV step-up transformer. The areas of the project substations would be excavated for the transformer equipment, control house foundations, and oil-containment area. Each substation area would be prepared and excavated to accommodate the footings required for the termination equipment and control house foundation pad. The concrete foundations for the substations would be formed with plywood and reinforced with structural rebar.

- Structural components in each substation area would include:
- A power transformer;
- Footings and an oil containment system for the power transformer;
- Footings for the relay enclosure; and
- A pre-fabricated relay enclosure to enclose the protection and control equipment, as needed. The equipment enclosure would be provided with ventilation and/or air conditioning, as required, to ensure reliable operation of the devices.

Project substation locations were depicted in Figures 1-5f and 1-5g of MND. The footprint for the project substation for the RE Mustang SGF would be approximately 325 ft by 370 ft. The footprint for the project substations for the RE Kent South SGF and RE Orion SGF would each be approximately 80 ft by 110 ft.

PG&E Owned Infrastructure and Points of Interconnection

Two Pacific Gas and Electric Company (PG&E) high-voltage (230-kV) transmission lines located within one utility line corridor, collectively referred to as the Henrietta-Gates transmission lines, cross the RE Mustang SGF project site from southwest to northeast. The Henrietta substation, owned and operated by PG&E, is located east of the eastern boundary of the Project. Additionally, the Henrietta–Tulare Lake 70 kV transmission line runs north-south along 25th Ave, the eastern border of the Project.

The RE Mustang SGF would interconnect via the Henrietta-Gates 230-kV transmission lines that cross the sites diagonally. A Pacific Gas and Electric ("PG&E")-owned substation with a footprint of approximately 400 ft by 600 ft adjacent to the RE Mustang project substation would be constructed within the RE Mustang SGF footprint, as depicted in Figure 1-5f of the MND, to support the interconnection requirements of the SGF.[1] Two generation tie lines of less than 200 feet and up to six new utility poles per generation tie line would be required to connect the high-voltage substation on the RE Mustang site to the 230-kV lines. The RE Orion and/or RE Kent South SGFs would require two generation tie lines of less than 200 feet to connect to a separate 70-kV substation to the Henrietta-Tulare Lake 70-kV line, which runs along the eastern border of the site. A PG&E-owned switching station adjacent to the RE Kent South and/or RE Orion project substations with a footprint of approximately 310 ft by 320 ft would be constructed within the RE Kent South SGF footprint, as depicted in Figure 1-5g of the MND, to support the interconnection requirements of the RE Kent South SGF. Up to three new utility poles would be required per generation tie line to connect the overhead electrical wires from the substation to the transmission lines for the RE Orion and RE Kent South projects.

Project Fencing and Access

The project sites would be secured by up to a 7- to 8-foot-high chain-link perimeter fences topped with three-strand barbed wire. The perimeter fence design would be "wildlife friendly"—i.e., the bottom of the perimeter fence for each project site would be an average of 5 inches above the ground along the entire perimeter, as measured from the top of the ground to the lowest point of the bottom of the fence. Access to each project site would be provided via gated access points along 25th Avenue, which forms the eastern boundary of the project sites.

Operations and Maintenance

Operation and maintenance (O&M) activities would be managed remotely and no on-site O&M facilities were proposed as part of the Project. The Project would contract with a regional (O&M) provider, who may lease warehouse and office space in an existing facility in the surrounding community. The regional O&M provider would use this existing facility to store tools, equipment, and supplies necessary for scheduled and unscheduled maintenance, including but not limited to spare parts for inverters, electrical infrastructure, panels, and tracking systems.

Farmland Security Zone Contracts

The Original Project site is located on land currently subject to Farmland Security Zone (FSZ) contracts pursuant to the Land Conservation "Williamson" Act of 1965. The applicant would fulfill one of three

[1] The MND mistakenly referred to this PG&E facility as a "substation," rather than as a "switching station."

options to reduce impacts related to the FSZ contracts. The applicant intends to either cancel the FSZ contracts or convert the FSZ contracts into a "Solar Use Easement" under Government Code Section 51255.1 (Senate Bill 618). If either of these two options is successful the applicant will not continue an agricultural operation on the site during the duration of the Project life. The third option will only be pursued if cancellation and the "Solar Use Easement" are unsuccessful. The third option is to maintain an agricultural use on the Project site that is consistent with the principles of compatibility and performance standards outlined in Government Code section 51238.1. This would be achieved by maintaining commercial agriculture on a minimum of 90% of the Project sites that would provide an economic output similar to the historical economic output of the sites. The specifics of the potential agricultural operations would be detailed in an Agriculture Management Plan for each approved project, subject to review by Kings County staff.

Approval of the Original Projects

The original CUPs were approved by the County Planning Commission on August 6, 2012 (CUP No. 11-09, 12-01, 12-02; Resolution 12-10).

IV. MODIFIED PROJECT DESCRIPTION

This Addendum analyzes a revision to the Projects' CUPs that would allow the Projects to demonstrate FSZ contract compatibility by maintaining reasonably foreseeable agricultural operations onsite determined by site-specific soil and water analysis. Consistent with Kings County Board of Supervisors Resolution 13-058, this amendment would remove the current CUPs' requirement that agricultural compatibility be achieved by maintaining commercial agriculture on a minimum of 90% of the Project sites that would provide an economic output similar to the historical economic output of the sites. The Addendum also amplifies and clarifies the description and environmental analysis of the PG&E switching stations depicted in Figures 1-5f and 1-5g of the MND.

Table 1 summarizes how these were described in the original MND and are assessed in this Addendum.

Table 1 Summary of Proposed Modifications to the Project

Project Component	Original Project Assessed in the MND	Project Modifications & Clarifications Assessed in this Addendum
PG&E Switching Stations	Two PG&E substations as depicted on Figures 1-5f and 1-5g, within the previously analyzed footprint of the Projects and with the following dimensions: a 230-kV PG&E "substation" approximately 400 x 600 ft (240,000 sq ft or 5.51 acres) and a 70-kV PG&E switching station approximately 310 x 320 ft (99,200 sq ft or 2.28 acres)	Further environmental analysis of two PG&E switching station approximately 465 x 490 ft (227,850 sq ft or 5.23 acres), and approximately 360 x 330 ft (118,800 sq ft or 2.73 acres), including the installation of 13 circuit breakers between the two switching stations. The switching stations together are less than 1 acre larger in footprint than depicted on Figures 1-5f and 1-5g, and may be located within 500 feet from the originally designated

		locations, but are within the previously analyzed footprint of the Projects.
Utility poles	Up to 18 new utility poles installed on the Project site and within PG&E easements, the tallest of which will be 80 ft.	Up to 18 new utility poles installed on the Project site and within PG&E easements, including the replacement of up to 3 lattice steel towers up to 140 ft in height.
Method of maintaining compatibility with an FSZ Contract	The project would maintain an intensive agricultural operation on 90 percent of the project site that would provide an economic output similar to the historical economic output of the project site.	Pursuant to Resolution 13-058, each SGF would maintain reasonably foreseeable agricultural operation onsite as determined by site-specific soil and water analysis.

SWITCHING STATION REVISIONS

The modified switching stations described in this Addendum clarify and augment the Original MND's depiction of PG&E substations in the project site plan. See MND Figures 1-5f and 1-5g. The PG&E facilities depicted in Figures 1-5f and 1-5g will actually be developed as switching stations The switching station on depicted in Figure 1-5f will be slightly smaller than as depicted and shifted slightly to the east, but still within the RE Mustang SFG CUP boundary. The switching station depicted in Figure 1-5g will be slightly larger (0.5 acres) than as depicted and would remain in the location identified within in the RE Kent South SGF CUP boundary. As a result, in total the Projects will include the construction of up to 3 project substations and 2 PG&E switching stations.

The switching stations would be owned and operated by Pacific Gas and Electric (PG&E) and would be unmanned, automated, and similar in appearance to existing utility infrastructure in the area, including the Henrietta Substation. They would be constructed to PG&E standards, inspected by PG&E during construction, and deeded to PG&E at the time construction is complete.

Utility-owned infrastructure, including electric transmission and distribution substations, communications equipment, and other public service structures, is under the exclusive jurisdiction of the California Public Utilities Commission and is not subject to County zoning requirements. However, for CEQA purposes, these interconnection components can be included as part of the Projects. Additionally, utility-owned infrastructure is considered a compatible use with land subject to an FSZ contract pursuant to Government Code Section 51238(a)(1), which states "…the erection, construction, alteration, or maintenance of gas, *electric*, water, *communication* or agricultural laborer housing facilities are hereby determined to be compatible uses within any agricultural preserve" (emphasis added).

No significant and unavoidable Project or cumulative impacts are anticipated to occur with the construction or operation of the PG&E switching stations, either as originally proposed or as modified as described in this Addendum. That is, the project changes analyzed here would not result in new significant impacts or substantially more severe impacts than those previously analyzed.

There can sometimes be public interest and concern regarding potential health effects from exposure to electric and magnetic fields (EMF) from transmission lines. However, EMF is not addressed here as an environmental impact under CEQA. The CPUC has repeatedly recognized that EMF is not an environmental impact to be analyzed in the context of CEQA because (1) there is no agreement among scientists that EMF does create a potential health risk, and (2) there are no defined or adopted CEQA standards for defining health risk from EMF. See, e.g., CPUC Decision No. 04-07-027 (Jul. 16, 2004); Delta DPA Capacity Increase Substation Project Final MND and Supporting Initial Study (November 2006), A.05-06-022, section B.1.14.1, page B-31, adopted in D.07-03-009 (March 1, 2007).

230-kV Switching Station within the RE Mustang SGF footprint

PG&E's 230-kV switching station will interconnect the RE Mustang SGF to the existing PG&E electric transmission system via the existing PG&E Gates-Gregg 230-kV transmission line and the Gates-McCall 230-kV transmission line (collectively, the "Henrietta-Gates 230-kV transmission line") and would be located in the southwest portion of the SGF site (APN 024-260-010), in the approximately location depicted in Figure 1-5F. The switching station footprint would be approximately equivalent to the PG&E "substation" depicted in the MND, and would remain entirely within the previously analyzed Original Project footprint.

The following details on the components that may be found within the switching station footprint or within a PG&E power line corridor:

- eight circuit breakers
- mounting hardware for one additional circuit breaker
- a mechanical, protection, automation and communication ("MPAC") enclosure approximately 64 ft by 16 and up to 14 ft in height
- a battery enclosure approximately 34 ft by 16 ft and up to 14 ft in height
- replacement of up to three existing approximately 140-foot tall lattice towers (LT) with up to four double circuit tubular steel poles (TSPs) or LTs, approximately 80 to 140 feet in height in the existing PG&E 230 kV transmission line corridor
- 16 foot drive aisles within the PG&E switching station fence line
- a storm water retention basin (approximately 400 ft x 40 ft x 4 ft)
- an eight feet high perimeter chain-link fence
- security lighting controlled by motion detectors
- telecommunication facilities (underground fiber optic telecommunication lines)
- microwave tower on a lattice steel structure approximately 80 ft in height

The fenced area of the revised 230-kV switching station would be approximately 465 ft by 490 ft (5.23 acres). The total footprint that would covered by concrete within the switchyard including breaker mounting foundations and the communications enclosure would be less than 0.10 acres. The drive aisles within the PG&E switching station fence line would be built in accordance with dustless and durable and would meet the County Fire Department's and PG&E's standards to support fire equipment and utility vehicles as well as the San Joaquin Valley Air Pollution Control District's (APCD) standards for minimizing dust. The maximum height of the PG&E equipment located in the switching station would be approximately 80-feet for the microwave tower. The switching station would also include six dead end structures approximately 60 feet in height supporting the 230-kV transmission line interconnection and switches and bus work approximately 21-feet . The dead end structures would connect to six TSPs previously contemplated in the MND, within the RE Mustang SGF footprint, and approximately 200 ft from the switching station.

70-kV Switching Station within the RE Kent South SGF footprint

PG&E's 70-kV switching station will interconnect the RE Kent South SGF to the existing PG&E electric transmission system via the existing PG&E Henrietta-Tulare 70-kV power line and would be located as depicted in figure 1-5f of the MND and within APN 026-010-041. The switching station footprint would be approximately 0.5 acres larger than as depicted in the MND, but would remain entirely within the previously analyzed Original Project footprint.
The following details on the components that may be found within the switching station footprint or within a PG&E power line corridor:

- five circuit breakers
- mounting hardware for one additional circuit breaker
- a mechanical, protection, automation and communication ("MPAC") enclosure approximately 64 ft by 16 and up to 14 ft in height
- a battery enclosure approximately 34 ft by 16 ft and up to 14 ft in height
- replacement of up to four approximately 75-foot high wooden transmission poles with four tubular steel poles ("TSPs"), two of which would be approximately 60 feet in height, one at approximately 75 feet in height, and one at approximately 85 feet in height in the existing PG&E 70 kV power line corridor
- 16 foot drive aisles within the PG&E switching station fence line
- a storm water retention basin (approximately 312 ft x 35 ft x 4 ft)
- an eight feet high perimeter chain-link fence
- security lighting controlled by motion detectors
- telecommunication facilities (underground fiber optic telecommunication lines)
- microwave tower on a lattice steel structure approximately 80 ft in height

The fenced area of the 70-kV switching station would be approximately 360 x 330 ft (2.73 acres). The total concrete within the switchyard including breaker mounting foundations and the communications enclosure would be approximately (0.05-acres). The drive aisles within the PG&E switching station fence line would be built in accordance with dustless and durable and would meet the County Fire Department's and PG&E's standards to support fire equipment and utility vehicles as well as the San Joaquin Valley Air Pollution Control District's (APCD) standards for minimizing dust. The maximum height of the PG&E equipment located in the switching station would be approximately 80 feet in height for the microwave tower. The switching station would also include four dead end structures approximately 60 feet in height supporting the 70-kV power line interconnection, and the switches and bus work would be approximately 21-feet tall. The dead end structures would connect to four TSPs previously contemplated in the MND, within the RE Kent South SGF footprint, and approximately 100 ft from the switching station.

Construction and Operations of the Switching Stations
All construction activity would occur within the Project footprint or existing PG&E easements or rights of ways. The Original Project description included equipment associated with switching station construction and analyzed a comprehensive estimate of construction workers and vehicles required to construct the three SGFs, including the switching stations. No additional construction workers or traffic trips are associated with the construction of the switching stations relative to those previously assessed. The site is mostly flat, so extensive grading will not be required. All grading would be completed in compliance with Kings County and the San Joaquin Valley Air Pollution Control District requirements.

Following site preparation, below grade construction would occur including concrete foundations, underground conduit, and a storm water retention basin, if necessary. Reinforced concrete subsurface footings and concrete slabs would be installed along with the grounding grid. A Storm Water Pollution Prevention Plan (SWPPP) would be developed and would comply with all National Pollution Discharge Elimination System (NPDES) permit requirements. A storm water retention basin would be constructed within the PG&E switching station boundaries, if necessary, to maintain existing site drainage patterns such that post-construction flows from the switching station would match pre-construction flows. The basin would be engineered to acceptable industry standard as well as the local capacity criteria and design standards. The pole replacement construction by PG&E would require the excavation of up to thirty holes, approximately five to eight feet in diameter, at a depth of no more than approximately 25-feet to accommodate the replacement of up to three LTs and 18 power poles. All fill would be maintained onsite or would be removed from the site in accordance with applicable storm water, APCD, County, and waste disposal standards.

During construction of the switching stations, the Project would implement all best management practices described in the MND, and as augmented by the following:

- To the extent feasible, unnecessary construction vehicle and idling time will be minimized. The ability to limit construction vehicle idling time is dependent upon the sequence of construction activities and when and where vehicles are needed or staged. Certain vehicles, such as large diesel powered vehicles, have extended warm-up times following start-up that limit their availability for use following startup. Where such diesel powered vehicles are required for repetitive construction tasks, these vehicles may require more idling time. The proposed Project will apply a “common sense” approach to vehicle use; if a vehicle is not required for use immediately or continuously for construction activities, its engine will be shut off. Construction foremen will include briefings to crews on vehicle use as part of pre-construction conferences. Those briefings will include discussion of a “common sense” to vehicle use.
- Use low-emission construction equipment. Maintain construction equipment per manufacturing specifications and use low-emission equipment described here. All off-road construction diesel engines not registered under the CARB Statewide Portable Equipment Registration Program shall use equipment manufactured after model year 2006 or equipment that meets at a minimum the Tier 3 California Emission Standards for Off-Road Compression-Ignition Engines as specified in California Code of Regulations, Title 13, Sec. 2423(b)(1).
- Construct all power transmission lines to the 2006 Avian Power Line Interaction Committee Guidelines specifications. The Project applicant shall install power collection and transmission facilities utilizing Avian Power Line Interaction Committee standards for collision reducing techniques as outlined in Suggested Practices for Raptor Protection on Power Lines: The State of the Art in 2006 (Avian Power Line Interaction Committee, 2006).

SF6 Greenhouse Gas (GHG)

Sulfur hexafluoride (SF6). Sulfur hexafluoride is a colorless, odorless, nontoxic, nonflammable gas. It is most commonly used as an electrical insulator in high voltage equipment that transmits and distributes electricity. Sulfur hexafluoride is the most potent GHG that has been evaluated by the Intergovernmental Panel on Climate Change with a Global Warming Potential of 23,900. However, its global warming contribution is not as high as the Global Warming Potential would indicate due to its low mixing ratio compared to carbon dioxide (4 parts per trillion [ppt] in 1990 versus 365 parts per million [ppm]) potentially high temperature applications such as electrical circuit breakers. The switching

stations would typically utilize equipment that may contain SF6. The allowable manufacturer leakage rate for such equipment is 1 percent per year. However, methods of estimating leakage from a particular substation or transmission line are not currently known.

The California Climate Action Registry (Registry) lists SF6 as a potential source of fugitive emissions from electrical transmission and distribution equipment (Power/Utility Reporting Protocol, Version 1.0, April 2005). Fugitive emissions are unintentional leaks of GHGs from equipment such as joints, seals, and gaskets. The Registry recommends that fugitive SF6 emissions from electricity transmission and distribution operations be calculated using the Mass Balance Approach outlined in the EPA SF6 Emission Reduction Partnership for Electric Power Systems. However, this method is based on accounting a company-wide inventory of SF6 throughout the year. Therefore, it is not possible to use this method to estimate fugitive emissions from any particular substation or transmission line.

Part of CARB's direction under AB 32 was to develop a scoping plan that contains the main strategies California will use to reduce GHG emissions that cause climate change. Recently, the Regulation for Reducing SF6 Emissions from Gas Insulated Switchgear was implemented as part of AB 32. This regulation will be applicable to the PG&E facilities that will include permanent installation of SF6-insulated breakers. CARB published interim guidance for assessing the significance of GHGs under CEQA in October 2008. CARB guidance indicates that GHG emissions for non-transportation-related sources of less than 7,000 metric tons of CO2e per should be presumed to have a less than significant impact (CARB, 2008b). PG&E's new breakers will be well below this threshold. PG&E's BMPs and APMs will further reduce less-than-significant impacts.

Since 1998, PG&E has implemented a programmatic plan to inventory, track, and recycle SF6 inputs, and inventory and monitor SF6 leakage rates in order to facilitate timely replacement of leaking breakers. PG&E has improved its leak detection procedures and increased awareness of SF6 issues within the company. X-ray technology is now used to inspect internal circuit breaker components to eliminate dismantling of breakers, reducing SF6 handling and accidental releases. As an active member of EPA's SF6 Emission Reduction Partnership for Electrical Power Systems, PG&E has focused on reducing SF6 emissions from its transmission and distribution operations and has reduced the SF6 leak rate by 89 percent and absolute SF6 emissions by 83 percent.

- Require that the switching stations' breakers have a manufacturer's guaranteed leakage rate of 0.5 percent per year or less for SF6.
- Maintain substation breakers in accordance with PG&E's maintenance guidelines.
- Comply with California Air Resources Board Early Action Measures as these policies become effective.

Figure 1
230-kV Switching Station Site Plan

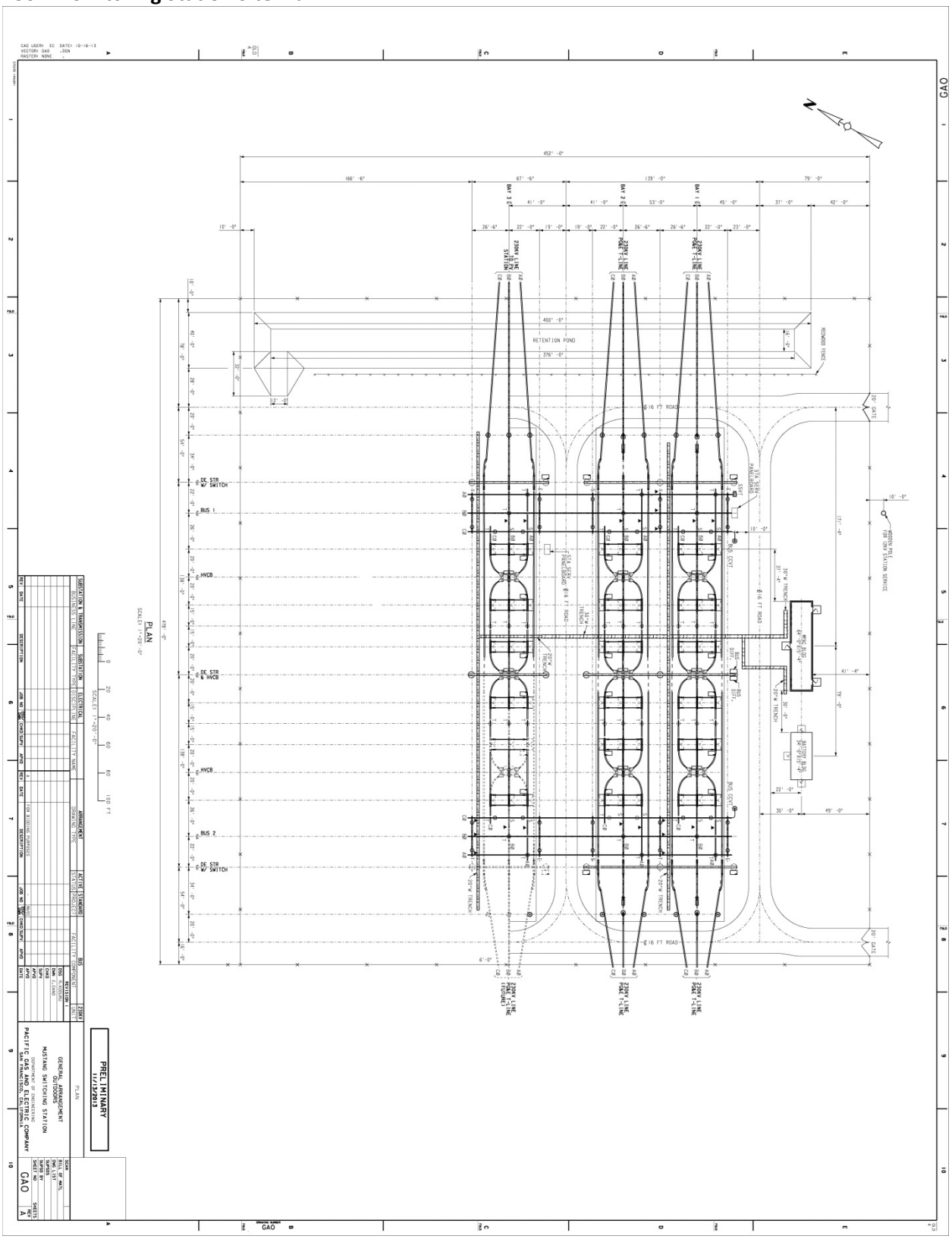
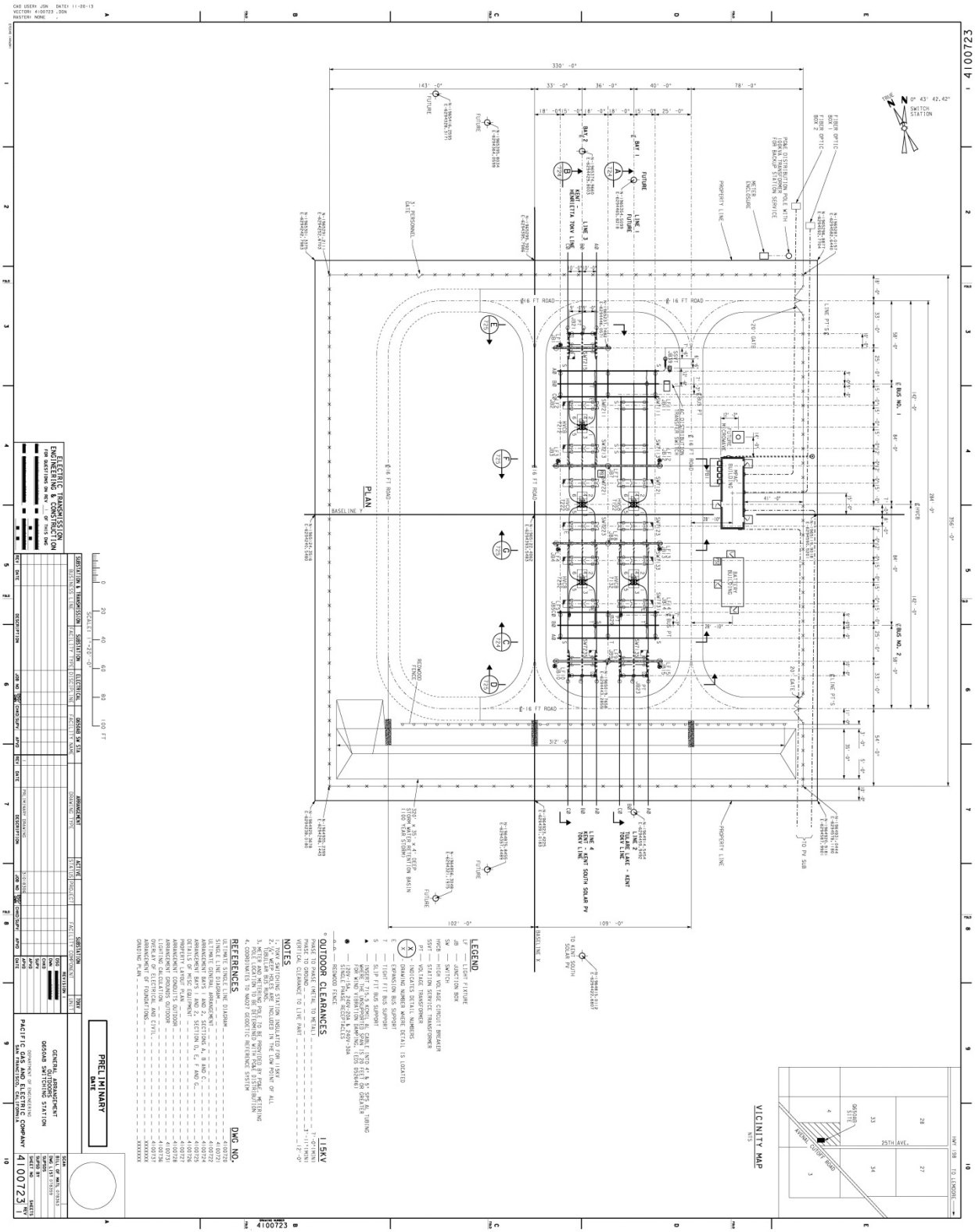


Figure 2
230-kV Switching Station Profile

Figure 3
70-kV Switching Station Site Plan and Profile



METHOD OF MAINTAINING COMPATIBILITY WITH AN FSZ CONTRACT

The revised Projects are located on land subject to Farmland Security Zone (FSZ) contracts. A solar facility to be located on Williamson Act or FSZ contracted land may only receive a conditional use permit if it meets the principles of compatibility under Government Code Section 51238.1.a, or if the contract is proposed for cancellation, or is eligible and converts to a Solar Use Easement. The Project applicants would fulfill one of three options to meet the requirements of the Zoning Ordinance and ensure the Project has no significant impacts related to the Williamson Act: Option 1) cancel the FSZ contract, Option 2) convert the FSZ contract into a "Solar Use Easement" pursuant to Government Code Section 51255.1 (Senate Bill 618), or Option 3) maintain a use onsite that meets the principles of compatibility pursuant to Government Code Section 51238.1(a) by maintaining reasonably foreseeable agricultural operations onsite as determined by site-specific soil and water analysis. As part of this revised Project description, the Project applicants may pursue these options in any order, such that an attempt to cancel or convert the FSZ contracts (Options 1 and 2) would not need to occur prior to pursuing compatibility (Option 3).

On November 26, 2013, the Board of Supervisors adopted Resolution No. 13-058, recognizing that circumstances exist on agricultural preserves located within that portion of Kings County south of State Route 198, west of State Route 41, and east of I-5, including water availability and soil conditions that limit the reasonably foreseeable agricultural use of certain parcels. If specified findings can be made, compatibility of solar development with certain reasonably foreseeable agricultural uses can be achieved.

Consistent with Resolution No. 13-058, should Option 3 be pursued, the Project applicant shall provide an Agriculture Management Plan (AMP) which will detail how the Project owner/operator will ensure an onsite use that is consistent with the principles of compatibility outlined in Government Code section 51238.1. As modified in this Addendum, and to ensure the compatibility threshold is met, the AMP shall be required for the life of the contract(s) and shall include the following information:

1) A written narrative demonstrating that agricultural practices would be limited due to chemical or physical limitations to the soils (including drainage), insufficient water availability, and/or compromised water quality that would reduce agricultural productivity. Evidence to support this narrative shall be provided in the form of:
    a) A recent soils test demonstrating that the characteristics of the soil significantly reduce its agricultural productivity, and/or
    b) An analysis of water availability demonstrating the insufficiency of water supplies for continued agricultural production, and/or
    c) An analysis of water quality demonstrating that continued agricultural production would be significantly reduced, and/or
    d) Site-pertinent reports, findings, or resolutions adopted by local, state, or federal government (and associated agencies) documenting circumstances contributing to reduced agricultural viability of the Project site and/or other beneficial purpose to neighboring agricultural land due to a non-agricultural use of the site.
2) A description of the intended agricultural operation on the site, including:
    a) Type of agricultural activity onsite (e.g., sheep grazing)
    b) Method of maintaining agricultural production (e.g., dryland pasture species groundcover and method of application)
    c) An annual monitoring and reporting plan documenting onsite agricultural use

3) If available, a description of how the onsite use is benefitting offsite agricultural uses, including:
    i. Reducing the presence of salts, pollutants, or other constituents in neighboring parcels by prohibiting onsite irrigation.
    ii. Increasing the availability of water for other agricultural users within the same water district by prohibiting onsite irrigation.

This Addendum provides site specific evidence of impaired soil quality, water quality, and drainage on the Project site, as well as severe limitations to surface water allocations, as evidence that a foreseeable agricultural operation on the Project footprint is season sheep grazing. A full soil and water analysis conducted by Provost & Pritchard Consulting Group and Dellavalle Labs Inc. for each SGF may be found in Appendix A (RE Mustang), Appendix B (RE Orion), and Appendix C (RE Kent South). A summary of the findings can be found in Table 2:

Table 2: Agricultural Limitations of the Project Site

Project Site Characteristics	Description of Issues
Soil Conditions	
Quality	**Soils are sodic and saline**. Agricultural limitations due to high concentrations of boron and sodium.
Drainage	**No subsurface drainage system or a sustainable leachate disposal outlet.** Soil salinity conditions are expected to increase due to lack of drainage.
Water Availability	
Surface Water (provided by Westlands Water District)	**Consistently limited surface water availability.** Currently, water allocation is at 20% (0.52 acre-feet per acre). Projected allocation for 2014 is 0%. Average allocation over the past 6 years was 41%.
Groundwater	Well is indicated to be 800 ft deep and taps lower aquifer. All wells in the area are drawing significantly deeper water due to drought conditions.
Water Quality	
Groundwater	**High concentrations of saline, boron and chloride.** Requires mixing with surface water to dilute agriculturally damaging constituent concentrations.

The 2012 MND included sheep grazing as a potential future agricultural use of the site and the additional soil and water data provided in the Addendum confirm that seasonal sheep grazing is reasonably foreseeable agricultural use and therefore, would allow for the Project to be compatible with the FSZ contracts. Upon completion of construction activities, each SGF would be revegetated with an appropriate seed mixture that would (1) reduce the presence of weeds on the site, (2) be rain-fed, and (3) provide nutritional value for sheep. No irrigation would be required to maintain the onsite agricultural use. Water for consumption by the sheep was included in the calculations of water use during operations; the presence of sheep onsite does not introduce a new water requirement not previously analyzed in the MND. The SGF applicant would receive approval from the Community Development Agency of an AMP meeting the requirements described above prior to receiving building permits.

Unavailability of surface water is the primary limiting factor to productive agriculture in the region. Removing this Site from agricultural production for solar would increase the percentage of water available for other agricultural parcels able to support higher value crops. The modified Project would accommodate for the placement of the solar project on land subject to agricultural limitations and

ensure the Project site contributes to the agricultural system, to maintain compatibility with the Farmland Security Zone Contract and complying with the County's Zoning Ordinance.

V. IMPACT ANALYSIS

The initial study has been reviewed in conjunction with the revised Projects and the County has determined that none of the conditions described in the CEQA Guidelines Section 15162 calling for the preparation of a subsequent EIR or negative declaration have occurred. Instead:

1. No substantial changes are proposed in the Projects which will require major revisions of the previous negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;
2. No substantial changes occur with respect to the circumstances under which the Projects are undertaken which will require major revisions of the previous negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or
3. No new information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous negative declaration was adopted, and none of the following apply:
    a. The Projects will have one or more significant effects not discussed in the previous negative declaration;
    b. Significant effects previously examined will be substantially more severe than shown in the previous negative declaration;
    c. Mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the Projects, but the Projects' proponents decline to adopt the mitigation measure or alternative; or
    d. Mitigation measures or alternatives which are considerably different from those analyzed in the previous negative declaration would substantially reduce one or more significant effects on the environment, but the Projects' proponents decline to adopt the mitigation measure or alternative.

As required by CEQA Guidelines Section 15162, the County has evaluated each of these circumstances below.

COMPARISON OF THE ORIGINAL AND MODIFIED PROJECT

Table 5: Comparison of the Original and Modified Project and Cumulative Impacts

Potential for Project and Cumulative Impacts	MND Conclusion	Modified Project
Aesthetics	Project would not substantially degrade existing visual quality of the site and surroundings as the scenic value of the area is low. Impacts would less than significant.	Modifications to the switching stations would maintain a similar visual impact as assessed in the MND and would remain within a land use area characterized by low vividness, intactness, and unity. Impacts would remain less than significant. Additional environmental analysis on this topic area can be found below.

Agriculture	Project would remove 1428.01 acres of Farmland of Statewide Importance from agricultural use. Project would implement Mitigation Measures (MMs) AG 1-3 and impacts would be less than significant. The Project site is subject to Farmland Security Zone (FSZ) contracts; the Project would pursue one of three options to reduce potential impacts to less than significant.	Total acreage associated with the project substations and switching stations infrastructure is slightly larger (<1 acre more) than as originally depicted footprint in the MND. Minor technical changes to clarify how the Project would maintain compatibility with an FSZ contract. Impacts remain less than significant with mitigation. Additional environmental analysis on this topic area can be found below.
Air Quality	Emissions generated during Project construction and operation would be less than the significance thresholds for criteria pollutants. Impacts to air quality would be less than significant.	No change. Construction of the switching stations would require the same number of employees and vehicles during Project construction and operation. Potential air pollutant releases from the switching stations were analyzed in the original MND. See MND at 3.7-5 (regarding GHG emissions from switching gear).Switching stations will adhere to best management practices and guidelines and requirements of the San Joaquin Valley APCD. Impacts would remain less than significant.
Biology	Implementation of the MMs Bio 1-7 addressing biological resources would be sufficient to protect special status plants and animals, as well as other common wildlife, found in the SGF Project area, and would reduce potential impacts to less-than-significant levels. Plants of certain special status species have potential to occur within the drainages in and adjacent to the Project area.	No change. Modified switching stations fall within the previously analyzed Project footprint. See p. ES-1 of Biological Technical Report, Appendix C-1 of the MND (reporting completion of surveys throughout the project areas plus a 250 foot buffer); MND at 3.4-8 (same). Project would adhere to the same MMs. Impacts would remain less than significant.
Cultural Resources	A historical record search identified no cultural resources within the SGF area and agricultural activity has disturbed the surface of the SGF area. Ground-disturbing activities associated with the construction phase of the SGF Project could impact unknown cultural resources. Implementation of MMs CR-1 through CR-4 would address impacts to potential historical,	No change. The modified switching station footprints were evaluated in the cultural resources section of the MND. See MND at p. 3.5-2 through -3 (describing 2010 cultural resources records searches, literature review, and reconnaissance surveys of the

	archaeological, and paleontological resources during Project construction activities. Therefore, potential impacts under this criterion would be reduced to less than significant levels with mitigation.	project areas). Project would implement MMs CR 1-4 and impacts would remain less than significant.
Geology	Project is not located within an Alquist-Priolo Earthquake Fault Zone. Project would adhere to all federal, state, and local ordinances. Impacts would be less than significant.	No change. Switching stations would occur on the same geologic conditions and would adhere to all federal, state, and local ordinances. Impacts would remain less than significant.
Greenhouse Gases	Project would result in a minor but beneficial impact, and a less than significant adverse impact.	No change. Potential GHG releases from onsite equipment, including equipment associated with the switching stations, were analyzed in the original MND. See MND at 3.7-5 (regarding GHG emissions from switching gear). Impacts would remain less than significant.
Hazards and Hazardous Materials	Hazardous and other materials would be used during construction and operation of the Project. Any use or disposal of hazardous materials during construction activities would be conducted according to all applicable local, state, and federal regulations. Potential impacts from the use of or exposure to hazards and hazardous materials as result of the Project would less than significant.	No change. Construction and operation of the switching stations would adhere to the conditions and materials as analyzed in the Initial Study. Any use or disposal of hazardous materials during construction and operations would be conducted according to all applicable local, state, and federal regulations. Impacts would remain less than significant.
Hydrology and Water Quality	Project construction would require approximately 102 acre-feet per year for construction-related activities and approximately 9.8 acre-foot per year of water for Project operations on the 1,482.01 acre site. This included approximately 200,000 gallons per year to support water consumption requirements of onsite sheep. Impacts related to water quality or waste discharge are not anticipated with the implementation of the SWPP and construction BMPs. Impacts to water quality or availability as a result of the Project would be less than significant.	The Projects would have the same water requirements and make use of the same water sources as previously analyzed, which included a provision of water for sheep grazing. BMPs and a SWPPP would be implemented. Drainage patterns would minimally change as a result of the Project revisions. Impacts would remain less than significant. Additional environmental analysis on this topic area can be found below.
Land Use and Planning	Project is consistent with local land use and zoning designations, plans, and policies. The Project would not divide an established community or conflict with a habitat or natural community conservation plan. Potential impacts	No change. Project would be located on the same parcels as analyzed for the Original Project. Construction and operation of the solar facility is consistent with

	would be less than significant.	local plans, policies, and regulations. Switching stations are not subject to County zoning requirements. Impacts would remain less than significant.
Noise	Project construction and operation would not result in the generation of noise levels in excess of established local standards or permanently increase ambient noise levels. Persons would not be subject to excessive noise or groundborne vibrations. Impacts from noise would be less than significant.	No change. Construction and operation schedule and equipment would not change as result of switching station modifications. Switching stations would not exceed any local noise standards or expose persons to excessive noise or vibrations. Impacts would remain less than significant.
Population and Housing	Project construction would require an average of 161 workers, and up to 250 workers during peak construction; maintenance would require up to 25 workers onsite periodically throughout the year. Workers would be hired from the local labor pool to the maximum extent practicable. Worker relocation and permanent housing options would not be required; therefore, impacts to population and housing would be less than significant.	No change. Project acreage and capacity are unchanged so the anticipated workforce to construct and operate the Project would be the same as assessed in the MND. Impacts would remain less than significant.
Public Services, Utilities, and Service Systems	Project is not anticipated to increase demand for fire and sheriff protection. Workers associated with the Project are anticipated to come from neighboring communities and would not result in a substantial increase in population that may increase demand for schools, parks, or other public facilities. Water use associated with the Project would be less than historic use for agriculture. Impacts under these criteria would less than significant. Existing waste facilities with sufficient capacity to hand Project waste exist proximate to the Project site; no impacts would occur.	No change. Project acreage and capacity are unchanged so the anticipated workforce, water requirements, and waste generated to construct and operate the Project would be the same as assessed in the MND. Impacts would remain less than significant.
Recreation	Project workforce would not result in a substantial increase in population or demand for recreational facilities in the Project region. Impacts to existing parks would be less than significant. No new recreational facilities, or expansions of existing facilities, would be required.	No change. Project acreage and capacity are unchanged so the anticipated workforce to construct and operate the Project would be the same as analyzed for the Original Project. Impacts would remain less than significant.
Transportation and Traffic	Project is not expected to cause a significant short-term or long-term increase in traffic volumes on area roads due to the nature and	No change. Project acreage and capacity are unchanged so the anticipated traffic associated with

	scope of the construction and maintenance activities required. Project would implement MM TT-1 to reduce potential impacts to a less than significant level. Project would not result in inadequate parking capacity or conflict with adopted policies or plan supporting alternative transportation.	constructing and operating the Project would be the same as analyzed for the Original Project. The Project would adhere to the ingress/egress points evaluated with the Original Project. Impacts would remain less than significant.

ENVIRONMENTAL ANALSYIS OF KEY TOPIC AREAS

Aesthetics

There are no scenic resources within the Project vicinity. The nearest eligible state scenic highway (not officially designated) is located approximately 24 miles from the Project site. The existing visual character of the site and the immediate surrounding area include numerous transmission and powers lines, a substation, and a gas peaker plant. Two electrical transmission lines traverse the middle portion of the sites from southwest to northeast. The southern transmission line is a high-voltage (230-kV) double-circuit line mounted on steel lattice towers reaching approximately 140 ft in height. The northern line is a lower-voltage (70-kV) single-circuit line mounted on wooden poles approximately 80-120 ft in height. A 70-kV power line also runs north-south along 25th Avenue with poles approximately 80 ft in height. The Henrietta Substation, operated by PG&E, is adjacent to the eastern boundary of the sites.

The switching stations would introduce additional lattice towers and tubular steel, which would be similar in character to the existing Henrietta-Gates and Henrietta-Tulare power lines within the Project site and the area. The switching stations would also each involve the construction of circuit breakers (5 for the 70-kV switching station and 8 for the 230-kV switching station), mounting hardware for two additional circuit breakers, a mechanical, protection, automation and communication enclosure and an eight feet high perimeter chain-link fence. These facilities would be located in approximately the same location as depicted in the MND in Figures 1-5f and 1-5g and would be adjacent to the project substations and existing utility-owned infrastructure. The switching stations would not result in a significant new visual impact. Further, there would be no discernible glare from the components of the switching station, whose security lights would be controlled by motion detectors, and therefore would not result in new or more adverse aesthetic impacts that the approved Project, with any impacts remaining less than significant. That is, the project changes analyzed here would not result in new significant impacts or substantially more severe impacts than those previously analyzed

No impacts not previously identified in the MND are identified with regards to the proposed revisions. Impacts would remain less than significant.

Agriculture and Forest Resources

The Projects' footprint for the modified Project Description is unchanged from the Original Projects' and is located on 1,482 acres of disturbed agricultural land in unincorporated Kings County. The Kings County General Plan Land Use Element's land use designation for the SGF site is Exclusive Agricultural (AX), 40 acre minimum, and the zoning designation is Exclusive Agriculture (AX) (Kings County CDA 2008, 2010). The Project site has a 2008 California Farmland Mapping and Monitoring Program (FMMP)

designation of Farmland of Statewide Importance (California Department of Conservation 2008). The site is subject to Farmland Security Zone Contract Nos. 221 and 222.

As explained below, this Addendum concludes that the modified Projects will not result in new or substantially more adverse significant impacts to agriculture and forest resources:

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?

LESS THAN SIGNIFICANT IMPACT WITH MITIGATION. The MND determined that implementation of the project would result in less than significant impacts with mitigation. The modified Project would have similar impacts as the Original Project under this criterion as there would be no change to the total Project footprint. The modifications to the switching stations would not significantly change the impervious area of the Project site as assessed in the MND and approximately 95 percent of the site would remain permeable and accessible to onsite sheep. Furthermore, the switching stations would be owned and operated by PG&E and are compatible uses with the FSZ contracts pursuant to Government Code Section 51238(a)(1).
To address the Farmland Security Zone Contracts on the Project site, the Project applicant has proposed to amend the Projects' CUPs to implement one of three options: 1) cancel the FSZ Contracts, 2) convert the FSZ Contracts to Solar Use Easements, or 3) maintain a use onsite that meets the principles of compatibility pursuant to Government Code Section 51238.1(a) by maintaining reasonably foreseeable agricultural operations onsite as determined by site-specific soil and water analysis. Cancellation, conversion to a Solar Use Easement, or meeting the principles of compatibility with the FSZ contracts could result in a reduced or limited agricultural use of the site. Implementation of Mitigation Measures (MM) AG-1, AG-2 and AG-3 would reduce impacts under this criterion to a less than significant level. MM AG-2 is unchanged from the adopted MND. This Addendum includes minor changes to MM AG-1 and AG-3 to clarify the applicability of these measures, as shown below.

MM AG-1: Soil Reclamation Plan. Prior to the issuance of building permits for each SGF project, each applicant shall submit a Soil Reclamation Plan for review and approval by Kings County Community Development Agency staff. The Soil Reclamation Plan for each permitted SGF site shall contain an analysis of pre-project baseline soil conditions, and shall contain specific measures to restore the soil to its pre-project condition, including removal of all <u>non-utility-owned</u> fixtures, equipment, non-agricultural roads, and restoration of compacted soil. Additionally, each Soil Reclamation Plan shall discuss the retention of any surface water rights. Reclamation of each permitted SGF project site shall commence within two months of the expiration of the use permit and be completed within 18 months from the date the facility ceases to operate.

MM AG-2: Financial Assurance. Prior to the issuance of building permits for each SGF project, each applicant shall post a performance bond or similar instrument to ensure completion of the activities under each Soil Reclamation Plan. Financial assurances for each Soil Reclamation Plan will be reviewed every 5 years by the Kings County Community Development Agency to determine if finances are sufficient to perform reclamation of the project. The assurance for

each Soil Reclamation Plan must be adjusted if, during the five year review, finances are determined to be insufficient to perform reclamation of the project.

MM AG-3: Off-site Agricultural Mitigation. For each SGF project, if the respective applicant 1) does not continue a reasonably foreseeable agricultural use ~~an intensive agricultural operation~~ on ~~at least 90 percent of~~ the project site ~~at an intensity equivalent to the existing agriculture use of the project site~~ for the entire life of the project, ~~and if the applicant~~ or 2) is successful in cancelling the ~~Williamson Act and/~~or Farmland Security Zone contracts~~, and/~~or 3) is successful in entering into one or more "solar use easements" (in accordance with the Solar Use Easement provisions of sections 51190-51192.2 of the Government Code), the respective applicant shall then provide written evidence of funding and/or purchase of agricultural mitigation land (which will be managed and maintained by an appropriate entity) for the life of the project to mitigate the loss of Farmland of Statewide Importance at a ratio of 1:1. Every acre of agricultural land removed from production would be mitigated by the respective applicant. The agricultural land preserved shall be of equal or greater quality as defined by the California Department of Conservation Farmland Mapping and Monitoring Program (i.e., if Farmland of Statewide Importance is converted to solar then the agricultural land preserved must not be in a classification indicating a lower quality than Farmland of Statewide Importance).

Should the mitigation occur within a preferred Kings County conservation area for agriculture, including but not limited to Zones defined as "AX" or the FSZ Expansion Area as shown on Figure RC-14 of the Resource Conservation Element of the Kings County 2035 General Plan, off-site mitigation shall be reduced by 50 percent to 0.5:1.

With the implementation of MM AG-1, AG-2, and AG-3 (as modified by this Addendum), the modified Project would result in a less than significant impact under this criterion.

(b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?

LESS THAN SIGNIFICANT IMPACT. The MND determined that implementation of the Original Project would result in less than significant impacts. The modified Project location is unchanged from the Original Project, which was deemed consistent with the General Plan and AX zone district though the conditional use permit process. To address the Farmland Security Zone contracts on the Project site, the Project applicant has proposed in the modified Project description to do one of three options in any order: 1) cancel the FSZ Contract, 2) convert the FSZ Contract to a Solar Use Easement, or 3) maintain a use onsite that meets the principles of compatibility pursuant to Government Code Section 51238.1(a) by maintaining reasonably foreseeable agricultural operations onsite as determined by site-specific soil and water analysis.

The following discussion addresses how the proposed solar site could satisfy the principles of compatibility of Government Code Section 51238.1(a):

Government Code Section 51238.1.(a) Uses approved on contracted lands shall be consistent with all of the following principles of compatibility:

(1) The use will not significantly compromise the long-term productive agricultural capability of the subject contracted parcel or parcels or on other contracted lands in agricultural preserves.

The Project changes analyzed here would not result in new significant impacts or substantially more severe impacts than those previously analyzed. Additionally, the Project would be subject to MM AG-1 to return the Project site to pre-project conditions after decommissioning the site. Furthermore, the Project site is self-contained so as to not compromise long-term agricultural activity on adjacent lands. The use of herbicides in the project area shall comply with regulations set forth by the Kings County Agriculture Department.

(2) The use will not significantly displace or impair current or reasonably foreseeable agricultural operations on the subject contracted parcel or parcels or on other contracted lands in agricultural preserves. Uses that significantly displace agricultural operations on the subject contracted parcel or parcels may be deemed compatible if they relate directly to the production of commercial agricultural products on the subject contracted parcel or parcels or neighboring lands, including activities such as harvesting, processing, or shipping.

In order to remain compatible with the Farmland Security Zone Contracts and in compliance with the Projects' conditional use permits, the owner/operator would fully commit to and ensure successful implementation of the Agriculture Management Plan which is consistent with the principles of compatibility and performance standards outlined in Government Code section 51238.1. Attachments A-C to this Addendum provide evidence of limitations to onsite agricultural operations such that seasonal sheep grazing is a reasonably foreseeable agricultural use. These Attachments show that the Project sites are subject to severe limitations on water quality and availability and that soil quality is impaired by saline conditions. As a result, dry farm seasonal grazing of the sites is a reasonably foreseeable agricultural use for all three sites. Each SGF applicant shall provide an Agriculture Management Plan (AMP), which will detail how the SGF owner/operator shall ensure the SGF continues this reasonably foreseeable agricultural use on the SGF site. To ensure this compatibility threshold is met, the AMP shall include evidence to determine reasonably foreseeable agricultural operations and describe how the owner/operator will ensure the site retains onsite agriculture activity sufficient to meet the compatibility requirements of Government Code Section 51238.1. The development and operation of the Project is self-contained, would not encourage the conversion of neighboring agricultural parcels to a non-agricultural use, and does not pose harm or create issues of incompatibility with the operation of agricultural activities on adjacent properties.

(3) The use will not result in the significant removal of adjacent contracted land from agricultural or open-space use. In evaluating compatibility a board or council shall consider the impacts on noncontracted lands in the agricultural preserve or preserves.

The modified Projects would not result in the removal of adjacent contracted land from an agricultural use. The projects would connect to existing electrical infrastructure and the proposed use will not induce additional solar generation facilities to site on adjacent parcels. In addition, solar generation facilities do not generate the development of new urban land uses adjacent to the site since a solar facility would not provide services or products that would draw urban uses to be sited nearby.

The modified Project would result in a less than significant impact under this criterion.

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

NO IMPACT. The MND determined that implementation of the Original Projects would result in no impact under this criterion. The modified Projects would also have no impact as no forest or timber land is present or zoned for on the Project site, and no forest or timber land would be affected by the Project.

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

NO IMPACT. The MND determined that implementation of the Original Projects would result in no impact under this criterion. The modified Projects would also have no impact as no forest or timber land is present on the Project site, and no forest or timber land would be affected by the Project.

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

LESS THAN SIGNIFICANT IMPACT WITH MITIGATION. The MND determined that implementation of the Original Projects would result in a less than significant impact with mitigation under this criterion. Construction of the Projects has the potential to affect the condition of onsite soils and may impact the post-project agricultural use. Implementation of mitigation measures AG-1 and AG-2 would ensure any project related impacts would remain less than significant.

No impacts not previously identified in the MND are identified with regards to the proposed revisions. Impacts would remain less than significant.

Hydrology and Water Quality

Drainage patterns would minimally change as a result of the Project revisions. The modified switching stations and associated infrastructure would introduce no more than approximately one additional acre of potentially impermeable surfaces across the 1,482.01 acre Project site. Retention basins would be constructed within each switching station's boundaries and would be designed to retain any runoff from within the switching station boundaries. A Storm Water Pollution Prevention Plan (SWPPP) would be developed for the solar generating facilities and for the PG&E switching stations, as required for all projects which disturb more than one acre in size. The revised Project would adhere to all County and RWQCB requirements for drainage and storm water control and would therefore be consistent with the Original Project, as approved.

No impacts not previously identified in the MND are identified with regards to the proposed revisions. Impacts would remain less than significant.

VI. Mitigation Measures

The MND identified mitigation measures that would reduce or eliminate potential environmental effects of the Original Projects. All but two of the mitigation measure approved for the Original Projects would

also apply, unchanged, to the Proposed Projects. Two mitigation measures (AG-1 and AG-3) are modified by this Addendum to clarify applicability to ensure potential impacts are reduced to a less than significant level.

The revised Projects would not result in any effects to environmental resources that are more severe than those described in the original MND. All mitigation measures (as revised by this Addendum) associated with the Original Project would be applied to the modified Project.

As with the Original Projects, the modified Projects would have a less than significant impact with the implementation of mitigation identified for agriculture, biological resources, cultural resources, and traffic.

VII. Kings County Planning Commission Findings

It is the finding of the Planning Commission that the previous environmental document as herein amended may be used to fulfill the environmental review requirements of the current (modified) Projects. Because the current Project meets the conditions for the application of State CEQA Guidelines Section 15164, preparation of a new EIR or Negative Declaration is not required for the issue areas discussed above. Specifically, the County has determined that:

Finding 1: There are no substantial changes to the Projects that would require major revisions of the Initial Study-Mitigation Negative Declaration due to the new significant environmental effects or a substantial increase in the severity of impacts identified in the Initial Study.

Facts in Support of Finding: The Projects have not changed substantially from the development assumptions contained in the previously adopted Initial Study-Mitigated Negative Declaration and the Projects are consistent with the provisions contained in the Initial Study-Mitigated Negative Declaration to address the FSZ Contracts. The Projects would maintain a use that meets the consistency findings of compatibility per Government Code Section 51238.1 and would be subject to Mitigation Measure Ag-3 (offsite agricultural mitigation). Modifying the switching station footprints would not introduce a new significant environmental effect or substantially increase the severity of environmental impacts identified in the Initial Study. Accordingly, there have been no substantial changes to the Projects or in the circumstances under which the Projects will be developed resulting in new or more severe significant impacts.

Finding 2: No substantial changes have occurred in the circumstances under which the Projects are being undertaken that will require major revisions of the previously adopted Initial Study-Mitigated Negative Declaration to disclose new significant environmental effects or that would result in a substantial increase in the severity of the impacts identified in the Initial Study-Mitigated Negative Declaration.

Facts in Support of Finding: The circumstances under which the Projects will be undertaken are accurately and adequately described in the previously adopted Initial Study-Mitigated Negative Declaration. The previously adopted Initial Study-Mitigated Negative Declaration disclosed that the Project sites were subject to FSZ contracts and that the Projects would not have significant impact if the respective applicants 1) cancel the FSZ contract, 2) converted the FSZ contract into a Solar Use Easement, or 3) maintained an onsite use consistent with the principles of compatibility under

Government Code Section 51238.1. The modified Project description provides minor technical changes to how the Projects would meet the principles of compatibility. The description provided above clarifies the switching stations' infrastructure and footprint, which fall within the footprint and survey buffer of the Projects as assessed within the Initial Study-Mitigated Negative Declaration, and does not constitute a change in circumstance such that any additional review is required.

Finding 3: There is no additional new information of substantial importance, which was not known as the time of the adoption of the Initial Study-Mitigated Negative Declaration, showing any of the following: 1) The Projects will have one or more significant effects not discussed in the previous Initial Study-Mitigated Negative Declaration; 2) Significant effects previously examined would be substantially more severe; 3) Mitigation measures or alternatives to the Projects previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the Project, but the Project proponents decline to adopt the mitigation measure; or 4) Mitigation measures or alternatives which are considerably different from those analyzed in the previous Initial Study-Mitigated Negative Declaration would substantially reduce one or more significant effects on the environment, but the Project proponents decline to adopt the mitigation measure or alternative.

Facts in Support of Finding: No new information of substantial importance to the conclusions of the previously adopted Initial Study-Mitigated Negative Declaration has been identified with the analysis of this Addendum. The impact conclusions are identical to those analyzed in the Initial Study-Mitigated Negative Declaration. The clarification of Mitigation Measures AG-1 and AG-3 do not introduce a new or unmitigated significant effect of the Projects. There are no additional mitigation measures or alternatives that could be implemented with the Project in order to substantially reduce one or more significant impacts discussed in the Initial Study-Mitigated Negative Declaration. No significant impacts are identified pursuant to this Addendum.

Finding 4: The Addendum need not be circulated for public review.

Facts in Support of Finding: Pursuant to CEQA Guidelines Section 15164(c), the Addendum need not be circulated for public review.

SUMMARY

No significant impacts to the environment as a result of these Projects have been identified when considering the mitigation measures included as a part of the Projects. Approval of the Projects is not expected to have any significant impacts, either long-term or short-term, nor will it cause substantial adverse effect on human beings, either directly or indirectly provided all mitigation measures and normal Project conditions are followed. A Mitigation Monitoring and Reporting Program remains valid and in force as approved with the Mitigated Negative Declaration, and would include minimal changes to MM AG-1 and AG-3, as explained above. In summary, the analysis concludes that none of the conditions described in Section 15162 of the CEQA Guidelines calling for preparation of a subsequent Negative Declaration have occurred and thus an Addendum to the RE Mustang LLC, RE Kent South LLC, and RE Orion LLC Solar Generation Facilities Mitigated Negative Declaration is appropriate to satisfy CEQA requirements for the revised Projects. The evidence in the file supports that no circumstances or conditions requiring the preparation of a subsequent Negative Declaration are present in this case.

ATTACHMENTS

Attachment A: RE Mustang LLC Solar Generation Facility Solar and Water Analysis
Attachment B: RE Orion LLC Solar Generation Facility Solar and Water Analysis
Attachment C: RE Kent South LLC Solar Generation Facility Solar and Water Analysis

Addendum Attachment A

SOIL & WATER ANALYSIS

for

RE MUSTANG LLC
SOLAR GENERATION FACILITY

Kings County, California

December 5, 2013

Project Summary

RE Mustang LLC intends to develop the RE Mustang Solar Generation Facility (**Project**) in Kings County, California. The Project site would consist of approximately 1,000 acres subject to a Farmland Security Zone (**FSZ)** Contract. The Project site is located west of State Route 41 and south of State Route 198 along 25th Avenue, as depicted on the attached **Figure 1- Project Location Map**.

Report Summary

On November 26, 2013, the Board of Supervisors adopted Resolution No. 13-058, recognizing that due to reduced surface water deliveries, poor groundwater quality and severe groundwater overdrafts, impaired soil conditions, and regulatory burdens, circumstances exist on agricultural preserves located within a portion of Kings County south of State Route 198 and west of State Route 41 that limit the use of much of the land within that territory for agricultural activities, such that it is reasonably foreseeable that certain parcels located there that currently are used for more intensive agricultural activities will be used in the near future for less intensive uses, including dry farm seasonal grazing. Kings County may determine that solar generation facilities located within this region that maintain a reasonably foreseeable agricultural use on the site in addition to the commercial solar generation facility may be compatible with a Farmland Security Zone Contract pursuant to Government Code 51238.1(a) if a finding can be made, based upon substantial evidence, and taking into account surface water availability, ground water quality and availability, and soil conditions, that the proposed agricultural operation is a reasonably foreseeable use of the land.

Provost and Pritchard Consulting Group and Dellavalle Laboratory, Inc. evaluated the existing, historic, and reasonably foreseeable soil, water quality, and water availability conditions of the Project site and determined that adverse soil conditions and water quality and availability

conditions make dry farm seasonal sheep grazing a reasonably foreseeable agricultural activity to occur on the Project site.

Methodology

The methodology to develop this report utilized various data collected and interpreted for this site.

- Soil classifications were derived from the Natural Resources Conservation Service (**NRCS**).
- Soil samples were collected from multiple locations on the site and tested.
- Well water samples were collected and tested.
- Water supply and quality available from any surface water sources serving the site.
- Analysis and interpretation of data.

Site Soil Classifications

According to the Natural Resources Conservation Service (Soil Survey Area: Kings County, California, Survey Area Data: Version 8, Aug 27, 2009) soils on the property consist of Lethent clay loam **Figure 2 – NRCS Soils Map**. In their native conditions, these soils would have been neutral to alkaline.

As mapped, the property is subject to saline-sodic conditions (8.0 to 16.00 mmhos/cm) and drainage limitations. The capacity of the most limiting layer to transmit water (Ksat) is low (0.00 to 0.06 in/hr). The Land Capability Class designation is 7s (non-irrigated) and 3s (irrigated). Class 7 soils have very severe limitations that make them unsuitable for cultivation and that restrict their use mainly to pasture, grazing, forestland, or wildlife habitat. Class 3 soils have severe limitations that restrict the choice of plants or that require special conservation practices, or both. The letter “s” indicates that the soil is limited mainly because it is shallow, droughty, or stony.

Saline conditions are native in the Lethent clay loam and have been exacerbated by poor natural drainage and the application of insufficient water to leach salt from the root zone. Long term soil salinity conditions are expected to increase, due to the lack of a subsurface drainage system and a sustainable leachate disposal outlet.

Soil Sampling Test Results: Soil Significantly Reduces Agricultural Productivity

On October 28, 2013, 56 soil samples were collected from 28 sites on the parcel in one foot increments to depths of two feet (a total of two samples from each soil boring hole). Approximate sampling locations (from GPS coordinates) are depicted on the attached map

labeled **Figure 3 – Soil Samples Map**. Results are attached as appendices and interpreted in this report.

Results of soil analysis are presented in **Table 1** and **Attachment A**. Of the 28 soil sampling locations, 21 locations showed significant limitations related to salinity. Soil salinity is a limiting factor and it is related to poor drainage conditions. Soils are considered saline when the electrical conductivity of saturation extracts (**EC**) are above 4 decisiemens per meter (**dS/m**). Sodium (**Na**) levels above 10 meq/l are considered high. Soils are considered sodic when the exchangeable sodium percentage (**ESP**) is above 15. Boron (**B**) levels above 2.0 mg/l are considered high.

Table 1
Soil Sampling Test Results

Sample ID	EC (dS/M)	Sodium (meq/l)	ESP (%)	Boron (mg/l)	Interpretation
Fld 201 NW 40 0-1'	2.52	**11.9**	5.2	1.3	Excessive sodium
Fld 201 NW 40 1-2'	2.84	**13.5**	5.6	1.6	Excessive sodium
Fld 201 SW 40 0-1'	2.04	9.2	3.8	1.5	Acceptable but high for sensitive crops
Fld 201 SW 40 1-2'	1.92	8.1	3.9	1.2	Acceptable but high for sensitive crops
Fld 201 NE 40 0-1'	2.68	**14.3**	6.2	**2.6**	Excessive sodium & boron
Fld 201 NE 40 1-2'	**12.70**	**53.4**	9.4	**9.4**	Saline with excessive sodium & boron
Fld 201 SE 40 0-1'	**7.25**	**40.4**	12.0	**7.3**	Saline with excessive sodium & boron
Fld 201 SE 40 1-2'	**6.08**	**34.9**	11.8	**6.3**	Saline with excessive sodium & boron
Fld 202 NW 40 0-1'	1.33	5.6	3.2	0.9	Acceptable
Fld 202 NW 40 1-2'	2.09	6.6	2.1	1.0	Acceptable
Fld 202 SW 40 0-1'	**10.60**	**47.7**	10.1	**6.8**	Saline with excessive sodium & boron
Fld 202 SW 40 1-2'	**13.70**	**62.9**	11.7	**9.4**	Saline with excessive sodium & boron
Fld 202 NE 40 0-1'	2.03	**10.2**	5.2	**2.1**	Excessive sodium & boron
Fld 202 NE 40 1-2'	1.69	8.9	4.7	**2.0**	Excessive boron
Fld 202 SE 40 0-1'	**11.20**	**48.6**	9.6	**9.7**	Saline with excessive sodium & boron
Fld 202 SE 40 1-2'	**13.50**	**62.3**	11.6	**21.0**	Saline with excessive sodium & boron
Fld 203 NW 40 0-1'	1.11	7.0	6.5	1.4	Acceptable
Fld 203 NW 40 1-2'	1.07	6.5	6.2	1.2	Acceptable
Fld 203 SW 40 0-1'	1.53	9.8	7.5	1.8	Acceptable but high for sensitive crops
Fld 203 SW 40 1-2'	1.44	9.9	9.7	**2.8**	Excessive boron
Fld 203 NE 40 0-1'	1.95	**14.4**	11.8	**3.8**	Excessive sodium & boron
Fld 203 NE 40 1-2'	2.57	**16.5**	10.8	**3.4**	Excessive sodium & boron
Fld 203 SE 40 0-1'	**6.01**	**31.7**	8.7	**4.3**	Saline with excessive sodium & boron
Fld 203 SE 40 1-2'	**8.68**	**53.4**	13.7	**11.2**	Saline with excessive sodium & boron

***Bold** = Above agricultural limitations*

Table 1 (Continued)
Soil Sampling Test Results

Sample ID	EC (dS/M)	Sodium (meq/l)	ESP (%)	Boron (mg/l)	Interpretation
Fld 204 NW 40 0-1'	**5.71**	**32.4**	11.5	**4.2**	Saline with excessive sodium & boron
Fld 204 NW 40 1-2'	**8.36**	**53.5**	14.5	**10.2**	Saline with excessive sodium & boron
Fld 204 SW 40 0-1'	3.39	**19.0**	9.1	**2.5**	Excessive sodium & boron
Fld 204 SW 40 1-2'	**5.62**	**27.5**	8.0	**4.2**	Saline with excessive sodium & boron
Fld 204 NE 40 0-1'	**8.98**	**46.2**	12.2	**6.9**	Saline with excessive sodium & boron
Fld 204 NE 40 1-2'	**12.70**	**79.3**	**19.0**	**13.7**	Saline-sodic with excessive sodium & boron
Fld 204 SE 40 0-1'	2.54	**14.1**	6.7	1.8	Excessive sodium
Fld 204 SE 40 1-2'	**5.30**	**26.0**	8.0	**3.9**	Saline with excessive sodium & boron
Fld 205 NW 40 0-1'	2.73	**14.2**	6.6	1.9	Excessive sodium
Fld 205 NW 40 1-2'	**5.61**	**25.2**	7.7	**3.1**	Saline with excessive sodium & boron
Fld 205 SW 40 0-1'	**6.87**	**36.8**	10.4	**7.5**	Saline with excessive sodium & boron
Fld 205 SW 40 1-2'	**10.40**	**59.5**	**15.4**	**15.1**	Saline-sodic with excessive sodium & boron
Fld 205 NE 40 0-1'	2.34	**12.8**	6.3	1.7	Excessive sodium
Fld 205 NE 40 1-2'	**4.19**	**19.7**	6.9	1.8	Saline with excessive sodium
Fld 205 SE 40 0-1'	2.71	**17.6**	9.3	**4.7**	Excessive sodium & boron
Fld 205 SE 40 1-2'	**10.7**	**66.1**	**16.3**	**16.4**	Saline-sodic with excessive sodium & boron
Fld 209 NW 40 0-1'	1.66	**10.4**	6.2	**2.4**	Excessive sodium & boron
Fld 209 NW 40 1-2'	**7.58**	**44.0**	12.3	**10.9**	Saline with excessive sodium & boron
Fld 209 SW 40 0-1'	**7.28**	**35.1**	9.8	**5.6**	Saline with excessive sodium & boron
Fld 209 SW 40 1-2'	**11.10**	**60.1**	**15.1**	**9.9**	Saline-sodic with excessive sodium & boron
Fld 209 NE 40 0-1'	**4.51**	**22.3**	7.9	**3.5**	Saline with excessive sodium & boron
Fld 209 NE 40 1-2'	**5.33**	**25.6**	7.9	**3.6**	Saline with excessive sodium & boron
Fld 209 SE 40 0-1'	3.21	**17.7**	7.7	**3.3**	Excessive sodium & boron
Fld 209 SE 40 1-2'	**4.03**	**21.0**	8	**4.2**	Saline with excessive sodium & boron
Fld 210 NW 40 0-1'	**44.00**	**310.0**	**42.7**	**14.5**	Saline-sodic with excessive sodium & boron
Fld 210 NW 40 1-2'	**31.10**	**209.0**	**34.9**	**8.2**	Saline-sodic with excessive sodium & boron
Fld 210 SW 40 0-1'	**21.80**	**151.0**	**31.6**	**25.2**	Saline-sodic with excessive sodium & boron
Fld 210 SW 40 1-2'	**43.40**	**292.0**	**40.4**	**31.6**	Saline-sodic with excessive sodium & boron
Fld 210 NE 40 0-1'	**15.80**	**93.9**	**21.3**	**11.6**	Saline-sodic with excessive sodium & boron
Fld 210 NE 40 1-2'	**21.00**	**134.0**	**26.2**	**19.3**	Saline-sodic with excessive sodium & boron
Fld 210 SE 0-1'	2.09	9.9	5.1	1.7	Acceptable but high for sensitive crops
Fld 210 SE 1-2'	**7.13**	**37.8**	10.4	**7.9**	Saline with excessive sodium & boron

***Bold** = Above agricultural limitations*

Salinity of the soil solution has the effect of making water less available to the plant. As salinity increases above a threshold amount, the plant has to expend more energy to obtain water from the soil and plant growth slows. At sufficiently high salinity levels, the plant can no longer extract water and the plant wilts.

When plants extract water from the soil most of the salt is left in the soil. Water above the amount required by the plant must be applied to leach salt from the root zone. If drainage is

restricted the extra water and the salt accumulates in the soil. As a result, soils with impaired drainage cannot be used for agriculture on a long-term basis. The site does not have access to a functioning drainage system.

Excess sodium disperses clay particles causing soil structure that severely limits movement of soil and water through the soil. Soil salinity offsets sodicity so permeability is maintained until salinity drops to about 4 dS/m. At that point gypsum or another source of soluble calcium must be added to displace the sodium and maintain permeability. Resulting sodium salts must be leached from the root zone.

Well Water Sampling Test Results

Two well locations (Well 204 and Well 209) are depicted in **Figure 3 – Soil Samples Map**. Well information was provided by the ranch manager. Well 204 is about 1,200 feet deep and taps the lower aquifer. The static water level prior to pumping is about 260 feet deep. The pumping level is about 400 feet deep, with a flow rate of 1,800 gpm. The pump is rated at 500 hp. Well 209 is about 1,200 feet deep and taps the lower aquifer. The static water level prior to pumping is about 260 feet deep. The pumping level is about 400 feet deep, with a flow rate of 750 gpm. The pump is rated at 125 hp. All wells in the area are drawing significantly deeper water than normal, due to drought conditions and unavailability of surface water supplies. Actual drawdown numbers for this well are undetermined.

On November 8, 2013 a sample was collected from each of the irrigation groundwater wells supplying these fields. Samples were delivered to the laboratory for analysis, following proper chain of custody procedures. Results of groundwater analysis are presented in **Table 2a and Table 2b** and **Attachment B – Irrigation Well Sample Laboratory Results**. Table 2 summarizes the exceedences of critical constituents of concern impacting crop production.

Table 2a
Well 204 - Groundwater Sampling Test Results

Well	Constituent	Result	Units	Interpretation
204	EC	0.84	dS/m	Normal
	SAR	**9.5**	--	Severe limitation of use
	SAR adj	**13.0**	--	Severe limitation of use
	Sodium (Na)	**152***	mg/l	Severe limitation of use for sprinklers
	Chloride (Cl)	35.3*	mg/l	Normal
	Boron (B)	**1.76**	mg/l	Moderate to severe limitation of use
	Nitrate as N (NO_3-N)	<0.1	mg/l	Normal
	pH	**8.8**	pH Units	High for most crops

Bold *= Above agricultural limitations*
** Converted from meq/l (lab report) to mg/l (Table)*

Table 2b
Well 209 - Groundwater Sampling Test Results

Well	Constituent	Result	Units	Interpretation
209	EC	1.47	dS/m	Moderate restriction of use
	SAR	**5.6**	--	Moderate to severe limitation of use
	SAR adj	**8.5**	--	Moderate to severe limitation of use
	Sodium (Na)	**205***	mg/l	Severe limitation of use for sprinklers
	Chloride (Cl)	35.3*	mg/l	Normal
	Boron (B)	**1.17**	mg/l	Moderate to severe limitation of use
	Nitrate as N (NO_3-N)	<0.1	mg/l	Normal
	pH	**8.1**	pH units	High for sensitive crops

Bold *= Above agricultural limitations*
** Converted from meq/l (lab report) to mg/l (Table)*

Without water source blending, the well water quality would be detrimental to sustain agricultural production. Well water must be mixed with surface water provided by Westlands Water District to achieve minimum water quality levels for agriculture. In the absence of availability of sufficient surface water, the property cannot rely upon groundwater to support agricultural production.

Surface Water Quality & Quantity Assessment: Water Availability Insufficient for Continued Agricultural Production

The site is located within the service area of Westlands Water District. Westlands Water District irrigation supply water quality (source: California Department of Water Resources, California Aqueduct, Check 21, grab sample taken 6/18/13) is summarized in **Table 3**.

Table 3
Westlands Water District Irrigation Supply Water Characteristics

Constituent	WWD Result	Units	Range and Degree of Problem	Interpretation
EC	0.51	dS/m	750 – 3,000, high	OK
SAR	3.0	--	Above 9, severe	OK
Sodium (Na)	54	mg/l	Above 70, high	OK
Chloride (Cl)	76	mg/l	140 - 350, plant injury can occur	OK
Boron (B)	0.2	mg/l	Above 1.0, high	OK
Nitrate (NO_3)	1.6	mg/l	Within crop agronomic limits	OK
pH	7.8	pH units	Between 6.5 - 8.4, normal	OK

The most limiting factor in the region is water quantity. Average rainfall is about 8.3 inches and in most years available surface water must be supplemented with groundwater to irrigate planed crops, because there is not sufficient surface water to irrigate all the land. This site has not had a full allotment of surface water supply in years, even in wet years like 2011. Water available for the past 6 years is presented in **Table 4**.

Table 4
Westlands Water District Water Allocation

Water Year	Allocation	Interpretation
2014	0%	Predicted by Westlands WD, w/o significant rainfall
2013	20%	Median forecast allocation to agricultural users
2012	40%	Median forecast allocation to agricultural users
2011	80%	Median forecast allocation to agricultural users
2010	45%	Median forecast allocation to agricultural users
2009	10%	Median forecast allocation to agricultural users
2008	40%	Median forecast allocation to agricultural users

As noted above, without sufficient allocations of surface water, available ground water would be unusable due to the significant water quality limitations. Economically viable crops on the site require approximately 3 to 4 acre-feet of water per acre and historic, current, and projected water allocations do not provide sufficient water to support this. In years of full entitlement (100% allocation), the site would receive a maximum water allocation from WWD of 2.6 acre-feet per acre. The current water allocation forecast of 20 percent would provide no more than 0.52 acre-feet per acre for the entire year.

Conversion of these parcels from agriculture would free the water supply for use on other parcels in the area. Because water, not land, is the limiting factor in the areas, agricultural productivity of the area would not be reduced should these parcels be removed from agricultural production.

Summary of Findings

The severe limitation of reliable water availability and related soil salinity constitutes specific circumstances under which Kings County can make the findings that a reasonably foreseeable agricultural use of the site would dry farm seasonal grazing. The Project as a concomitant use with dry farm seasonal grazing or a similar commercial agricultural activity may be deemed a compatible use with a Farmland Security Zone contract pursuant to Government Code Section 51238.1(a) and the County of Kings Implementation Procedures for the California Land Conservation “Williamson” Act of 1965.

Summary Preparers

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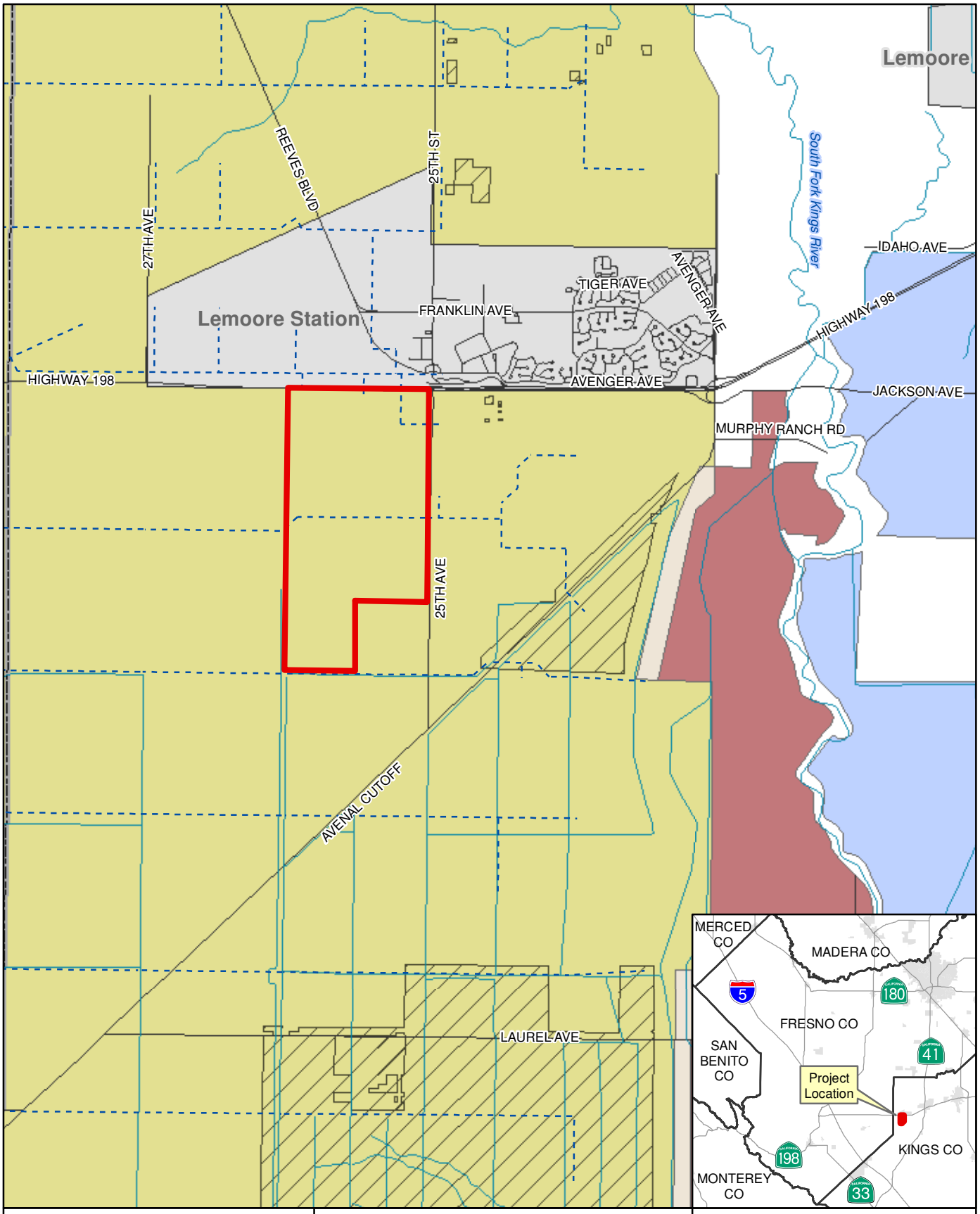
STATE OF CALIFORNIA

FIGURE 1
PROJECT LOCATION MAP



0 0.5 1 Miles

PROVOST & PRITCHARD CONSULTING GROUP
EST. 1962
An Employee Owned Company
2505 Alluvial Ave
Clovis, CA 93611
(559) 326-1100

Legend

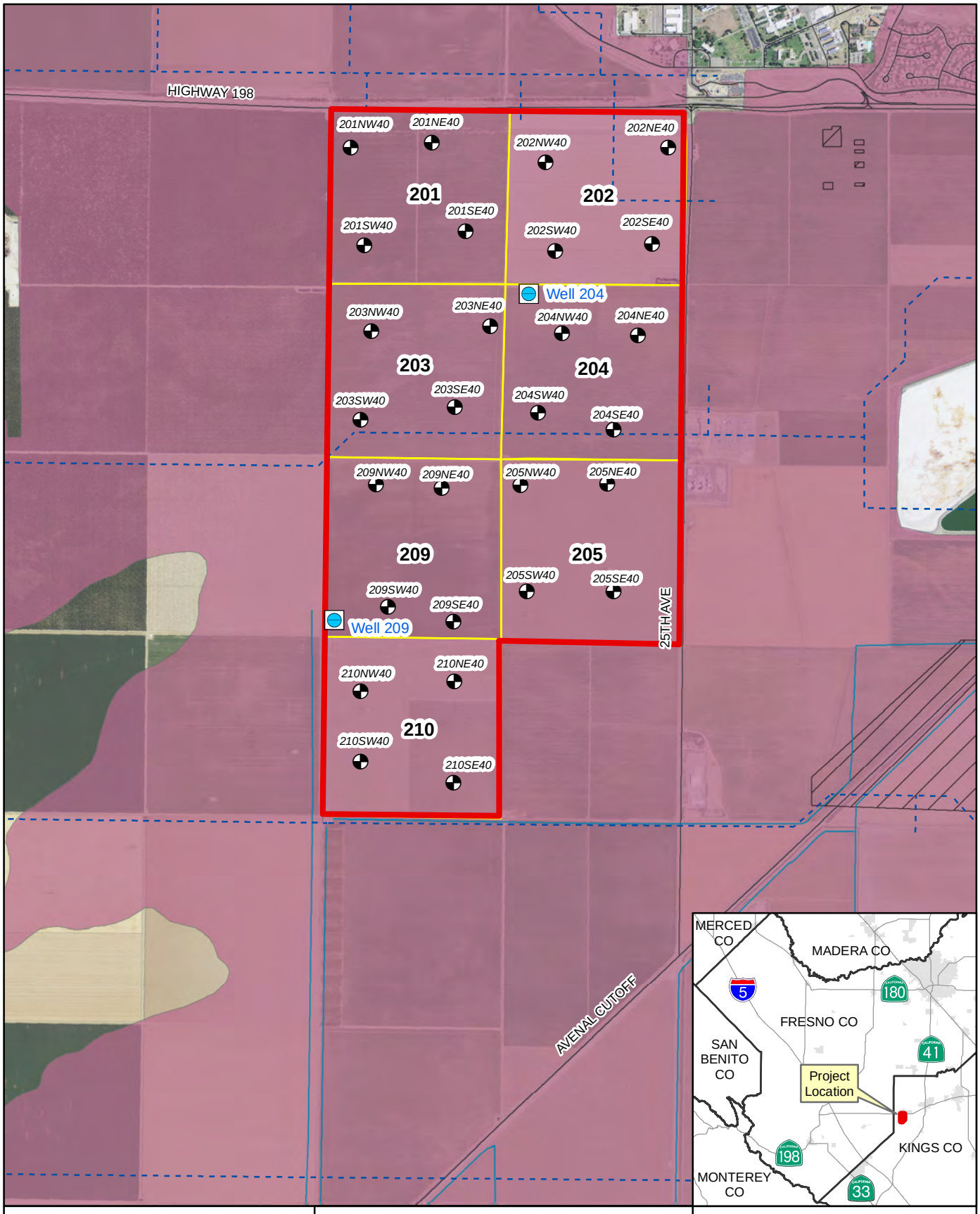
- ProjectArea
- USGS Topo Map Hydro Features
- Westlands Dist. System
- Westlands W.D.
- WWD Retired Lands
- Empire West Side I.D.
- Stratford I.D.

RE Mustang LLC
Proposed Solar Generating Facility

Project Location

12/4/2013 : \\EVOLUTION\clv_clients\Clients\Recurrent Energy-2072\207211C7-RE Mustang WSA\GIS\Map\WaterAgencies.mxd

FIGURE 2
NRCS SOILS MAP



0 1,000 2,000 Feet

EST. 1968
PROVOST & PRITCHARD
CONSULTING GROUP
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2505 Alluvial Ave
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Legend

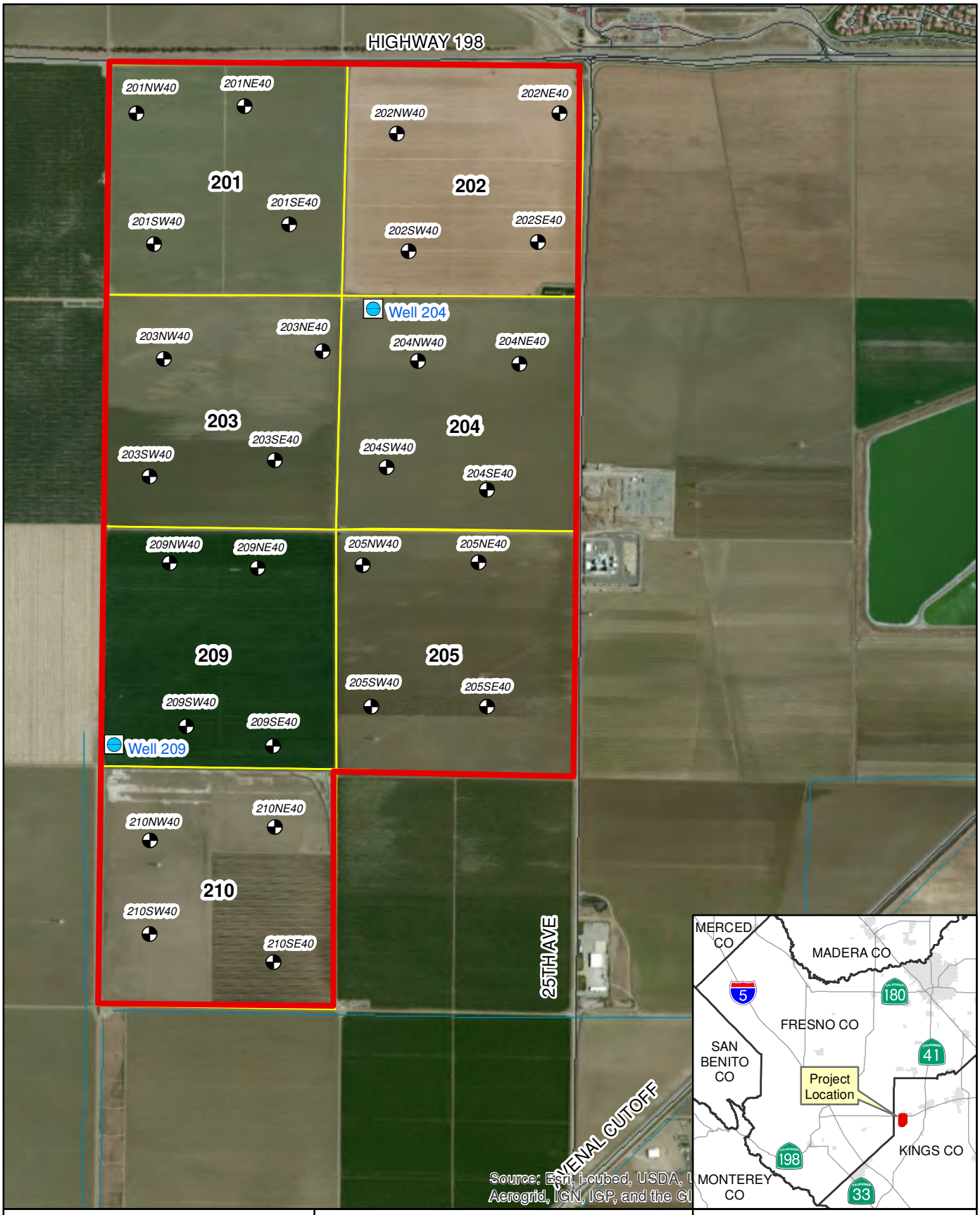
- ProjectArea
- 139 - Lethent clay loam
- USGS Topo Map Hydro Features
- Westlands Dist. System
- WWD Retired Lands

RE Mustang LLC
Proposed Solar Generating Facility

NRCS Soils Map

12/5/2013 : \\EVOLUTION\clv_clients\Clients\Recurrent Energy-2072\207211C7-RE Mustang WSA\GIS\Map\Soils.mxd

FIGURE 3
SOIL SAMPLES MAP



0 750 1,500 Feet

EST. 1962
PROVOST & PRITCHARD CONSULTING GROUP
An Employee Owned Company

2505 Alluvial Ave
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Legend

- Soil Boring Location
- Well

RE Mustang LLC
Proposed Solar Generating Facility

Soil Boring Locations

11/18/2013 : \\EVOLUTION\clv_clients\Clients\Recurrent Energy-2072\207211C7-RE Mustang WSA\GIS\Map\Soil_Boring.mxd

ATTACHMENT A
SOIL SAMPLING LABORATORY RESULTS

DELLAVALLE® Laboratory, Inc.
Chemists and Consultants

Report of Soil Analysis

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Visalia CA 93291
14015
01

ID: Tomato

Lab No. 196927
Sampled Date 10/28/2013
Submitted Date 10/28/2013
Submitted by
Reported Date 11/6/2013
Location/Project Mustang LLC
Proposed Solar Generating Facility
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E-mail dikemiya@ppeng.com

No.	Description	% SP	units pH	dS/m EC	meq/l Ca	meq/l Mg	meq/l Na	meq/l Cl	% ESP	T/ac-6" GR	+\- Lime	lbs/ac-6" Lime	mg/l B	mg/kg NO_3-N	mg/kg PO_4-P	mg/kg K	mg/kg Acid K	mg/kg Zn
	RL--->	0.50	1.0	0.01	0.1	0.1	0.1	0.1	0.1	0.1		500	0.1	1.0	2.0	2.0	40.0	0.1
	NAPT Methods--->	S1.00	S1.10	S1.20	S1.60	S1.60	S1.60	S1.40	Calc.			S2.50	S1.50	S3.10	S4.10	S5.10		S6.10
	Handbook 60--->									Hndbk 60-22d	Hndbk 60-23a						SSSA,p5 61 mod	
1	Fld 201 NW 40 0-1'	49	7.6	2.52	8.3	5.0	11.9		5.2		+		1.3	18	9	426		1.0
2	Fld 201 NW 40 1-2'	48	7.9	2.84	8.7	6.8	13.5		5.6		+		1.6	3	2	169		0.2
3	Fld 201 SW 40 0-1'	53	7.8	2.04	9.1	4.3	9.2		3.8		+		1.5	20	11	447		0.9
4	Fld 201 SW 40 1-2'	51	8.1	1.92	6.7	3.3	8.1		3.9		+		1.2	8	5	308		0.5
5	Fld 201 NE40 0-1'	54	8.2	2.68	9.1	5.2	14.3		6.2		+		2.6	26	7	412		0.8
6	Fld 201 NE 40 1-2'	51	8.0	12.70	57.6	34.5	53.4		9.4		+		9.4	8	6	296		0.3
7	Fld 201 SE 40 0-1'	53	8.2	7.25	20.5	11.8	40.4		12.0	1.1	+		7.3	35	6	429		1.1
8	Fld 201 SE 40 1-2'	54	8.1	6.08	15.8	9.0	34.9		11.8	<0.1	+		6.3	31	8	415		0.9
9	Fld 202 NW 40 0-1'	57	8.2	1.33	4.1	2.6	5.6		3.2		+		0.9	12	6	380		0.8
10	Fld 202 NW 40 1-2'	61	8.2	2.09	11.6	5.0	6.6		2.1		+		1.0	3	5	284		0.3
11	Fld 202 SW 40 0-1'	56	8.0	10.60	37.3	26.0	47.7		10.1	0.7	+		6.8	44	4	444		0.8
12	Fld 202 SW 40 1-2'	53	8.1	13.70	43.2	37.8	62.9		11.7	<0.1	+		9.4	<1	3	183		<0.1
13	Fld 202 NE 40 0-1'	53	8.4	2.03	6.1	3.9	10.2		5.2		+		2.1	26	8	530		1.3
14	Fld 202 NE 40 1-2'	56	8.4	1.69	5.4	3.7	8.9		4.7		+		2.0	5	2	287		0.2
15	Fld 202 SE 40 0-1'	49	8.1	11.20	45.8	26.5	48.6		9.6		+		9.7	63	13	476		1.4
16	Fld 202 SE 40 1-2'	50	8.0	13.50	49.5	31.8	62.3		11.6	<0.1	+		21.0	18	8	284		0.4

Tomato Soil	"Texture"	"Acidity"	Total Salts	Calcium	Magnesium	Sodium	Chloride	"Alkali"	Gyp Req	Lime Pres	Lime Req.	Boron	Nitrate-N*	Phosphate-P*	Potassium*	Zinc*
Low	Sand<20	< 6.3	< 0.5	< 4	-	-	-	-		-		< 0.2	< 4	<24	<180	< 0.7
Normal	25-45	6.7-7.9	0.7-2.5	7-15	2-15	< 8	< 8	<8		++		.3-1.2	7-30	25-45	200-350	0.8-3.0
High	Clay>55	8.2+	3.0 +	25+	25+	Na>Ca	12+	11 +		++++		2.0 +	45 +	70+	450+	4.0+

*Tissue analysis is advised to track nutrient use during the season.

High & Sl High may indicate non-economic situations or toxic situations, see report.

** = EC up to 3.5 not a problem if primarily calcium

(mg/kg & mg/L are equivalent to ppm)

*** = High & Low color levels may be differ based on consultant interpretation of the situation, including crop age, soil type, weather, irrigation system, etc.

Black = Normal	
Red = High	Green = Sl Low
Orange = Sl. High	Blue = Low

DELLAVALLE® Laboratory, Inc.
Chemists and Consultants

Report of Soil Analysis

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Visalia CA 93291
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ID: Cotton

Lab No. 196926
Sampled Date 10/28/2013
Submitted Date 10/28/2013
Submitted by
Reported Date 11/6/2013
Location/Project Mustang LLC
Proposed Solar Generating Facility
Fax (559) 636-1177
E-mail dikemiya@ppeng.com

No.	Description	% SP	units pH	dS/m EC	meq/l Ca	meq/l Mg	meq/l Na	meq/l Cl	% ESP	T/ac-6" GR	+\- Lime	lbs/ac-6" Lime	mg/l B	mg/kg NO_3-N	mg/kg PO_4-P	mg/kg K	mg/kg Acid K	mg/kg Zn
	RL--->	0.50	1.0	0.01	0.1	0.1	0.1	0.1	0.1	0.1		500	0.1	1.0	2.0	2.0	40.0	0.1
	NAPT Methods--->	S1.00	S1.10	S1.20	S1.60	S1.60	S1.60	S1.40	Calc.			S2.50	S1.50	S3.10	S4.10	S5.10		S6.10
	Handbook 60--->									Hndbk 60-22d	Hndbk 60-23a						SSSA,p5 61 mod	
1	Fld 203 NW 40 0-1'	57	7.7	1.11	1.9	1.2	7.0		6.5		-		1.4	12	3	365		0.7
2	Fld 203 NW 40 1-2'	59	8.6	1.07	1.9	1.0	6.5		6.2		-		1.2	5	2	204		0.2
3	Fld 203 SW 40 0-1'	55	8.3	1.53	3.0	1.7	9.8		7.5		+		1.8	7	5	390		0.8
4	Fld 203 SW 40 1-2'	62	8.6	1.44	1.7	1.3	9.9		9.7		+		2.8	3	3	301		0.3
5	Fld 203 NE 40 0-1'	58	8.2	1.95	2.6	1.6	14.4		11.8	4.0	+		3.8	11	5	547		1.4
6	Fld 203 NE 40 1-2'	62	8.3	2.57	4.1	2.5	16.5		10.8	3.2	+		3.4	24	6	645		1.4
7	Fld 203 SE 40 0-1'	58	8.1	6.01	25.8	12.0	31.7		8.7		+		4.3	9	4	362		0.8
8	Fld 203 SE 40 1-2'	64	8.0	8.68	26.2	16.0	53.4		13.7	0.2	+		11.2	7	7	295		0.2
9	Fld 204 NW 40 0-1'	58	8.2	5.71	14.8	7.8	32.4		11.5	<0.1	+		4.2	67	4	429		1.2
10	Fld 204 NW 40 1-2'	58	8.2	8.36	23.0	14.8	53.5		14.5	4.8	+		10.2	6	5	285		0.5
11	Fld 204 SW 40 0-1'	55	8.2	3.39	8.3	4.0	19.0		9.1		+		2.5	52	5	449		1.1
12	Fld 204 SW 40 1-2'	54	8.1	5.62	22.5	10.7	27.5		8.0		+		4.2	4	3	291		0.4
13	Fld 204 NE 40 0-1'	56	8.1	8.98	27.4	12.8	46.2		12.2	<0.1	+		6.9	87	7	507		1.1
14	Fld 204 NE 40 1-2'	59	8.2	12.70	27.4	17.2	79.3		19.0	2.4	+		13.7	44	7	386		0.6
15	Fld 204 SE 40 0-1'	57	8.3	2.54	8.7	3.5	14.1		6.7		+		1.8	9	7	534		1.3
16	Fld 204 SE 40 1-2'	60	8.2	5.30	20.1	9.4	26.0		8.0		+		3.9	2	3	312		0.4

Cotton Soil	"Texture"	"Acidity"	Total Salts	Calcium	Magnesium	Sodium	Chloride	"Alkali"	Gyp Req	Lime Pres	Lime Req.	Boron	Nitrate-N*	Phosphate-P*	Potassium*	Zinc*
V. Low	Sand<20	< 6.5	< 0.5	< 4	-	-	-	-		-		<0.2	< 5	< 10	<90	<0.9
Normal	25-45	6.7-8.0	0.6-2.0	5-14	-	< 8	< 10	< 9		++		0.3-1.5	8-25	12-30	110-350	1.0-2.5
High	Clay>55	8.4+	2.5**	30+	-	10+	15 +	12+		++++		2.0	40 +	50+	500+	3.0+

*Tissue analysis is advised to track nutrient use during the season.

High & Sl High may indicate non-economic applications or toxic levels..

Black = Normal ***

Red = High	Green = Low
Orange = Sl. High	**Blue** = V. Low

** = EC up to 4.0 not a problem if primarily calcium

Sodium should not be significantly higher than calcium.

*** = High & Low color levels may be differ based on consultant interpretation of the situation, including crop age, soil type, weather, irrigation system, etc.

Report of Soil Analysis

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Chemists and Consultants

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ID: Cotton

Lab No. 196930
Sampled Date 10/28/2013
Submitted Date 10/28/2013
Submitted by
Reported Date 11/7/2013
Location/Project Mustang LLC
Proposed Solar Generating Facility
Fax (559) 636-1177
E-mail dikemiya@ppeng.com

No.	Description	% SP	units pH	dS/m EC	meq/l Ca	meq/l Mg	meq/l Na	meq/l Cl	% ESP	T/ac-6" GR	+\- Lime	lbs/ac-6" Lime	mg/l B	mg/kg NO_3-N	mg/kg PO_4-P	mg/kg K	mg/kg Acid K	mg/kg Zn
	RL--->	0.50	1.0	0.01	0.1	0.1	0.1	0.1	0.1	0.1		500	0.1	1.0	2.0	2.0	40.0	0.1
	NAPT Methods--->	S1.00	S1.10	S1.20	S1.60	S1.60	S1.60	S1.40	Calc.			S2.50	S1.50	S3.10	S4.10	S5.10		S6.10
	Handbook 60--->									Hndbk 60-22d	Hndbk 60-23a						SSSA,p5 61 mod	
1	Fld 205 NW 40 0-1'	59	7.5	2.73	8.2	4.4	14.2		6.6		+		1.9	45	3	403		0.8
2	Fld 205 NW 40 1-2'	61	8.2	5.61	19.2	10.7	25.2		7.7		+		3.1	21	<2	337		0.5
3	Fld 205 SW 40 0-1'	60	8.1	6.87	21.8	13.9	36.8		10.4	0.5	+		7.5	14	3	370		0.7
4	Fld 205 SW 40 1-2'	54	8.0	10.40	23.9	16.9	59.5		15.4	<0.1	+		15.1	25	7	337		0.2
5	Fld 205 NE 40 0-1'	57	8.2	2.34	7.3	3.8	12.8		6.3		+		1.7	28	5	428		1.0
6	Fld 205 NE 40 1-2'	54	8.1	4.19	14.5	7.8	19.7		6.9		+		1.8	25	3	316		0.6
7	Fld 205 SE 40 0-1'	53	8.1	2.71	6.1	4.1	17.6		9.3		+		4.7	6	<2	377		0.7
8	Fld 205 SE 40 1-2'	54	8.1	10.70	26.3	18.0	66.1		16.3	0.8	+		16.4	23	4	305		0.4
9	Fld 209 NW 40 0-1'	56	8.1	1.66	4.9	2.8	10.4		6.2		+		2.4	5	6	388		1.0
10	Fld 209 NW 40 1-2'	56	8.0	7.58	23.4	12.6	44.0		12.3	2.9	+		10.9	2	8	363		0.3
11	Fld 209 SW 40 0-1'	57	8.2	7.28	24.7	11.5	35.1		9.8		+		5.6	19	7	412		0.8
12	Fld 209 SW 40 1-2'	62	8.2	11.10	25.8	17.5	60.1		15.1	<0.1	+		9.9	29	6	438		0.6
13	Fld 209 NE 40 0-1'	65	8.1	4.51	14.9	7.4	22.3		7.9		+		3.5	20	9	558		1.6
14	Fld 209 NE 40 1-2'	61	8.2	5.33	20.1	9.4	25.6		7.9		+		3.6	30	12	580		1.4
15	Fld 209 SE 40 0-1'	60	8.4	3.21	9.5	5.4	17.7		7.7		+		3.3	46	10	442		1.1
16	Fld 209 SE 40 1-2'	56	8.4	4.03	12.2	7.3	21.0		8.0		+		4.2	44	9	435		1.0

Cotton Soil	"Texture"	"Acidity"	Total Salts	Calcium	Magnesium	Sodium	Chloride	"Alkali"	Gyp Req	Lime Pres	Lime Req.	Boron	Nitrate-N*	Phosphate-P*	Potassium*	Zinc*
V. Low	Sand<20	< 6.5	< 0.5	< 4	-	-	-	-		-		<0.2	< 5	< 10	<90	<0.9
Normal	25-45	6.7-8.0	0.6-2.0	5-14	-	< 8	< 10	< 9		++		0.3-1.5	8-25	12-30	110-350	1.0-2.5
High	Clay>55	8.4+	2.5**	30+	-	10+	15 +	12+		++++		2.0	40 +	50+	500+	3.0+

*Tissue analysis is advised to track nutrient use during the season.

High & Sl High may indicate non-economic applications or toxic levels..

** = EC up to 4.0 not a problem if primarily calcium

Sodium should not be significantly higher than calcium.

*** = High & Low color levels may be differ based on consultant interpretation of the situation, including crop age, soil type, weather, irrigation system, etc.

Black = Normal	***
Red = High	Green = Low
Orange = Sl. High	**Blue** = V. Low

DELLAVALLE® Laboratory, Inc.
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Report of Soil Analysis

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ID: Open

Lab No. 196934
Sampled Date 10/28/2013
Submitted Date 10/28/2013
Submitted by
Reported Date 11/7/2013
Location/Project Mustang LLC
Proposed Solar Generating Facility
Fax (559) 636-1177
E-mail dikemiya@ppeng.com

No.	Description	% SP	units pH	dS/m EC	meq/l Ca	meq/l Mg	meq/l Na	meq/l Cl	% ESP	T/ac-6" GR	+\- Lime	lbs/ac-6" Lime	mg/l B	mg/kg NO_3-N	mg/kg PO_4-P	mg/kg K	mg/kg Acid K	mg/kg Zn
	RL--->	0.50	1.0	0.01	0.1	0.1	0.1	0.1	0.1	0.1		500	0.1	1.0	2.0	2.0	40.0	0.1
	NAPT Methods--->	S1.00	S1.10	S1.20	S1.60	S1.60	S1.60	S1.40	Calc.			S2.50	S1.50	S3.10	S4.10	S5.10		S6.10
	Handbook 60--->									Hndbk 60-22d	Hndbk 60-23a						SSSA,p5 61 mod	
1	Fld 210 NW 40 0-1'	58	8.0	44.00	30.5	42.5	310		42.7	5.4	-		14.5	72	16	575		0.5
2	Fld 210 NW 40 1-2'	64	8.2	31.10	27.7	35.3	209		34.9	6.1	-		8.2	60	7	438		0.3
3	Fld 210 SW 40 0-1'	56	8.4	21.80	26.8	17.1	151		31.6	7.0	-		25.2	16	17	494		0.4
4	Fld 210 SW 40 1-2'	67	8.3	43.40	31.9	46.0	292		40.4	1.1	-		31.6	31	9	359		0.2
5	Fld 210 NE 40 0-1'	53	8.2	15.80	24.5	23.1	93.9		21.3	1.3	+		11.6	35	6	438		0.3
6	Fld 210 NE 40 1-2'	58	8.2	21.00	27.2	30.7	134		26.2	<0.1	+		19.3	50	7	306		0.2

Report of Soil Analysis

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ID: Pomegranate

Lab No. 196933
Sampled Date 10/28/2013
Submitted Date 10/28/2013
Submitted by
Reported Date 11/7/2013
Location/Project Mustang LLC
Proposed Solar Generating Facility
Fax (559) 636-1177
E-mail dikemiya@ppeng.com

No.	Description	% SP	units pH	dS/m EC	meq/l Ca	meq/l Mg	meq/l Na	meq/l Cl	% ESP	T/ac-6" GR	+\- Lime	lbs/ac-6" Lime	mg/l B	mg/kg NO_3-N	mg/kg PO_4-P	mg/kg K	mg/kg Acid K	mg/kg Zn
	RL--->	0.50	1.0	0.01	0.1	0.1	0.1	0.1	0.1	0.1		500	0.1	1.0	2.0	2.0	40.0	0.1
	NAPT Methods--->	S1.00	S1.10	S1.20	S1.60	S1.60	S1.60	S1.40	Calc.			S2.50	S1.50	S3.10	S4.10	S5.10		S6.10
	Handbook 60--->									Hndbk 60-22d	Hndbk 60-23a						SSSA,p5 61 mod	
1	Fld 210 SE 0-1'	56	8.3	2.09	5.2	4.5	9.9		5.1		+		1.7	12	6	483		0.5
2	Fld 210 SE 1-2'	60	8.1	7.13	19.0	18.9	37.8		10.4	3.3	+		7.9	6	3	268		0.3

Pomegranate-soil	"Texture"	"Acidity"	Tot. Salts	Calcium	Magnesium	Sodium	Chloride	"Alkali"	Gyp Req	Lime Pres	Lime Req.	Boron*	Nitrate-N*	Phosphate-P*	Potassium*	Potassium'	Zinc
Low	Sand<20	6.5	0.5	<Na			-	-		-		0.1	< 5	<4?	<60?		<0.5
Normal	25-45	6.7-8.3	0.6-4.0	4-10	Mg<Ca	<12.0	14	).1-14.0		++		.3-1.6	6-15	6-25	100-300		1.2-3.0
High	Clay>50	8.5+	5.5+ **		Mg>Ca	20+	18	18.0+		++++		2.0+	30+	50+	500+		5.0+

(mg/kg is equivalent to ppm)

Black = Normal ***

Red = High | Green = Sl. Low
Orange = Sl. High | Blue = Low

* = a low level for this nutrient does not necessarily indicate a deficiency, check with tissue analysis.

** = EC up to 6.0 not a problem if calcium is much greater than sodium.

*** = High & Low levels are based on consultant interpretation of the situation, including tree age, rootstock, age, irrigation system, etc.

SP levels with a significant textural interface (>6) are indicated with a separator line.

ATTACHMENT B
IRRIGATION WELL SAMPLE LABORATORY RESULTS

DELLAVALLE® Laboratory, Inc.
Chemists and Consultants

Report of Water Analysis

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01

Crop:

Lab No. 196863
Sampler B. Nydam
Submitted Date 10/25/2013
Submitted by Donald Ikemiya
Reported Date 11/8/2013
Location/Project Recurrent Energy - Olivera
Copy To
Fax (559) 636-1177
e-mail dikemiya@ppeng.com

		Date	Time	EC	**Ca**	**Mg**	**Na**	SAR	Adj SAR	Cl	CO_3+ HCO_3	SO_4	**B**	NO_3-N	**Fe**	**Mn**	pH	L.I.	TDS
		Sampled	Sampled	dS/m	meq/L	meq/L	meq/L			meq/L	meq/L	meq/L	mg/L	mg/L	mg/L	mg/L	unit	Calc	mg/L
	RL--->			0.01	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1				0.02	1.0 to 14.0	-2.0 to 2.0	10.0
	SM--->			2510 B	3120 B	3120 B	3120 B	Calc	Calc		2320 B		3120 B		3120 B	3120 B	4500H B	2330 B	2540 C
	EPA--->									300.0		300.0		300.0					
	Analysis Date:			*10/25/2013*	*11/4/2013*	*11/4/2013*	*11/4/2013*	*11/4/2013*	*11/8/2013*	*10/25/2013*	*10/25/2013*	*10/25/2013*	*11/4/2013*	*10/25/2013*	*11/4/2013*	*11/4/2013*	*10/25/2013*	*11/8/2013*	
	Analysis Time:			*12:04*	*8:51*	*8:51*	*8:51*	*8:51*		*14:30*	*12:04*	*14:30*	*8:51*	*14:30*	*8:51*	*8:51*	*12:04*		
001	Well 204	10/24/2013	14:30	0.84	0.94	0.03	6.6	9.5	13.0	1.0	2.4	4.5	1.76	<0.1	<0.10	<0.02	8.8	0.8	
002	Well 209	10/24/2013	15:00	1.47	4.36	0.61	8.9	5.6	8.5	1.0	0.9	13.2	1.17	<0.1	<0.10	0.05	8.1	0.2	

RL = Reporting Limit
pH analyzed outside of 15 min hold time.
SM = Standard Methods for the Examination of Water and Wastewater, 19th ed., 1995
EPA = Environmental Protection Agency methods
Dissolved metals (**bolded**) were filtered.
QA/QC available upon request.

Approved By: _____
ELAP Certification #1595

Addendum Attachment B

SOIL & WATER ANALYSIS

for

RE ORION LLC
SOLAR GENERATION FACILITY

Kings County, California

December 4, 2013

Project Summary

RE Orion LLC intends to develop the RE Orion solar energy generation facility (**Project**) in Kings County, California. The Solar facility would consist of approximately 160 acres subject to a Farmland Security Zone (**FSZ)** Contract. The Project site is located west of State Route 41 and south of State Route 198 along 25th Avenue, as depicted on the attached **Figure 1- Project Location Map**.

Report Summary

On November 26, 2013, the Board of Supervisors adopted Resolution No. 13-058, recognizing that due to reduced surface water deliveries, poor groundwater quality and severe groundwater overdrafts, impaired soil conditions, and regulatory burdens, circumstances exist on agricultural preserves located within a portion of Kings County south of State Route 198 and west of State Route 41 that limit the use of much of the land within that territory for agricultural activities, such that it is reasonably foreseeable that certain parcels located there that currently are used for more intensive agricultural activities will be used in the near future for less intensive uses, including dry farm seasonal grazing. Kings County may determine that solar generation facilities located within this region that maintain a reasonably foreseeable agricultural use on the site in addition to the commercial solar generation facility may be compatible with a Farmland Security Zone Contract pursuant to Government Code 51238.1(a) if a finding can be made, based upon substantial evidence, and taking into account surface water availability, ground water quality and availability, and soil conditions, that the proposed agricultural operation is a reasonably foreseeable use of the land.

Provost and Pritchard Consulting Group and Dellavalle Laboratory, Inc. evaluated the existing, historic, and reasonably foreseeable soil, water quality, and water availability conditions of the Project site and determined that adverse soil conditions and water quality and availability conditions make dry farm seasonal sheep grazing a reasonably foreseeable agricultural activity to occur on the Project site.

Methodology

The methodology to develop this report utilized various data collected and interpreted for this site.

- Soil classifications were derived from the Natural Resources Conservation Service (**NRCS**).
- Soil samples were collected from multiple locations on the site and tested.
- Well water samples were collected and tested.
- Water supply and quality available from any surface water sources serving the site.
- Analysis and interpretation of data.

Site Soil Classifications:

According to the Natural Resources Conservation Service (Soil Survey Area: Kings County, California, Survey Area Data: Version 8, Aug 27, 2009) soils on the property consist of Lethent clay loam **Figure 2 - NRCS Soils Map**. In their native conditions, these soils would have been neutral to alkaline.

As mapped the property is subject to saline-sodic conditions (8.0 to 16.00 mmhos/cm) and drainage limitations. The capacity of the most limiting layer to transmit water (Ksat) is low (0.00 to 0.06 in/hr). The Land Capability Class designation is 7s (non-irrigated) and 3s (irrigated). Class 7 soils have very severe limitations that make them unsuitable for cultivation and that restrict their use mainly to pasture, grazing, forestland, or wildlife habitat. Class 3 soils have severe limitations that restrict the choice of plants or that require special conservation practices, or both. The letter “s” indicates that the soil is limited mainly because it is shallow, droughty, or stony.

Saline conditions are native in the Lethent clay loam and have been exacerbated by poor natural drainage and the application of insufficient water to leach salt from the root zone. Long term soil salinity conditions are expected to increase, due to the lack of a subsurface drainage system and a sustainable leachate disposal outlet.

Soil Sampling Test Results: Soil Significantly Reduces Agricultural Productivity

On June 19, 2013, 8 soil samples were collected from four sites on the parcel in one foot increments to depths of two feet (a total of two samples from each soil boring hole). Approximate sampling locations (from GPS coordinates) are depicted on the attached map labeled **Figure 3 – Soil Samples Map**. Results are attached as appendices and interpreted in this report.

Results of soil analysis are presented in **Table 1** and **Attachment A**. Of the four soil sampling locations, all four locations showed significant limitations related to salinity. Soil salinity is a limiting factor and it is related to poor drainage conditions. Soils are considered

saline when the electrical conductivity of saturation extracts (**EC**) are above 4 decisiemens per meter (**dS/m**). Sodium (**Na**) levels above 10 meq/l are considered high. Soils are

considered sodic when the exchangeable sodium percentage (**ESP**) is above 15. Boron (**B**) levels above 2.0 mg/l are considered high.

Table 1
Soil Sampling Test Results

Sample ID	EC (dS/m)	Sodium (meq/l)	ESP (%)	Boron (mg/l)	Interpretation
Orion NE 1'	**11.60**	**47.9**	9.8	**7.8**	Saline with excessive sodium & boron
Orion NE 2'	**11.10**	**55.4**	12.5	**9.7**	Saline with excessive sodium & boron
Orion SE 1'	**4.26**	**19.4**	6.7	**4.9**	Saline with excessive sodium & boron
Orion SE 2'	**6.14**	**28.4**	7.3	**6.2**	Saline with excessive sodium & boron
Orion SW 1'	**11.30**	**62.6**	14.7	**9.6**	Saline with excessive sodium & boron
Orion SW 2'	**13.50**	**77.1**	**17.9**	**11.5**	Saline-sodic with excessive sodium & boron
Orion NW 1'	**13.20**	**75.6**	**17.3**	**19.0**	Saline-sodic with excessive sodium & boron
Orion NW 2'	**16.20**	**105**	**23.4**	**23.3**	Saline-sodic with excessive sodium & boron

***Bold** = Above agricultural limitations*

Salinity of the soil solution has the effect of making water less available to the plant. As salinity increases above a threshold amount, the plant has to expend more energy to obtain water from the soil and plant growth slows. At sufficiently high salinity levels, the plant can no longer extract water and the plant wilts.

When plants extract water from the soil most of the salt is left in the soil. Water above the amount required by the plant must be applied to leach salt from the root zone. If drainage is restricted the extra water and the salt accumulates in the soil. As a result, soils with impaired drainage cannot be used for agriculture on a long-term basis. The site does not have access to a functioning drainage system.

Excess sodium disperses clay particles causing soil structure that severely limits movement of soil and water through the soil. Soil salinity offsets sodicity so permeability is maintained until salinity drops to about 4 dS/m. At that point gypsum or another source of soluble calcium must be added to displace the sodium and maintain permeability. Resulting sodium salts must be leached from the root zone.

Well Water Sampling Test Results:

The well location is depicted in **Figure 3 – Soil Samples Map**. This well is indicated to be about 800 feet deep and taps the lower aquifer. A pump test was conducted on this well in 2008. The static water level prior to pumping was 255 feet deep. During the test the pumping rate was about 790 gpm, the pumping level was 385 feet deep, drawdown was 130 feet, and the specific capacity was 6 gpm/ft of drawdown. All wells in the area are

drawing significantly deeper water, due to drought conditions and unavailability of surface water supplies. Actual drawdown numbers for this well are undetermined.

On June 19, 2013 a sample was collected from the irrigation groundwater well supplying this field. Samples were delivered to the laboratory for analysis, following proper chain of custody procedures. Results of groundwater analysis are presented in **Table 2** and **Attachment B – Irrigation Well Sample Laboratory Results**. Table 2 summarizes the exceedences of critical constituents of concern impacting crop production.

Table 2
Groundwater Sampling Test Results

Constituent	Result	Units	Interpretation
EC	1.18	dS/m	Moderate restriction of use
SAR	**14.6**	--	Severe limitation of use
SAR adj	**26.5**	--	Severe limitation of use
Sodium (Na)	**221***	mg/l	Severe limitation of use for sprinkler application
Chloride (Cl)	**106***	mg/l	Moderate to severe limitation of use for sprinkler application
Boron (B)	**2.59**	mg/l	Moderate to severe limitation of use
Nitrate as N (NO_3-N)	0.4	mg/l	Within crop loading agronomic limits
pH	**8.1**	pH	High for sensitive crops

Bold *= Above agricultural limitations*
** Converted meq/l (lab report) to mg/l (Table)*

Without water source blending, the well water quality would be detrimental to sustain agricultural production. Well water must be mixed with surface water provided by Westlands Water District to achieve minimum water quality levels for agriculture. In the absence of availability of sufficient surface water, the property cannot rely upon groundwater to support agricultural production.

Surface Water Quality & Quantity Assessment: Water Availability Insufficient for Continued Agricultural Production

The site is located within the service area of Westlands Water District. Westlands Water District irrigation supply water quality (source: California Department of Water Resources, California Aqueduct, Check 21, grab sample taken 6/18/13) is summarized in **Table 3**.

Table 3
Westlands Water District Irrigation Supply Water Characteristics

Constituent	WWD Result	Units	Range and Degree of Problem	Interpretation
EC	0.51	dS/m	750 – 3,000, high	OK
SAR	3.0	--	Above 9, severe	OK
Sodium (Na)	54	mg/l	Above 70, high	OK
Chloride (Cl)	76	mg/l	140 - 350, plant injury can occur	OK
Boron (B)	0.2	mg/l	Above 1.0, high	OK
Nitrate (NO_3)	1.6	mg/l	Within crop agronomic limits	OK
pH	7.8	pH units	Between 6.5 - 8.4, normal	OK

The most limiting factor in the region is water quantity. Average rainfall is about 8.3 inches and in most years available surface water must be supplemented with groundwater to irrigate planed crops, because there is not sufficient surface water to irrigate all the land. This site has not had a full allotment of surface water supply in years, even in wet years like 2011. Water available for the past 6 years is presented in **Table 4**.

Table 4
Westlands Water District Water Allocation

Water Year	Allocation	Interpretation
2014	0%	Predicted by Westlands WD, w/o significant rainfall
2013	20%	Median forecast allocation to agricultural users
2012	40%	Median forecast allocation to agricultural users
2011	80%	Median forecast allocation to agricultural users
2010	45%	Median forecast allocation to agricultural users
2009	10%	Median forecast allocation to agricultural users
2008	40%	Median forecast allocation to agricultural users

As noted above, without sufficient allocations of surface water, available ground water would be unusable due to the significant water quality limitations. Economically viable crops on the site require approximately 3 to 4 acre-feet of water per acre and historic, current, and projected water allocations do not provide sufficient water to support this. In years of full entitlement (100% allocation), the site would receive a maximum water allocation from WWD of 2.6 acre-feet per acre. The current water allocation forecast of 20 percent would provide no more than 0.52 acre-feet per acre for the entire year.

Conversion of these parcels from agriculture would free the water supply for use on other parcels in the area. Because water, not land, is the limiting factor in the areas, agricultural productivity of the area would not be reduced should these parcels be removed from agricultural production.

Summary of Findings

The severe limitation of reliable water availability and related soil salinity constitutes specific circumstances under which Kings County can make the findings that a reasonably foreseeable agricultural use of the site would dry farm seasonal grazing. The Project as a concomitant use with dry farm seasonal grazing or a similar commercial agricultural activity may be deemed a compatible use with a Farmland Security Zone contract pursuant to Government Code Section 51238.1(a) and the County of Kings Implementation Procedures for the California Land Conservation "Williamson" Act of 1965.

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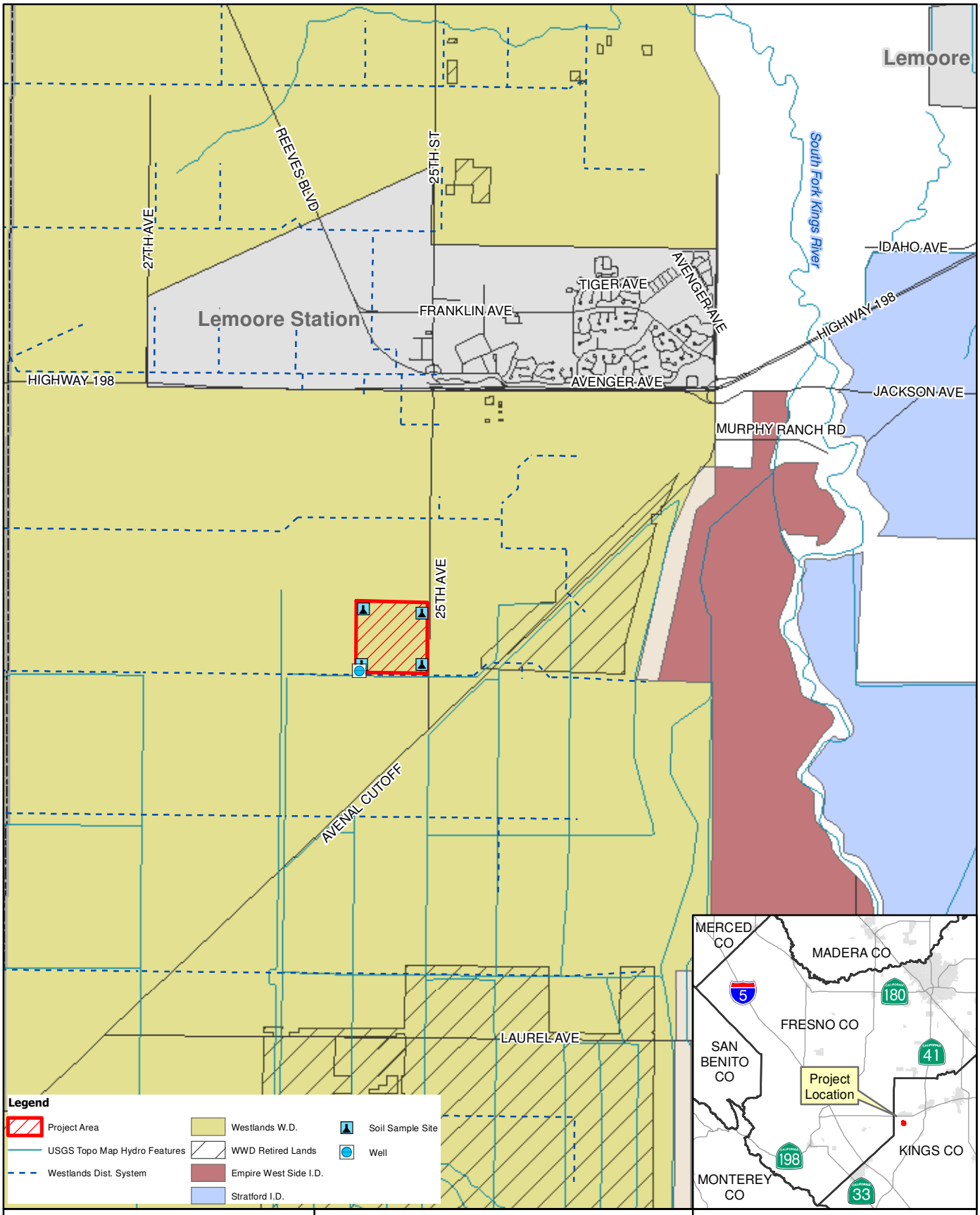
REGISTERED PROFESSIONAL ENGINEER
DONALD T. IKEMIYA
No. 56,630
Civil
STATE OF CALIFORNIA

FIGURE 1
PROJECT LOCATION MAP



0 0.5 1 Miles

EST. 1962
PROVOST & PRITCHARD CONSULTING GROUP
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2505 Alluvial Ave
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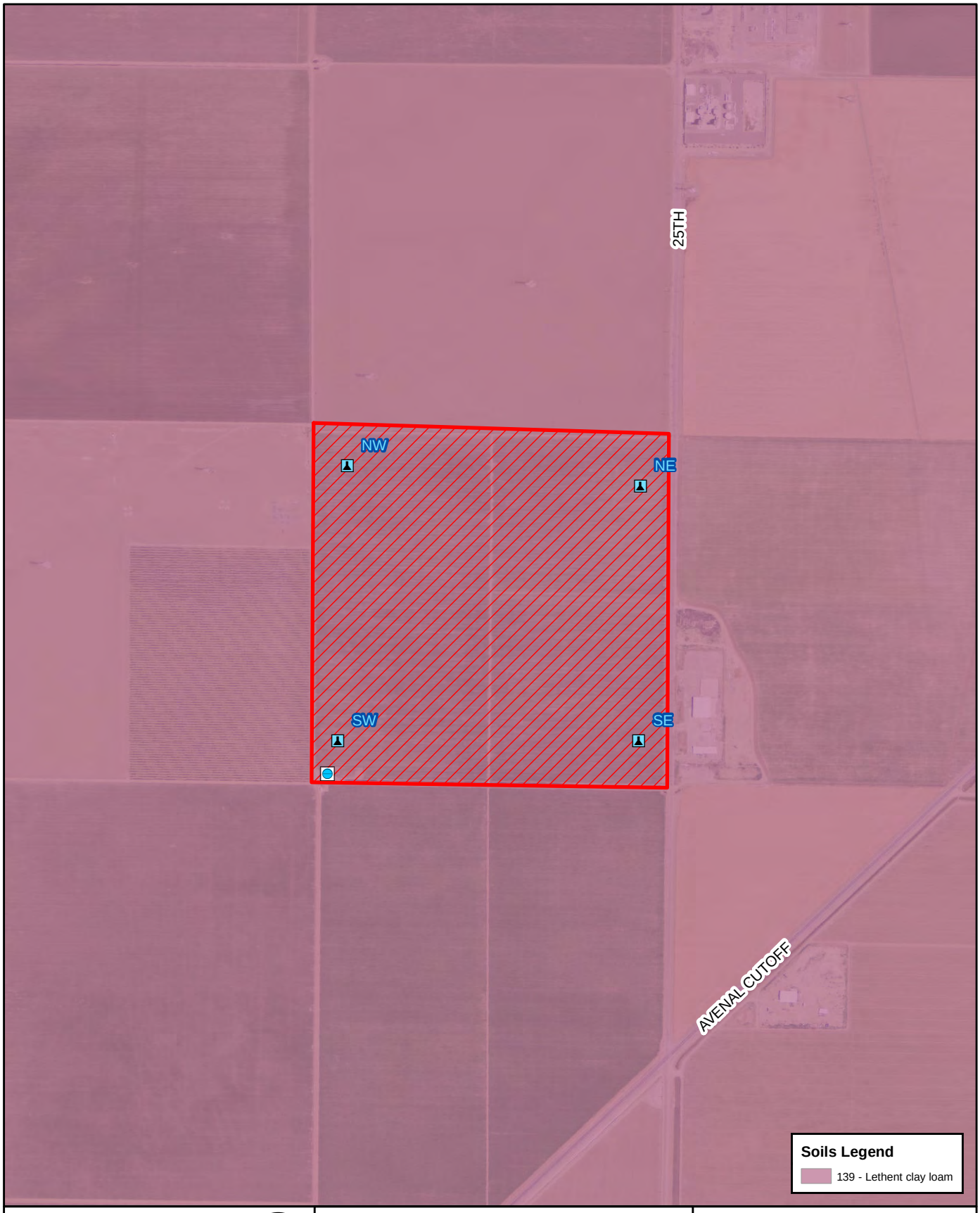
RE Orion LLC
Proposed Solar Generating Facility

Project Location

6/25/2013 : \\EVOLUTION\clv_clients\Clients\Recurrent Energy-2072\207212V2-RE Orion\GIS\Map\WaterAgencies.mxd

FIGURE 2
NRCS SOILS MAP



0 500 1,000 Feet

EST. 1968
PROVOST& PRITCHARD
CONSULTING GROUP
An Employee Owned Company

286 W. Cromwell Ave.
Fresno, CA 93711-6162
(559) 449-2700

Legend

- Project Area
- Soil Sample Site
- Well

RE Orion LLC

Proposed Solar Generating Facility

Soils Map

7/16/2013 : \\Evolution\clv_clients\Clients\Recurrent Energy-2072\207212V2-RE Orion\GIS\Map\Aerial_Soils.mxd

FIGURE 3
SOIL SAMPLES MAP

0 500 1,000 Feet

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CONSULTING GROUP
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286 W. Cromwell Ave.
Fresno, CA 93711-6162
(559) 449-2700

Legend

- Project Area
- Soil Sample Site
- Well

RE Orion LLC

Proposed Solar Generating Facility

Aerial Map

7/16/2013 : \\Evolution\clv_clients\Clients\Recurrent Energy-2072\207212V2-RE Orion\GIS\Map\Aerial.mxd

ATTACHMENT A
SOIL SAMPLING LABORATORY RESULTS

Report of Soil Analysis

DELLAVALLE® Laboratory, Inc.
Chemists and Consultants

1910 W. McKinley, Suite 110, Fresno, CA 93728
FAX (559) 268-8174 - (800) 228-9896 - (559) 233-6129

Provost & Pritchard Eng - Visalia
130 N Garden St
Visalia CA 93291
14015
01

ID: Cotton

Lab No. 190316
Sampled Date 6/19/2013
Submitted Date 6/20/2013
Submitted by
Reported Date
Location/Project Recurrent_Orion
Copy To Provost & Pritchard Eng.
Fax (559) 636-1177
E-mail lgomezsloan@ppeng.com

No.	Description	% SP	units pH	dS/m EC	meq/l Ca	meq/l Mg	meq/l Na	meq/l Cl	% ESP	T/ac-6" GR	+\- Lime	lbs/ac-6" Lime	mg/l B	mg/kg NO_3-N	mg/kg PO_4-P	mg/kg K	mg/kg Acid K	mg/kg Zn
	RL--->	0.50	1.0	0.01	0.1	0.1	0.1	0.1	0.1	0.1		500	0.1	1.0	2.0	2.0	40.0	0.1
	NAPT Methods--->	S1.00	S1.10	S1.20	S1.60	S1.60	S1.60	S1.40	Calc.			S2.50	S1.50	S3.10	S4.10	S5.10		S6.10
	Handbook 60--->									Hndbk 60-22d	Hndbk 60-23a						SSSA,p5 61 mod	
1	Orion_NE 1'	41	7.8	11.60	42.2	25.4	47.9		9.8		+		7.8	166	25	496		1.5
2	Orion_NE 2'	51	8.0	11.10	31.5	23.7	55.4		12.5	<0.1	+		9.7					
3	Orion_SE 1'	45	8.1	4.26	14.5	8.5	19.4		6.7		+		4.9	48	22	442		1.1
4	Orion_SE 2'	49	7.9	6.14	26.3	15.8	28.4		7.3		+		6.2					
5	Orion_SW 1'	46	8.0	11.30	28.7	21.3	62.6		14.7	<0.1	+		9.6	50	16	353		0.9
6	Orion_SW 2'	45	8.0	13.50	26.6	22.1	77.1		17.9	<0.1	+		11.5					
7	Orion_NW 1'	45	8.2	13.20	30.0	20.5	75.6		17.3	<0.1	+		19.0	55	24	437		1.1
8	Orion_NW 2'	50	8.1	16.20	26.6	21.1	105		23.4	<0.1	+		23.3					

Cotton Soil	"Texture'	"Acidity"	Total Salts	Calcium	Magnesium	Sodium	Chloride	"Alkali"	Gyp Req	Lime Pres	Lime Req.	Boron	Nitrate-N*	hosphate-P	otassium*	Zinc*	Mang.	Iron	Copper
V. Low	Sand<20	< 6.5	< 0.5	< 4	-	-	-	-		-		<0.2	< 5	< 10	<90	<0.9	< 0.8	< 3.0	< 0.1
Normal	25-45	6.7-8.0	0.6-2.0	5-14	-	< 8	< 10	< 9		++		0.3-1.5	8-25	12-30	110-350	1.0-2.5	1.0 +	4.0+	0.2+
High	Clay>55	8.4+	2.5**	30+	-	10+	15 +	12+		++++		2.0	40 +	50+	500+	3.0+			

*Tissue analysis is advised to track nutrient use during the season. High & SI High may indicate non-economic applications or toxic levels..

** = EC up to 4.0 not a problem if primarily calcium

Sodium should not be significantly higher than calcium.

*** = High & Low color levels may be differ based on consultant interpretation of the situation, including crop age, soil type, weather, irrigation system, etc.

Black = Normal ***
Red = High | Green = Low
Orange = SI. Hig | Blue = V. Low

ATTACHMENT B
IRRIGATION WELL SAMPLE LABORATORY RESULTS

DELLAVALLE® Laboratory, Inc.
Chemists and Consultants

Report of Water Analysis

1910 W. McKinley, Suite 110, Fresno, CA 93728
FAX (559) 268-8174 - (800) 228-9896 - (559) 233-6129

Provost & Pritchard Eng - Visalia
130 N Garden St
Visalia CA 93291
14015
1

Material Submitted: Water

Lab No. 190275
Sampler K. Backman
Submitted Date 6/20/2013
Submitted by Donald Ikemiya
Reported Date 7/1/2013
Location/Project Recurrent_Orion
Copy To
Fax (559) 636-1177
e-mail lgomezsloan@ppeng.com

	Date	Time	EC	Ca	Mg	Na	SAR	Adj SAR	Cl	CO_3+ HCO_3	SO_4	B	NO_3-N	Fe	Mn	pH	L.I.	TDS
	Sampled	Sampled	dS/m	meq/L	meq/L	meq/L			meq/L	meq/L	meq/L	mg/L	mg/L	mg/L	mg/L	unit	Calc	mg/L
RL--->			0.01	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1				0.02	1.0 to 14.0	-2.0 to 2.0	10.0
SM--->			2510 B	3120 B	3120 B	3120 B	Calc	Calc		2320 B		3120 B		3120 B	3120 B	4500H B	2330 B	2540 C
EPA--->									300.0		300.0		300.0					
Analysis Date:			*6/20/2013*	*6/25/2013*	*6/25/2013*	*6/25/2013*	*6/25/2013*	*6/27/2013*	*6/20/2013*	*6/20/2013*	*6/20/2013*	*6/25/2013*	*6/20/2013*	*6/25/2013*	*6/25/2013*	*6/20/2013*	*6/27/2013*	
Analysis Time:			*13:25*	*9:47*	*9:47*	*9:47*	*9:47*		*19:11*	*13:25*	*19:11*	*9:47*	*19:11*	*9:47*	*9:47*	*13:25*		
001 Orion Well- (SW Corner)	6/19/2013	10:00	1.18	**0.80**	0.07	**9.6**	**14.6**	**26.5**	**3.0**	**8.8**	0.2	**2.59**	0.4	<0.10	0.03	**8.1**	0.5	

Field and Row Crops		Total				Sodium Abs. Ratio			Carbonates &						Langelier
Generalized Levels		Salts	Calcium	Magnesium	Sodium	SAR	Adjusted	Chloride	Bicarbonates	Sulfate	Boron	Nitrate-N	Iron	Manganese	pH	Index
Low		<0.40	<4.00	-	-	-	-	-	-	-	-	-	-	-	<6.5	< -0.5
Normal		0.50-1.50	5.00-10.00	1.1-5.0	<4.0	0.1-4.0	0.1-4.0	0.1-1.5	0.1-2.5	0.1-5.0	0.01-0.40	0.1-5.0	<0.20	<0.20	6.8-7.9	-0.3 - 0.5
High for Sensitive Crops		1.51-2.20	> 10.00	> 5.0	4.1-7.0	4.1-9.0	4.1-9.0	1.6-3.5	2.5-3.5	-	0.41-0.59	5.1-7.0	0.21-0.40	0.21-0.40	8.0-8.4	0.6-0.7
High for Tolerant Crops		> 2.20	-	-	> 7.0	> 9.0	> 9.0	> 3.5	> 3.5	-	> 0.60	> 7.0	> 0.40*	> 0.40*	> 8.4	> 0.9*

Many of the above parameters need specific adjustment for crops, uses, irrigation procedures, etc. Check report for specifics.

LI 0.4+ Problematic for drip system deposits. LI < -0.3 corrosive to plumbing

*= High levels can cause plumbing deposits.

When sodium is greater than calcium (or high SAR), the water is considered sodic or "alkali".

Note: High & Low levels are based on consultant interpretation of the situation, including plant varieties, age, soil type, irrigation system, etc., when information is available.

Notes:	Black = Normal	
Red = High		Green = Sl. Low
Orange = Sl. High		Blue = Low

Addendum Attachment C

SOIL & WATER ANALYSIS

for

RE KENT SOUTH LLC
SOLAR GENERATION FACILITY

Kings County, California

December 4, 2013

Project Summary

RE Kent South LLC intends to develop the RE Kent South Solar Generation Facility (**Project**) in Kings County, California. The Project site would consist of approximately 200 acres subject to a Farmland Security Zone (**FSZ)** Contract. The Project site is located west of State Route 41 and south of State Route 198 at the corner of 25th Avenue and Avenal Cutoff Road, as depicted on the attached **Figure 1- Project Location Map**.

Report Summary

On November 26, 2013, the Board of Supervisors adopted Resolution No. 13-058, recognizing that due to reduced surface water deliveries, poor groundwater quality and severe groundwater overdrafts, impaired soil conditions, and regulatory burdens, circumstances exist on agricultural preserves located within a portion of Kings County south of State Route 198 and west of State Route 41 that limit the use of much of the land within that territory for agricultural activities, such that it is reasonably foreseeable that certain parcels located there that currently are used for more intensive agricultural activities will be used in the near future for less intensive uses, including dry farm seasonal grazing. Kings County may determine that solar generation facilities located within this region that maintain a reasonably foreseeable agricultural use on the site in addition to the commercial solar generation facility may be compatible with a Farmland Security Zone Contract pursuant to Government Code 51238.1(a) if a finding can be made, based upon substantial evidence, and taking into account surface water availability, ground water quality and availability, and soil conditions, that the proposed agricultural operation is a reasonably foreseeable use of the land.

Provost and Pritchard Consulting Group and Dellavalle Laboratory, Inc. evaluated the existing, historic, and reasonably foreseeable soil, water quality, and water availability conditions of the Project site and determined that adverse soil conditions and water quality and availability

conditions make dry farm seasonal sheep grazing a reasonably foreseeable agricultural activity to occur on the Project site.

Methodology

The methodology to develop this report utilized various data collected and interpreted for this site.

- Soil classifications were derived from the Natural Resources Conservation Service (**NRCS**).
- Soil samples were collected from multiple locations on the site and tested.
- Well water samples were collected and tested.
- Water supply and quality available from any surface water sources serving the site.
- Analysis and interpretation of data.

Site Soil Classifications: Restrictive Saline Soils

According to the Natural Resources Conservation Service (Soil Survey Area: Kings County, California, Survey Area Data: Version 8, Aug 27, 2009) soils on the property consist of Lethent clay loam **Figure 2 – NRCS Soils Map**. In their native conditions, these soils would have been neutral to alkaline.

As mapped the property is subject to saline-sodic conditions (8.0 to 16.00 mmhos/cm) and drainage limitations. The capacity of the most limiting layer to transmit water (Ksat) is low (0.00 to 0.06 in/hr). The Land Capability Class designation is 7s (non-irrigated) and 3s (irrigated). Class 7 soils have very severe limitations that make them unsuitable for cultivation and that restrict their use mainly to pasture, grazing, forestland, or wildlife habitat. Class 3 soils have severe limitations that restrict the choice of plants or that require special conservation practices, or both. The letter “s” indicates that the soil is limited mainly because it is shallow, droughty, or stony.

Saline conditions are native in the Lethent clay loam and have been exacerbated by poor natural drainage and the application of insufficient water to leach salt from the root zone. Long term soil salinity conditions are expected to increase, due to the lack of a subsurface drainage system and a sustainable leachate disposal outlet.

Soil Sampling Test Results: Soil Significantly Reduces Agricultural Productivity

On June 19, 2013, 10 soil samples were collected from five sites on the parcel in one foot increments to depths of two feet (a total of two samples from each soil boring hole). Approximate sampling locations (from GPS coordinates) are depicted on the attached map

labeled **Figure 3 – Soil Samples Map**. Results are attached as appendices and interpreted in this report.

Results of soil analysis are presented in **Table 1** and **Attachment A**. Of the five soil sampling locations, four locations showed significant limitations related to salinity. Soil salinity is a limiting factor and it is related to poor drainage conditions. Soils are considered saline when the electrical conductivity of saturation extracts (**EC**) are above 4 decisiemens per meter (**dS/m**). Sodium (**Na**) levels above 10 meq/l are considered high. Soils are considered sodic when the exchangeable sodium percentage (**ESP**) is above 15. Boron (**B**) levels above 2.0 mg/l are considered high.

Table 1
Soil Sampling Test Results

Sample ID	EC (dS/M)	Sodium (meq/l)	ESP (%)	Boron (mg/l)	Interpretation
KS NW 1'	**8.27**	**47.1**	12.4	**8.9**	Saline with excessive sodium & boron
KS NW 2'	**12.80**	**84.6**	**20.2**	**15.1**	Saline-sodic with excessive sodium & boron
KS NE 1'	**4.01**	**14.6**	4.5	**3.2**	Saline with excessive sodium & boron
KS NE 2'	3.62	**19.4**	7.5	**8.6**	Excessive sodium & boron
KS CW 1'	3.345	**12.6**	4.0	**2.2**	Excessive sodium & boron
KS CW 2'	2.48	**11.1**	4.3	**2.0**	Excessive sodium & boron
KS CS 1'	**5.62**	**23.2**	6.4	**4.8**	Saline with excessive sodium & boron
KS CS 2'	**4.69**	**25.6**	9.4	**4.3**	Saline with excessive sodium & boron
KS South Tip 1’	**20.70**	**129**	**24.1**	**20.7**	Saline-sodic with excessive sodium & boron
KS South Tip 2’	**22.10**	**140**	**24.2**	**23.3**	Saline-sodic with excessive sodium & boron

Bold *= Above agricultural limitations*

Salinity of the soil solution has the effect of making water less available to the plant. As salinity increases above a threshold amount, the plant has to expend more energy to obtain water from the soil and plant growth slows. At sufficiently high salinity levels, the plant can no longer extract water and the plant wilts.

When plants extract water from the soil most of the salt is left in the soil. Water above the amount required by the plant must be applied to leach salt from the root zone. If drainage is restricted the extra water and the salt accumulates in the soil. As a result, soils with impaired drainage cannot be used for agriculture on a long-term basis. The site does not have access to a functioning drainage system.

Excess sodium disperses clay particles causing soil structure that severely limits movement of soil and water through the soil. Soil salinity offsets sodicity so permeability is maintained until salinity drops to about 4 dS/m. At that point gypsum or another source of soluble calcium must be added to displace the sodium and maintain permeability. Resulting sodium salts must be leached from the root zone.

Well Water Sampling Test Results

The well location is depicted in **Figure 3 – Soil Samples Map**. This well is indicated to be about 800 feet deep and taps the lower aquifer. A pump test was conducted on this well in 2008. The static water level prior to pumping was 255 feet deep. During the test the pumping rate was about 790 gpm, the pumping level was 385 feet deep, drawdown was 130 feet, and the specific capacity was 6 gpm/ft of drawdown. All wells in the area are drawing significantly deeper water, due to drought conditions and unavailability of surface water supplies. Actual drawdown numbers for this well are undetermined.

On June 19, 2013 a sample was collected from the irrigation groundwater well supplying this field. Samples were delivered to the laboratory for analysis, following proper chain of custody procedures. Results of groundwater analysis are presented in **Table 2** and **Attachment B – Irrigation Well Sample Laboratory Results**. Table 2 summarizes the exceedences of critical constituents of concern impacting crop production. Note that the RE Kent South property is served by the same well that serves RE Orion.

Table 2
Groundwater Sampling Test Results

Constituent	Result	Units	Interpretation
EC	1.18	dS/m	Moderate restriction of use
SAR	**14.6**	--	Severe limitation of use
SAR adj	**26.5**	--	Severe limitation of use
Sodium (Na)	**221***	mg/l	Severe limitation of use for sprinkler application
Chloride (Cl)	**106***	mg/l	Moderate to severe limitation of use for sprinkler application
Boron (B)	**2.59**	mg/l	Moderate to severe limitation of use
Nitrate as N (NO_3-N)	0.4	mg/l	Within crop loading agronomic limits
pH	**8.1**	pH units	High for sensitive crops

Bold *= Above agricultural limitations*
** Converted meq/l (lab report) to mg/l (Table)*

Without water source blending, the well water quality would be detrimental to sustain agricultural production. Well water must be mixed with surface water provided by Westlands Water District to achieve minimum water quality levels for agriculture. In the absence of availability of sufficient surface water, the property cannot rely upon groundwater to support agricultural production.

Surface Water Quality & Quantity Assessment: Water Availability Insufficient for Continued Agricultural Production

The site is located within the service area of Westlands Water District. Westlands Water District irrigation supply water quality (source: California Department of Water Resources, California Aqueduct, Check 21, grab sample taken 6/18/13) is summarized in **Table 3**.

Table 3
Westlands Water District Irrigation Supply Water Characteristics

Constituent	WWD Result	Units	Range and Degree of Problem	Interpretation
EC	0.51	dS/m	750 – 3,000, high	OK
SAR	3.0	--	Above 9, severe	OK
Sodium (Na)	54	mg/l	Above 70, high	OK
Chloride (Cl)	76	mg/l	140 - 350, plant injury can occur	OK
Boron (B)	0.2	mg/l	Above 1.0, high	OK
Nitrate (NO_3)	1.6	mg/l	Within crop agronomic limits	OK
pH	7.8	pH units	Between 6.5 - 8.4, normal	OK

The most limiting factor in the region is water quantity. Average rainfall is about 8.3 inches and in most years available surface water must be supplemented with groundwater to irrigate planed crops, because there is not sufficient surface water to irrigate all the land. This site has not had a full allotment of surface water supply in years, even in wet years like 2011. Water available for the past 6 years is presented in **Table 4**.

Table 4
Westlands Water District Water Allocation

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As noted above, without sufficient allocations of surface water, available ground water would be unusable due to the significant water quality limitations. Economically viable crops on the site require approximately 3 to 4 acre-feet of water per acre and historic, current, and projected water allocations do not provide sufficient water to support this. In years of full entitlement (100% allocation), the site would receive a maximum water allocation from WWD

of 2.6 acre-feet per acre. The current water allocation forecast of 20 percent would provide no more than 0.52 acre-feet per acre for the entire year.

Conversion of these parcels from agriculture would free the water supply for use on other parcels in the area. Because water, not land, is the limiting factor in the areas, agricultural productivity of the area would not be reduced should these parcels be removed from agricultural production.

Summary of Findings

The severe limitation of reliable water availability and related soil salinity constitutes specific circumstances under which Kings County can make the findings that a reasonably foreseeable agricultural use of the site would dry farm seasonal grazing. The Project as a concomitant use with dry farm seasonal grazing or a similar commercial agricultural activity may be deemed a compatible use with a Farmland Security Zone contract pursuant to Government Code Section 51238.1(a) and the County of Kings Implementation Procedures for the California Land Conservation "Williamson" Act of 1965.

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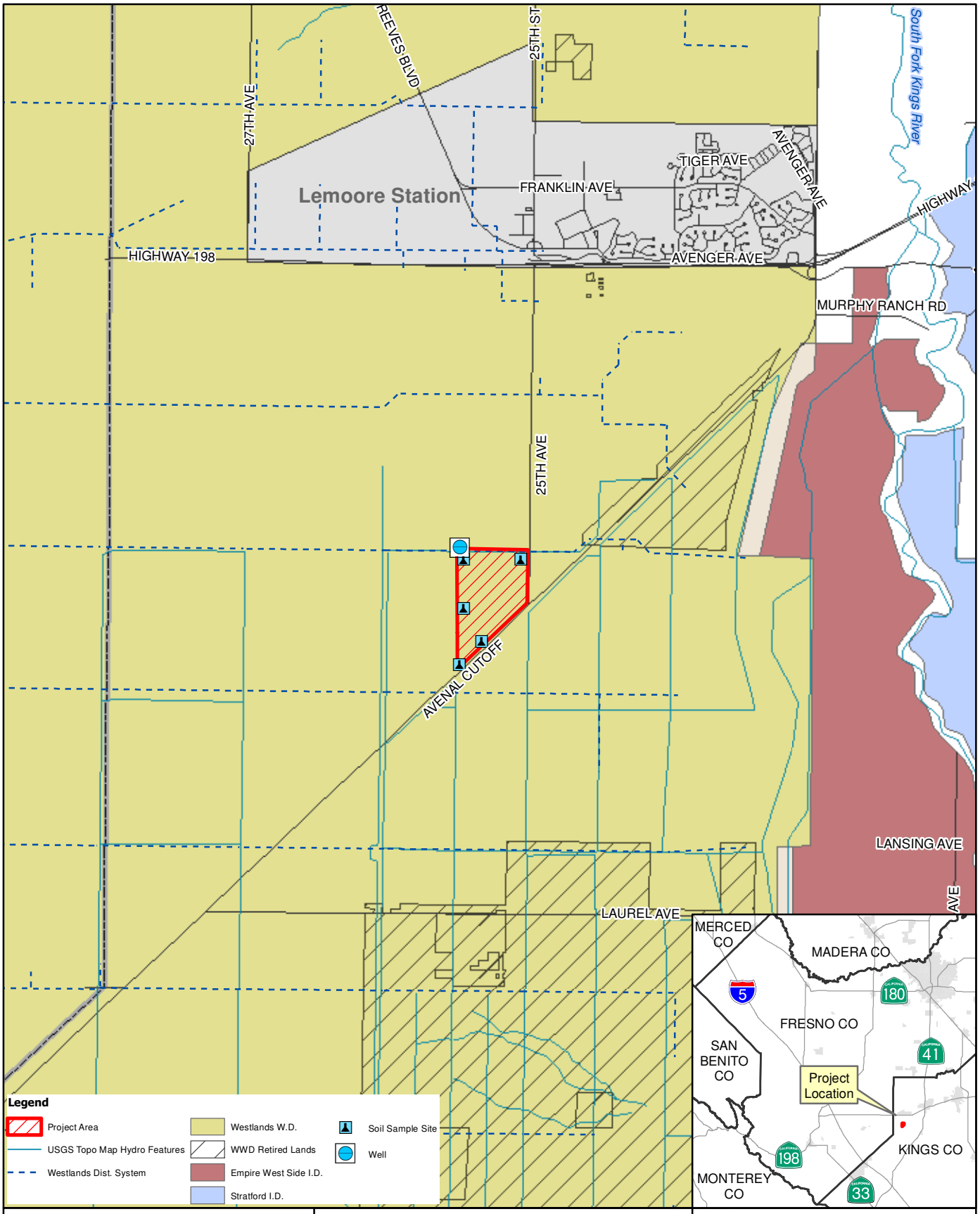
FIGURE 1
PROJECT LOCATION MAP



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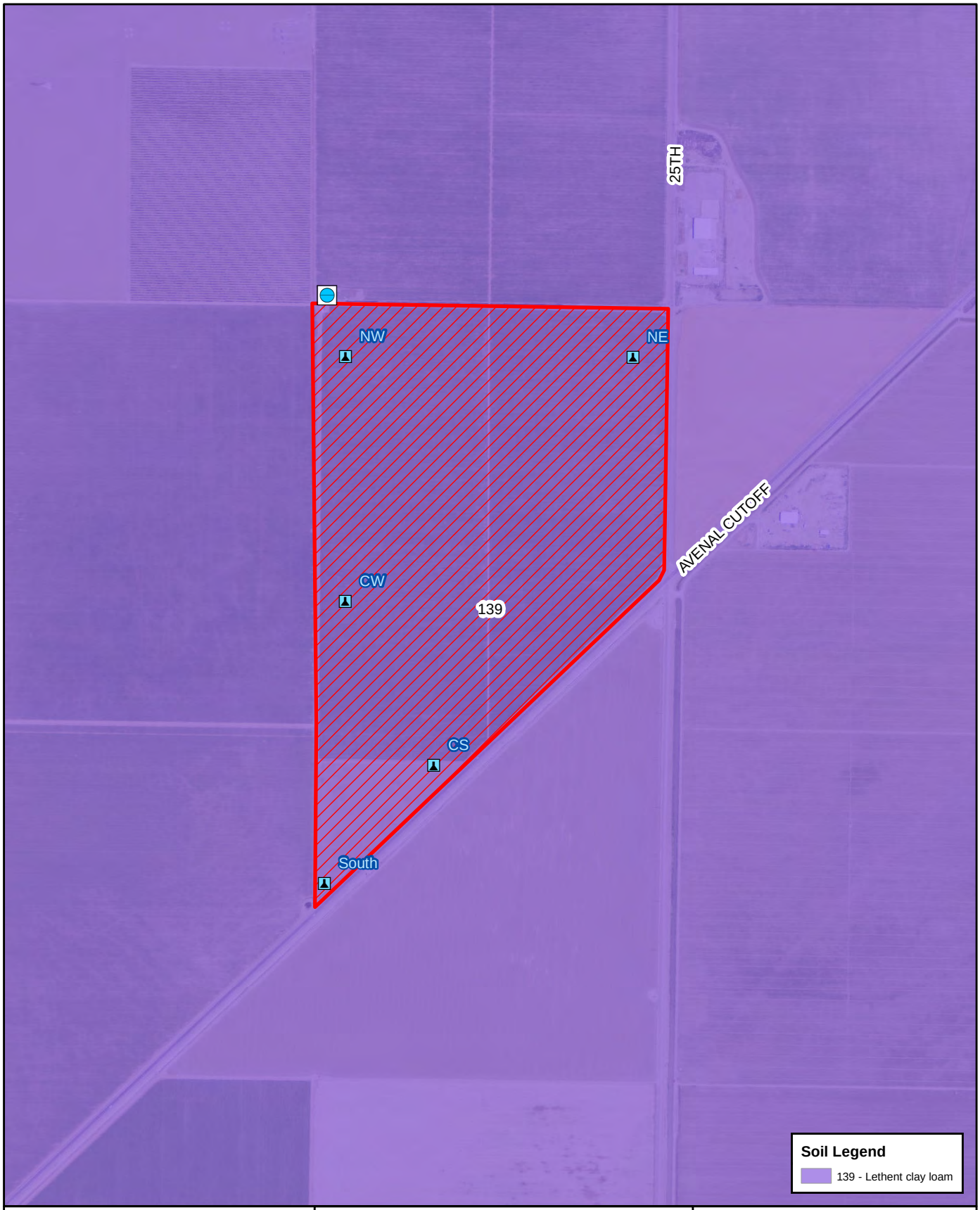
RE Kent South LLC
Proposed Solar Generating Facility

Project Location

6/25/2013 : \\EVOLUTION\clv_clients\Clients\Recurrent Energy-2072\207212V1-RE Kent South\GIS\Map\WaterAgencies.mxd

FIGURE 2
NRCS SOILS MAP



0 500 1,000 Feet

EST. 1968
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Legend

- Project Area
- Soil Sample Site
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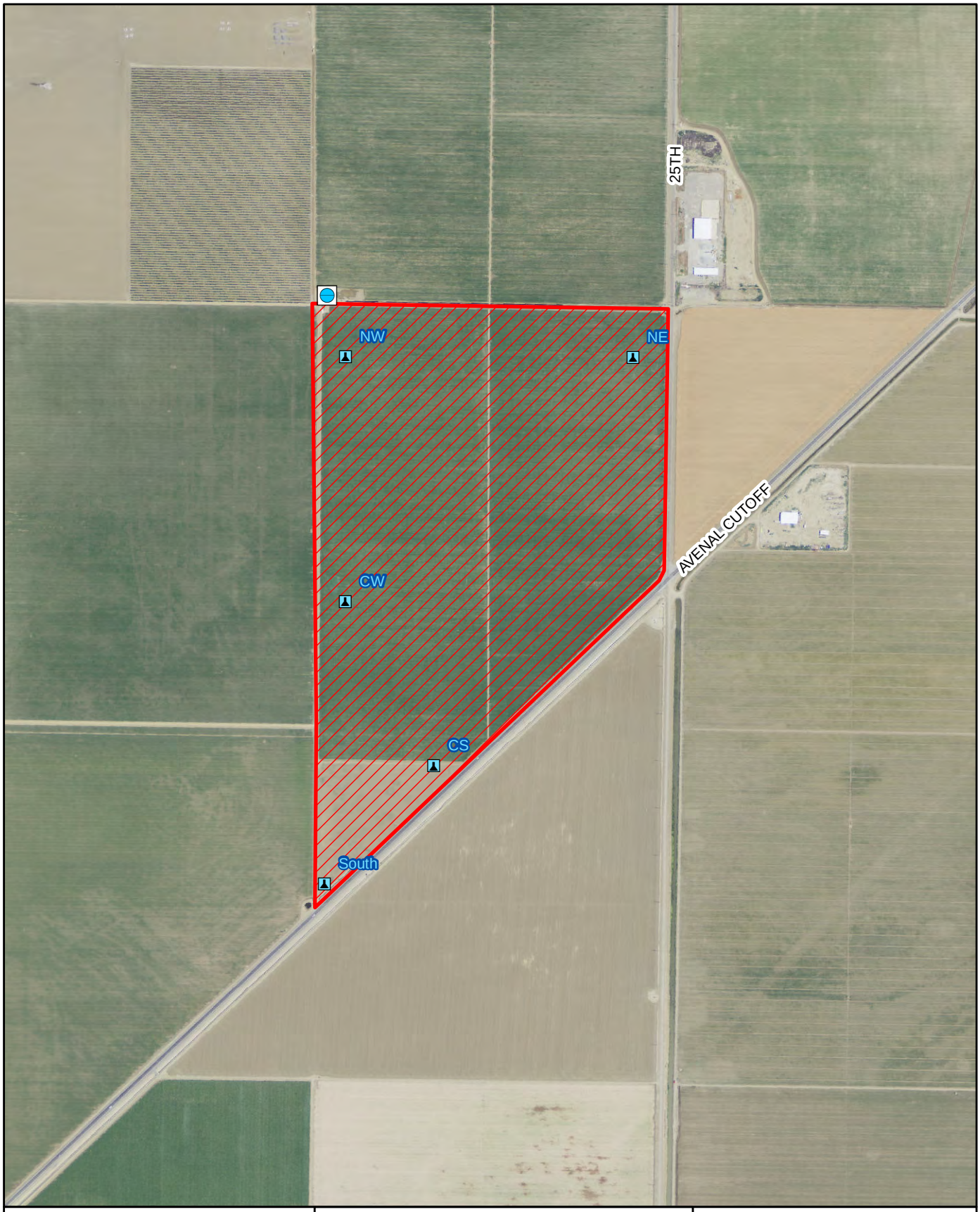
Soils Map

7/12/2013 : \\EVOLUTION\clv_clients\Clients\Recurrent Energy-2072\207212V1-RE Kent South\GIS\Map\Aerial_Soils.mxd

FIGURE 3
SOIL SAMPLES MAP



0 500 1,000 Feet

EST. 1968
PROVOST& PRITCHARD
CONSULTING GROUP
An Employee Owned Company

286 W. Cromwell Ave.
Fresno, CA 93711-6162
(559) 449-2700

Legend

- Project Area
- Soil Sample Site
- Well

RE Kent South LLC

Proposed Solar Generating Facility

Aerial Map

7/16/2013 : \\Evolution\clv_clients\Clients\Recurrent Energy-2072\207212V1-RE Kent South\GIS\Map\Aerial.mxd

ATTACHMENT A
SOIL SAMPLING LABORATORY RESULTS

DELLAVALLE® Laboratory, Inc.
Chemists and Consultants

Report of Soil Analysis

1910 W. McKinley, Suite 110, Fresno, CA 93728
FAX (559) 268-8174 - (800) 228-9896 - (559) 233-6129

Provost & Pritchard Eng - Visalia
130 N Garden St
Visalia CA 93291
14015
01

ID: Grain & Cotton

Lab No. 190319
Sampled Date
Submitted Date 6/20/2013
Submitted by
Reported Date 7/2/2013
Location/Project Recurrent_Kent South
Copy To Provost & Pritchard Eng.
Fax (559) 636-1177
E-mail lgomezsloan@ppeng.com

No.	Description	% SP	units pH	dS/m EC	meq/l Ca	meq/l Mg	meq/l Na	meq/l Cl	% ESP	T/ac-6" GR	+\- Lime	lbs/ac-6" Lime	mg/l B	mg/kg NO_3-N	mg/kg PO_4-P	mg/kg K	mg/kg Acid K	mg/kg Zn
	RL--->	0.50	1.0	0.01	0.1	0.1	0.1	0.1	0.1	0.1		500	0.1	1.0	2.0	2.0	40.0	0.1
	NAPT Methods--->	S1.00	S1.10	S1.20	S1.60	S1.60	S1.60	S1.40	Calc.			S2.50	S1.50	S3.10	S4.10	S5.10		S6.10
	Handbook 60--->									Hndbk 60-22d	Hndbk 60-23a						SSSA,p5 61 mod	
1	KS_ NW 1'	47	8.2	8.27	24.4	16.0	47.1		12.4	<0.1	+		8.9	35	11	381		1.5
2	KS_ NW 2'	48	8.1	12.80	24.7	19.3	84.6		20.2	<0.1	-		15.1					
3	KS_ NE 1'	40	8.0	4.01	15.6	10.2	14.6		4.5		-		3.2	33	13	437		1.6
4	KS_ NE 2'	49	8.1	3.62	9.5	9.3	19.4		7.5		+		8.6					
5	KS_ CW 1'	41	8.0	3.35	15.9	7.8	12.6		4.0		-		2.2	31	23	388		1.2
6	KS_ CW 2'	48	8.0	2.48	9.1	6.8	11.1		4.3		+		2.0					
7	KS_ CS 1'	49	7.9	5.62	22.4	13.5	23.2		6.4		-		4.8	59	35	620		2.5
8	KS_ CS 2'	41	8.1	4.69	10.5	10.4	25.6		9.4		+		4.3					
9	KS_ South Tip 1'	36	8.0	20.70	29.8	36.2	129		24.1	<0.1	+		20.7	44	16	381		1.2
10	KS_ NW 2'	37	8.0	22.10	28.6	48.8	140		24.2	<0.1	+		23.3					

Cotton Soil	"Texture"	"Acidity"	Total Salts	Calcium	Magnesium	Sodium	Chloride	"Alkali"	Gyp Req	Lime Pres	Lime Req.	Boron	Nitrate-N*	Phosphate-P*	Potassium*	Zinc*
V. Low	Sand<20	< 6.5	< 0.5	< 4	-	-	-	-		-		<0.2	< 5	< 10	<90	<0.9
Normal	25-45	6.7-8.0	0.6-2.0	5-14	-	< 8	< 10	< 9		++		0.3-1.5	8-25	12-30	110-350	1.0-2.5
High	Clay>55	8.4+	2.5**	30+	-	10+	15 +	12+		++++		2.0	40 +	50+	500+	3.0+

*Tissue analysis is advised to track nutrient use during the season.

High & SI High may indicate non-economic applications or toxic levels..

** = EC up to 4.0 not a problem if primarily calcium

Sodium should not be significantly higher than calcium.

*** = High & Low color levels may be differ based on consultant interpretation of the situation, including crop age, soil type, weather, irrigation system, etc.

Black = Normal	***
Red = High	Green = Low
Orange = SI. High	Blue = V. Low

ATTACHMENT B
IRRIGATION WELL SAMPLE LABORATORY RESULTS

DELLAVALLE® Laboratory, Inc.
Chemists and Consultants

Report of Water Analysis

1910 W. McKinley, Suite 110, Fresno, CA 93728
FAX (559) 268-8174 - (800) 228-9896 - (559) 233-6129

Provost & Pritchard Eng - Visalia
130 N Garden St
Visalia CA 93291
14015
1

Material Submitted: Water

Lab No. 190275
Sampler K. Backman
Submitted Date 6/20/2013
Submitted by Donald Ikemiya
Reported Date 7/1/2013
Location/Project Recurrent_Orion
Copy To
Fax (559) 636-1177
e-mail lgomezsloan@ppeng.com

	Date	Time	EC	Ca	Mg	Na	SAR	Adj SAR	Cl	CO_3+ HCO_3	SO_4	B	NO_3-N	Fe	Mn	pH	L.I.	TDS
	Sampled	Sampled	dS/m	meq/L	meq/L	meq/L			meq/L	meq/L	meq/L	mg/L	mg/L	mg/L	mg/L	unit	Calc	mg/L
RL--->			0.01	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1				0.02	1.0 to 14.0	-2.0 to 2.0	10.0
SM--->			2510 B	3120 B	3120 B	3120 B	Calc	Calc		2320 B		3120 B		3120 B	3120 B	4500H B	2330 B	2540 C
EPA--->									300.0		300.0		300.0					
Analysis Date:			*6/20/2013*	*6/25/2013*	*6/25/2013*	*6/25/2013*	*6/25/2013*	*6/27/2013*	*6/20/2013*	*6/20/2013*	*6/20/2013*	*6/25/2013*	*6/20/2013*	*6/25/2013*	*6/25/2013*	*6/20/2013*	*6/27/2013*	
Analysis Time:			*13:25*	*9:47*	*9:47*	*9:47*	*9:47*		*19:11*	*13:25*	*19:11*	*9:47*	*19:11*	*9:47*	*9:47*	*13:25*		
001 Orion Well- (SW Corner)	6/19/2013	10:00	1.18	**0.80**	0.07	**9.6**	**14.6**	**26.5**	**3.0**	**8.8**	0.2	**2.59**	0.4	<0.10	0.03	**8.1**	0.5	

Field and Row Crops	Total				Sodium Abs. Ratio			Carbonates &							Langelier
Generalized Levels	Salts	Calcium	Magnesium	Sodium	SAR	Adjusted	Chloride	Bicarbonates	Sulfate	Boron	Nitrate-N	Iron	Manganese	pH	Index
Low	<0.40	<4.00	-	-	-	-	-	-	-	-	-	-	-	<6.5	< -0.5
Normal	0.50-1.50	5.00-10.00	1.1-5.0	<4.0	0.1-4.0	0.1-4.0	0.1-1.5	0.1-2.5	0.1-5.0	0.01-0.40	0.1-5.0	<0.20	<0.20	6.8-7.9	-0.3 - 0.5
High for Sensitive Crops	1.51-2.20	> 10.00	> 5.0	4.1-7.0	4.1-9.0	4.1-9.0	1.6-3.5	2.5-3.5	-	0.41-0.59	5.1-7.0	0.21-0.40	0.21-0.40	8.0-8.4	0.6-0.7
High for Tolerant Crops	> 2.20	-	-	> 7.0	> 9.0	> 9.0	> 3.5	> 3.5	-	> 0.60	> 7.0	> 0.40*	> 0.40*	> 8.4	> 0.9*

Many of the above parameters need specific adjustment for crops, uses, irrigation procedures, etc. Check report for specifics.

LI 0.4+ Problematic for drip system deposits. LI < -0.3 corrosive to plumbing

*= High levels can cause plumbing deposits.

When sodium is greater than calcium (or high SAR), the water is considered sodic or "alkali".

Note: High & Low levels are based on consultant interpretation of the situation, including plant varieties, age, soil type, irrigation system, etc., when information is available.

Notes:	Black = Normal	
Red = High		Green = Sl. Low
Orange = Sl. High		Blue = Low

3.2.2 Environmental Impacts and Mitigation Measures

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

LESS THAN SIGNIFICANT IMPACT WITH MITIGATION. ~~As discussed above, all 1,428.01 acres of the SGF sites are designated as Farmland of Statewide Importance by the FMMP. The entire 1,428.01-acre area of the three project sites would be temporarily removed from agricultural production during project construction and operation. During the life of the projects less than 4 percent (57 acres) of the site would be physically covered by project elements, such as the substation, inverter, and roads; the remaining approximately 96 percent (1,365 acres) would be unencumbered and covered with a seed mix that could grow under solar panels and around the steel posts (see Table 3.2-3).~~

~~Table 3.2-3 Impermeable Site Coverage over SGF Project Sites~~

~~Impermeable Structures~~	~~Impermeable Square Feet~~	~~Impermeable Acres~~	~~Percent of Sites~~
~~All Roads~~	~~1,990,692~~	~~45.7~~	~~3.21%~~
~~Parking Lot~~	~~209,088~~	~~4.8~~	~~0.34%~~
~~Substations~~	~~178,596~~	~~4.1~~	~~0.29%~~
~~Inverter Pads~~	~~104,544~~	~~2.4~~	~~0.17%~~
~~Total~~	~~2,482,920~~	~~57~~	~~4%~~

~~Note: Calculations are approximate and may be slightly refined during final project design.~~

~~The intent of the applicants is to either cancel the Williamson Act and FSZ contracts associated with the project sites or transfer the Williamson Act and FSZ contracts into "solar use easements" as described under Government Code Section 50255.1 (Senate Bill 618). The applicants do not intend to perform agricultural operations on the project sites if either of these two options is successful. If both of these options are unsuccessful, the applicants would continue intensive agricultural operations on the SGF project sites. If agricultural operations are implemented, the 1,371.01 acres of unencumbered area of the SGF project sites would be actively farmed (i.e., grazing on a permanent crop such as alfalfa, bee keeping or labor intensive agricultural production). If grazing is implemented on site, animals would graze on a permanent crop that is grown year-round such as alfalfa or similar forage plant grown according to standard local farming practices. It is recognized that continued farming operations within the SGF project areas may pose unique challenges. For example, specialized equipment may be needed to harvest crops in between rows of solar panels and an increased labor force may be needed to harvest crops that are planted underneath solar panels. The specifics of the potential farming operations for each of the project sites would be detailed in Agriculture Management Plans that are subject to review by County staff.~~

~~The temporary use of the land for solar development would represent a very small portion of the overall, currently designated farmland in Kings County. Because the project applicants anticipate the SGF project sites would be temporarily removed from agricultural production, the projects would have the potential to result in an impact related to the conversion of Farmland of Statewide Importance to a non-agricultural~~

~~use. Implementation of Mitigation Measures AG-1, AG-2 and AG-3 would reduce this impact to a less than significant level.~~

~~If the Williamson Act and FSZ contracts that apply to the project sites are cancelled, or if the Williamson Act and FSZ contracts are converted into solar use easements, the SGF sites will be temporarily removed from agricultural production during the life of the projects. If either of these two options does not occur, agricultural operations would continue on the unencumbered areas of the SGF sites. Please see response b. below for an expanded discussion of the conversion to solar use easements. If continued agricultural operations are maintained on the sites in a manner that is equivalent to existing (pre-project) conditions, as determined by the county-approved AMPs in accordance with the performance standards outlined in Government Code section 51238.1, the projects would still have the potential to result in an impact related to the conversion of Farmland of Statewide Importance to a non-agricultural use. Implementation of Mitigation Measures AG-1 through AG-3 would reduce this impact to a less than significant level.~~ The Addendum made minor alterations to the site plan to clarify the footprint and infrastructure of two PG&E switching stations. The Original MND and the modifications made by the Addendum have all determined that implementation of the Projects would result in less than significant impacts with mitigation. The modified Projects would have similar impacts as the Original Projects under this criterion as no change to the Projects' construction and footprint are proposed.

To address the Farmland Security Zone Contracts on the Projects site, each Project applicant has proposed in the modified Project description to do one of three options: 1) cancel the FSZ Contracts, 2) convert the FSZ Contracts to a Solar Use Easement, or 3) maintain a use onsite that meets the principles of compatibility pursuant to Government Code Section 51238.1(a). Cancellation, conversion to a Solar Use Easement, or meeting the principles of compatibility with the FSZ Contracts could result in a reduced or limited agricultural use of the site. Implementation of Mitigation Measures (MM) AG-1, AG-2 and AG-3 would reduce impacts under this criterion to a less than significant level. MM AG-2 is unchanged from the certified MND. This Addendum includes minor changes to MM AG-1 and MM AG-3 to clarify the applicability of MM AG-1 and AG-3, as shown below.

MM AG-1: Soil Reclamation Plan. Prior to the issuance of building permits for each SGF project, each applicant shall submit a Soil Reclamation Plan for review and approval by Kings County Community Development Agency staff. The Soil Reclamation Plan for each permitted SGF site shall contain an analysis of pre-project baseline soil conditions, and shall contain specific measures to restore the soil to its pre-project condition, including removal of all non-utility-owned fixtures, equipment, non-agricultural roads, and restoration of compacted soil. Additionally, each Soil Reclamation Plan shall discuss the retention of any surface water rights. Reclamation of each permitted SGF project site shall commence within two months of the expiration of the use permit and be completed within 18 months from the date the facility ceases to operate.

MM AG-2: Financial Assurance. Prior to the issuance of building permits for each SGF project, each applicant shall post a performance bond or similar instrument to ensure completion of the activities under each Soil Reclamation Plan. Financial assurances for each Soil Reclamation Plan will be reviewed every 5 years by the Kings County Community Development Agency to determine if finances are sufficient to perform reclamation of the project. The assurance for each Soil Reclamation Plan must be adjusted if, during the five year review, finances are determined to be insufficient to perform reclamation of the project.

MM AG-3: Off-site Agricultural Mitigation. For each SGF project, if the respective applicant 1) does not continue ~~an intensive agricultural operation~~ a reasonably foreseeable agricultural use on ~~at least 90 percent of~~ the project site ~~at an intensity equivalent to the pre-project agricultural use (as historically provided by the site over the previous decade) of the project site~~ for the entire life of the

project, ~~and if the applicant~~ or 2) is successful in cancelling the ~~Williamson Act and/or~~ Farmland Security Zone contracts, ~~and/~~or 3) is successful in entering into one or more "solar use easements" (in accordance with the Solar Use Easement provisions of sections 51190-51192.2 of the Government Code), the respective applicant shall then provide written evidence of funding and/or purchase of agricultural mitigation land in Kings County (which will be managed and maintained by an appropriate entity) for the life of the respective project to mitigate the loss of Farmland of Statewide Importance at a ratio of 1:1. Every acre of agricultural land removed from production would be mitigated by the respective applicant. The agricultural land preserved shall be of equal or greater quality as defined by the California Department of Conservation Farmland Mapping and Monitoring Program (i.e., if Farmland of Statewide Importance is converted to a solar use then the agricultural land preserved must not be in a classification indicating a lower quality than Farmland of Statewide Importance).

Should the mitigation occur within a preferred Kings County conservation area for agriculture, including but not limited to Zones defined as "AX" or the Farmland Security Zone Expansion Area as shown on Figure RC-14 of the Resource Conservation Element of the Kings County 2035 General Plan, off-site mitigation shall be reduced by 50 percent to 0.5:1.

With the implementation of MMs AG-1, ~~through~~ AG-2, and AG-3 (as modified by the Addendum), ~~solar energy generation activities that would take place on the SGF sites~~ the modified Projects would result in a less than significant impact under this criterion.

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

LESS THAN SIGNIFICANT IMPACT. ~~According to the Kings County General Plan, solar power generation facilities are considered a "community benefiting non-agricultural use" of agricultural spaces. Additionally, solar generation facilities producing power for sale are consistent with the AX zone district through the conditional use permit process. The projects are thus consistent with the sites' general plan and zoning designations. The projects are located on 18 parcels containing active FSZ contracts and one parcel containing an active Williamson Act contract. The County has determined that commercial solar facilities are not considered compatible with the Williamson Act Program under Government Code section 51238(a)(1), unless a project can make findings consistent with the principles of compatibility under Government Code section 51238.1(a).~~

~~The applicants would perform one of the following actions: 1) the applicants shall file a FSZ and Williamson Act cancellation application package with the County and Department of Conservation on the 1,428.01 acres that make up the three project sites, initiating a separate review process from the County and the Director of the Department of Conservation, or 2) the applicants shall pursue rescinding the portion of the FSZ and Williamson Act contracts containing the project sites and enter into one or more "solar use easements" if the projects are qualified under the requirements of the Solar Use Easement provisions of sections 51190-51192.2 of the Government Code (Senate Bill 618). Both of these courses of action will require approval from the California Department of Conservation and the Kings County Board of Supervisors. If the cancellation of the FSZ and Williamson Act contracts are not approved, and if the FSZ and Williamson Act contracts are not converted into one or more solar use easements, the applicants shall 3) conduct an on-site agricultural operation on each respective project site which is consistent with the principles of compatibility of California Government Code Section 51238.1 as described below. In the event that the applicants are unable to obtain approval for the cancellation of the FSZ and Williamson Act contracts and the conversion into one or more solar use easements, then each project applicant shall provide the County with an Agriculture Management Plan describing the commercial agricultural operations consistent with the principles of compatibility of California Government Code Section 51238.1~~

~~to be pursued on the respective project site prior to issuance of that project's building permit. Each Agriculture Management Plan will explain in detail how the project applicant/operator will ensure the project site significantly provides an equivalent intensity of agricultural output as historically provided by the site over the last decade.~~

~~Co-locating agricultural operations on a solar site is a unique opportunity to provide continued contributions to the agricultural economy in the project region while generating a clean source of renewable energy. The following discussion addresses how the proposed solar sites could satisfy the principles of compatibility of Government Code Section 51238.1 if option 3) is pursued:~~ The MND determined that implementation of the Original Project would result in less than significant impacts. The modified Project location is unchanged from the Original Project, which was deemed consistent with the General Plan and the AX zone district though the conditional use permit process. To address the Farmland Security Zone and Williamson Act contracts on the Project site, the Project applicant has proposed in the modified Project description to do one of three options: 1) cancel the FSZ contract, 2) convert the FSZ contract to a Solar Use Easement, or 3) maintain a use onsite that meets the principles of compatibility pursuant to Government Code Section 51238.1(a) by maintaining reasonably foreseeable agricultural operations onsite as determined by site-specific soil and water analysis.

The following discussion addresses how the proposed solar site could satisfy the principles of compatibility of Government Code Section 51238.1(a):

> *Government Code Section 51238.1. (a) Uses approved on contracted lands shall be consistent with all of the following principles of compatibility:*
>
> *(1) The use will not significantly compromise the long-term productive agricultural capability of the subject contracted parcel or parcels or on other contracted lands in agricultural preserves.*

The projects do not include elements that would compromise the long-term soil quality of the site ~~(see Section 3.8, Hazards and Hazardous Materials)~~. Additionally, each project would be subject to a project-specific Soil Reclamation Plan (MM AG-1) to return each project's ~~portion of the 1,428.01-acres~~ site to pre-project conditions after decommissioning of the site; ~~and~~ furthermore, the project sites are self-contained so as to not compromise long-term agricultural activity on adjacent lands. The use of herbicides in each respective project area shall comply with regulations set forth by the Kings County Agriculture Department. ~~Each Agriculture Management Plan would ensure agricultural commercial operations are maintained on the respective site in a sustainable manner for the life of each project.~~

> *(2) The use will not significantly displace or impair current or reasonably foreseeable agricultural operations on the subject contracted parcel or parcels or on other contracted lands in agricultural preserves. Uses that significantly displace agricultural operations on the subject contracted parcel or parcels may be deemed compatible if they relate directly to the production of commercial agricultural products on the subject contracted parcel or parcels or neighboring lands, including activities such as harvesting, processing, or shipping.*

In order to remain compatible with the Farmland Security Zone ~~Williamson Act~~ Contracts and in compliance with each ~~p~~Projects ~~s~~ conditional use permits, the owners/operators of each project would fully commit to and ensure successful implementation of the project's Agriculture Management Plan which is consistent with the principles of compatibility and performance standards outlined in Government Code section 51238.1. ~~Agricultural commercial operations would continue on no less than~~

~~90 percent of each permitted project site and at an intensity equivalent to the pre-project agricultural use of the project site (as historically provided by the site over the previous decade), for the entire life of each individual project, and agricultural production would provide an economic output similar to the historical economic output of each project's site (as measured over the previous decade). Each Agriculture Management Plan will also describe, in detail, how the owners/operators will fulfill this commitment and ensure the continued use of the respective site for the production of food or fiber to achieve agricultural production and a monetary result materially equivalent to current production levels as demonstrated over the past decade. Each SGF would be self-contained in terms of development and operation, and each SGF would not include elements that would facilitate expansion (i.e., over-sized infrastructure), nor does the operation of the SGFs pose harm or create issues of incompatibility with the operation of agricultural activities on adjacent properties.~~ Attachments A, B, and C (Soil & Water Analysis) to the Addendum provide evidence of limitations to onsite agricultural operations such that seasonal sheep grazing is a reasonably foreseeable agricultural use. These Attachments show that the Project sites are subject to severe limitations on water quality and availability and that soil quality is impaired by saline conditions. As a result, dry farm seasonal grazing of the sites is a reasonably foreseeable agricultural use for this site. The SGF applicant shall provide an Agriculture Management Plan (AMP), which will detail how the SGF owner/operator shall ensure the SGF continues this reasonably foreseeable agricultural use on the SGF site. To ensure this compatibility threshold is met, the AMP shall include evidence to determine reasonably foreseeable agricultural operations and describe how the owner/operator will ensure the site retains onsite agricultural activity sufficient to meet the compatibility requirements of Government Code Section 51238.1. The development and operation of the Projects is self-contained, would not encourage the conversion of neighboring agricultural parcels to a non-agricultural use, and does not pose harm or create issues of incompatibility with the operation of agricultural activities on adjacent properties.

> *(3) The use will not result in the significant removal of adjacent contracted land from agricultural or open-space use. In evaluating compatibility a board or council shall consider the impacts on noncontracted lands in the agricultural preserve or preserves.*

~~Development of non-agricultural land uses significantly raises the potential for development of adjacent land. Development of a solar generation facility, however, would not result in the removal of adjacent contracted land from agricultural use. The primary feature required to site a solar generation facility is the nearby availability of an adequately sized transmission line containing available capacity to carry the increased energy load. Because the projects would be self-contained and would not provide infrastructure that could be used by other power generation projects, the proposed SGFs will not induce additional solar generation facilities to be sited on adjacent parcels. In addition, solar generation facilities do not generate the development of new urban land uses adjacent to the solar site, because a solar facility would not provide services or products that would draw urban uses to be sited nearby.~~ The modified Projects would not result in the removal of adjacent contracted land from an agricultural use. The Projects would connect to existing electrical infrastructure and the proposed use will not induce additional solar generation facilities to site on adjacent parcels. In addition, solar generation facilities do not generate the development of new urban land uses adjacent to the site since a solar facility would not provide services or products that would draw urban uses to be sited nearby.

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

NO IMPACT. ~~No forest or timber land is present in the SGF sites, and no forest or timber land would be affected by the projects.~~ The MND determined that implementation of the Original Projects would result

in no impact under this criterion. The modified Projects would also have no impact as no forest or timberland is present or zoned for on the Project site, and no forest or timberland would be affected by the Project.

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

NO IMPACT. ~~As discussed above under Section 3.2.2c, no forest land is present in the project areas, and no forest land would be affected by the projects.~~ The MND determined that implementation of the Original Projects would result in no impact under this criterion. The modified Projects would also have no impact as no forest or timberland is present on the Project site, and no forest or timberland would be affected by the Project.

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

LESS THAN SIGNIFICANT IMPACT WITH MITIGATION. The MND determined that implementation of the Original Projects would result in a less than significant impact with mitigation under this criterion. Construction of the solar generation facility has the potential to affect the condition of soils on the SGF project sites and may impact post-project agricultural uses. Implementation of MMs AG-1 and AG-2 would ensure any project related impacts would remain less than significant.

References

California Department of Conservation. 2008. Kings County 2006-2008 Land Use Conversion. Kings County Important Farmland. Table A-11. California Department of Conservation. Division of Land Resource Protection. Farmland Mapping and Monitoring Program.

_____. 2010a. "Solar Power and the Williamson Act." Division of Land Resource Protection. May 13, 2010. http://www.conservation.ca.gov/dlrp/lca/Documents/WA_solar_paper_2010.pdf. Accessed September 27, 2010.

_____. 2010b. "The California Land Conservation (Williamson) Act: Status Report 2010." November 2010.

Kings County Community Development Agency (Kings County CDA). 2008. Zoning Ordinance. Last amended by Ordinance No. 269.65, October 28, 2008. Effective November 27.

_____. 2009. Kings County Agricultural Preserves 2009, Williamson Act & Farmland Security Zone Properties. Map. October 22.

_____. 2010. Land Use Element. 2035 Kings County General Plan. Adopted by Kings County Board of Supervisors. January 26, 2010.

Kings County Department of Agriculture Measurement Standards. 2010. Kings County 2010 Agricultural Crop Report.

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EXHIBIT NO. 3

Modifications to Section VI of Planning Commission Resolution No. 12-10 for CUP's No. 11-09, 12-01, and 12-02 pertaining to Williamson Act consistency findings

VI. SECTION 6: Consistency with the *California Land Conservation (Williamson) Act*

1. Utility-owned infrastructure associated with the Project would be compatible with the Farmland Security Zone Contract pursuant to Government Code section 51238(a)(1) since the utility-owned infrastructure would be an electric facility.

2. The project sites are located within an established Agricultural Preserve and consistent with the California Land Conservation Act of 1965 (Williamson Act). The project sites are also consistent with the Kings County Uniform Rules for Agricultural Preserves pursuant to the following findings of consistency:

   A. The parcels belonging to the project sites are currently under ~~both a Williamson Act Contract and a~~ two Farmland Security Zone Contracts as described below.

Parcel Number	Parcel Acreage	FSZ or WA	Contract No.	Effective Date
RE Mustang				
024-260-004	158.18	FSZ	FSZ00222	1/1/2002
024-260-011	160			1/1/2002
024-260-016	463.58	~~WA~~FSZ	~~01902~~ FSZ00222	1/1/1985
024-260-010	160	FSZ	FSZ00222	1/1/2002
024-270-001	71.25			1/1/2002
024-270-025	1			1/1/2002
024-270-024	0.5			1/1/2002
024-270-022	2.5			1/1/2002
024-270-023	1.25			1/1/2002
024-270-018	11.25			1/1/2002
024-270-010	26.25			1/1/2002
024-270-016	2.5			1/1/2002
024-270-015	2.5			1/1/2002
024-270-006	1.5			1/1/2002
024-270-007	1			1/1/2002
024-270-008	2.5			1/1/2002
024-270-004	5			1/1/2002
RE Orion				
024-260-010	160	FSZ	FSZ00222	1/1/2002
024-260-004	158.18	FSZ	FSZ00222	1/1/2002
024-260-018	158.65	FSZ	FSZ00221	1/1/2002
RE Kent South				
024-260-018	158.65	FSZ	FSZ00221	1/1/2002
026-010-041	198.60			1/1/2002

B. The proposed project is consistent with the *Uniform Rules for Agricultural Preserves in Kings County*. On March 27, 2012, the Kings County Board of Supervisors adopted Resolution No. 12-016 amending the County's Implementation Procedures for the California Land Conservation "Williamson" Act of 1965 by adding the following ~~paragraph~~ language to Section I under Uniform Rules for Agricultural Preserves: "Commercial solar photovoltaic system facilities that are designed primarily for the production of electrical energy for third party consumption are not compatible under the provisions of Government Code Section 51238(a)(1). For purposes of determining compatibility, a project must be determined consistent with the principles of compatibility under Section 51238.1(a)." Ordinarily, a solar project will be found compatible if the applicant provides a soil reclamation plan and financial assurances, and if the economic output of agricultural operations on the contracted parcel or parcels on which the project is located will be 90-percent of pre-project output. However, on November 26, 2013, the Board of Supervisors adopted Resolution No. 13-058, recognizing that due to reduced surface water deliveries, poor groundwater quality and severe groundwater overdrafts, impaired soil conditions, and regulatory burdens, circumstances exist on agricultural preserves located within that portion of Kings County south of State Route 198 and west of State Route 41 that limit the use of much of the land within that territory for agricultural activities, such that it is reasonably foreseeable that certain parcels located there that currently are used for more intensive agricultural activities will be used in the near future for less intensive uses, including dry farm seasonal grazing. Notwithstanding the present agricultural use of the land, solar farming as a concomitant use with dry farm seasonal grazing or a similar commercial agricultural activity may be deemed a compatible use within this region of the County if the applicant provides a soil reclamation plan and financial assurances, and if a finding can be made, based upon substantial evidence, and taking into account surface water availability, ground water quality and availability, and soil conditions, that the proposed concomitant commercial agricultural operation is a reasonably foreseeable use of the land.

~~This~~ Each project is proposing to perform one of the following three actions: ~~First,~~ (1) the applicant will attempt to cancel the portion of Farmland Security Zone Contract Nos. 221 and 222~~201~~ where the project is located, or ~~second,~~ (2) the applicant would convert the portion of Farmland Security Zone Contract Nos. 221 and 222 ~~#201~~ where the project is located into a "Solar Use Easement" as described under Government Code Section 50255.1 (Senate Bill 618), or (3) ~~The last option will only be pursued if the previous two options fail. If option three is implemented~~ the applicant would prepare and execute, for the ~~operational life of the project~~ life of the Contract, an Agriculture Management Plan that completely satisfies the Williamson Act principles of compatibility and the performance standards established in Government Code Section 51238.1. The Agriculture Management Plan would ~~require that the project maintain commercial agriculture production on a minimum of 90 percent of the project site and would maintain commercial agricultural production that would provide an economic output similar to the historical economic output of the project site.~~ provide site specific evidence that a foreseeable agricultural operation on the Project footprint is seasonal grazing due to evidence such as impaired soil quality, water quality, and

drainage on the Project site, as well as severe limitations to surface water allocations.

C. The applicants would perform one of the following actions: 1) the applicants shall file a FSZ and Williamson Act cancellation application package with the County and Department of Conservation on the 1,428.01 acres that make up the three project sites, initiating a separate review process from the County and the Director of the Department of Conservation, or 2) the applicants shall pursue rescinding the portion of the FSZ and Williamson Act contracts containing the project sites and enter into one or more "solar use easements" if the projects are qualified under the requirements of the Solar Use Easement provisions of sections 51190-51192.2 of the Government Code (Senate Bill 618). ~~Both of these courses of action will require approval from the California Department of Conservation and the Kings County Board of Supervisors. If the cancellation of the FSZ and Williamson Act contracts are not approved, and if the FSZ and Williamson Act contracts are not converted into one or more solar use easements, the applicants shall~~ or 3) the applicant shall conduct an on-site agricultural operation on each respective project site which is consistent with the principles of compatibility of California Government Code Section 51238.1 as described below. ~~In the event that the applicants are unable to obtain approval for the cancellation of the FSZ and Williamson Act contracts and the conversion into one or more solar use easements, then e~~If option 3 is pursued, each project applicant shall provide the County with an Agriculture Management Plan describing the commercial agricultural operations consistent with the principles of compatibility of California Government Code Section 51238.1 to be pursued on the respective project site prior to issuance of that project's building permit. Each Agriculture Management Plan will provide site specific evidence that a foreseeable agricultural operation on the Project footprint is seasonal grazing due to evidence such as impaired soil quality, water quality, and drainage on the Project site.~~explain in detail how the project applicant/operator will ensure the project site significantly provides an equivalent intensity of agricultural output as historically provided by the site over the last decade.~~

The following discussion addresses how the proposed solar site could satisfy the principles of compatibility of Government Code Section 51238.1:

Government Code Section 51238.1. (a) Uses approved on contracted lands shall be consistent with all of the following principles of compatibility:

(1) The use will not significantly compromise the long-term productive agricultural capability of the subject contracted parcel or parcels or on other contracted lands in agricultural preserves.

The projects do not include elements that would compromise the long-term soil quality of the site ~~(see Section 3.8, Hazards and Hazardous Materials)~~. Additionally, each project would be subject to ~~a project-specific Soil Reclamation Plan (MM AG-1)~~ MM AG-2 to return each project's ~~portion of the 1,428.01 acres~~ site to pre-project conditions after decommissioning of the site; Furthermore ~~and~~ the Projects sites are self-contained so as to not compromise long-term agricultural activity on adjacent lands. The use of herbicides in each respective project area

shall comply with regulations set forth by the Kings County Agriculture Department. ~~Each Agriculture Management Plan would ensure agricultural commercial operations are maintained on the respective site in a sustainable manner for the life of each project.~~

(2) The use will not significantly displace or impair current or reasonably foreseeable agricultural operations on the subject contracted parcel or parcels or on other contracted lands in agricultural preserves. Uses that significantly displace agricultural operations on the subject contracted parcel or parcels may be deemed compatible if they relate directly to the production of commercial agricultural products on the subject contracted parcel or parcels or neighboring lands, including activities such as harvesting, processing, or shipping.

In order to remain compatible with the Williamson Act and in compliance with each Project's conditional use permit, the owners/operators of each project would fully commit to and ensure successful implementation of the project's Agriculture Management Plan which is consistent with the principles of compatibility and performance standards outlined in Government Code section 51238.1. Attachments A, B, and C (Soil & Water Analysis) to the Addendum provide evidence of limitations to onsite agricultural operations such that seasonal sheep grazing is a reasonably foreseeable agricultural use. The Attachment shows that the Project sites are subject to severe limitations on water availability and that soil quality is impaired by saline conditions. As a result, dry farm seasonal grazing of the sites is a reasonably foreseeable agricultural use for this site. Each SGF applicant shall provide an Agriculture Management Plan (AMP) which will detail how the SGF owner/operator shall ensure the SGF continues this reasonably foreseeable agricultural use on the SGF site. To ensure this compatibility threshold is met, the AMP shall include evidence to determine reasonably foreseeable agricultural operations and describe how the owner/operator will ensure the site retains onsite agricultural activity sufficient to meet the compatibility requirements of Government Code Section 51238.1. The development and operation of the Project is self-contained, would not encourage the conversion of neighboring agricultural parcels to a non-agricultural use, and does not pose harm or create issues of incompatibility with the operation of agricultural activities on adjacent properties. ~~Agricultural commercial operations would continue on no less than 90 percent of each permitted project site and at an intensity equivalent to the pre-project agricultural use of the project site (as historically provided by the site over the previous decade), for the entire life of each individual project, and agricultural production would provide an economic output similar to the historical economic output of each project's site (as measured over the previous decade). Each Agriculture Management Plan will also describe, in detail, how the owners/operators will fulfill this commitment and ensure the continued use of the respective site for the production of food or fiber to achieve agricultural production and a monetary result materially equivalent to current production levels as demonstrated over the past decade. Each SGF would be self-contained in terms of development and operation, and each SGF would not include elements that would facilitate expansion (i.e., over-sized infrastructure), nor does the operation of the~~

~~SGFs pose harm or create issues of incompatibility with the operation of agricultural activities on adjacent properties.~~

(3) The use will not result in the significant removal of adjacent contracted land from agricultural or open-space use. In evaluating compatibility a board or council shall consider the impacts on noncontracted lands in the agricultural preserve or preserves.

The modified Projects would not result in the removal of adjacent contracted land from an agricultural use. The Projects would connect to existing electrical infrastructure and the proposed use will not induce additional solar generation facilities to site on adjacent parcels. In addition, solar generation facilities do not generate the development of new urban land uses adjacent to the site since a solar facility would not provide services or products that would draw urban uses to be sited nearby. ~~Development of non-agricultural land uses significantly raises the potential for development of adjacent land. Development of a solar generation facility, however, would not result in the removal of adjacent contracted land from agricultural use. The primary feature required to site a solar generation facility is the nearby availability of an adequately sized transmission line containing available capacity to carry the increased energy load. Because the projects would be self-contained and would not provide infrastructure that could be used by other power generation projects, the proposed SGFs will not induce additional solar generation facilities to be sited on adjacent parcels. In addition, solar generation facilities do not generate the development of new urban land uses adjacent to the solar site, because a solar facility would not provide services or products that would draw urban uses to be sited nearby.~~

4.0 Mitigation Monitoring and Reporting Plan

The purpose of this Mitigation Monitoring and Reporting Plan (MMRP) is to ensure effective implementation of the mitigation measures required by the Kings County Community Development Agency and that RE Mustang LLC, RE Kent South LLC, and RE Orion LLC and their subsidiaries (applicants) have agreed to implement as part of the RE Mustang, RE Kent South, and RE Orion Solar Generation Facility projects. The applicants will perform the measures outlined in Table 4-1. The MMRP table includes the:

- Mitigation measures that the applicant is required to implement as part of the project;
- California Environmental Quality Act (CEQA) checklist questions to which the mitigation measures apply;
- Responsibility for compliance; and
- Timing for implementation of the mitigation measures.

Table 4-1 Mitigation Monitoring and Reporting Plan for the RE Mustang, RE Kent South, and RE Orion Solar Generation Facility Projects

CEQA Checklist Questions	Mitigation Measures (MMs)	Responsibility for Compliance	Timing
3.1 Aesthetics			
	No applicable mitigation measures.		
3.2 Agriculture and Forest Resources			
a. *Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?*	MM AG-1: Soil Reclamation Plan. Prior to the issuance of building permits for each SGF project, each applicant shall submit a Soil Reclamation Plan for review and approval by Kings County Community Development Agency staff. The Soil Reclamation Plan for each permitted SGF site shall contain an analysis of pre-project baseline soil conditions, and shall contain specific measures to restore the soil to its pre-project condition, including removal of all non-utility-owned fixtures, equipment, non-agricultural roads, and restoration of compacted soil. Additionally, each Soil Reclamation Plan shall discuss the retention of any surface water	Applicants, Kings County Community Development Division	Plan submittal prior to construction with plan performance within 12 months of CUP expiration. Prior to issuance of building permits.

Table 4-1 Mitigation Monitoring and Reporting Plan for the RE Mustang, RE Kent South, and RE Orion Solar Generation Facility Projects

CEQA Checklist Questions	Mitigation Measures (MMs)	Responsibility for Compliance	Timing
	rights. Reclamation of each permitted SGF project site shall commence within two months of the expiration of the use permit and be completed within 18 months from the date the facility ceases to operate. MM AG-2: Financial Assurance. Prior to the issuance of building permits for each SGF project, each applicant shall post a performance bond or similar instrument to ensure completion of the activities under each Soil Reclamation Plan. Financial assurances for each Soil Reclamation Plan will be reviewed every 5 years by the Kings County Community Development Agency to determine if finances are sufficient to perform reclamation of the project. The assurance for each Soil Reclamation Plan must be adjusted if, during the five year review, finances are determined to be insufficient to perform reclamation of the project. MM AG-3: Off-site Agricultural Mitigation. For each SGF project, if the respective applicant 1) does not continue ~~an intensive agricultural operation~~ a reasonably foreseeable agricultural use on ~~at least 90 percent of~~ the project site ~~at an intensity equivalent to the pre-project agricultural use (as historically provided by the site over the previous decade) of the project site~~ for the entire life of the project, ~~and if the applicant~~ or 2) is successful in cancelling the ~~Williamson Act and/or~~ Farmland Security Zone contracts, ~~and/~~or 3) is successful in entering into one or more "solar use easements" (in accordance with the Solar Use Easement provisions of sections 51190-51192.2 of the Government Code), the respective applicant shall then provide written evidence of funding and/or purchase of agricultural mitigation land in Kings County (which will be managed and maintained by an appropriate entity) for the life of the respective project to mitigate the loss of Farmland of Statewide Importance at a ratio of 1:1. Every acre of agricultural land removed from production would be mitigated by the respective applicant. The agricultural land preserved shall be of equal or greater quality as defined by the California Department of Conservation Farmland Mapping and Monitoring Program (i.e., if Farmland of Statewide Importance is converted to a solar use then		Prior to commencement of operations for each respective SGF project.

Table 4-1 Mitigation Monitoring and Reporting Plan for the RE Mustang, RE Kent South, and RE Orion Solar Generation Facility Projects

CEQA Checklist Questions	Mitigation Measures (MMs)	Responsibility for Compliance	Timing
	the agricultural land preserved must not be in a classification indicating a lower quality than Farmland of Statewide Importance). Should the mitigation occur within a preferred Kings County conservation area for agriculture, including but not limited to Zones defined as "AX" or the Farmland Security Zone Expansion Area as shown on Figure RC-14 of the Resource Conservation Element of the Kings County 2035 General Plan, off-site mitigation shall be reduced by 50 percent to 0.5:1.		
b. Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?	MM AG-1: Soil Reclamation Plan. MM AG-2: Financial Assurance.	Applicants, Kings County Community Development Division	Plan submittal prior to construction with plan performance within 12 months of CUP expiration. Prior to issuance of building permits.
c. Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220 (g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined in Government Code section 51104(g))?	No applicable mitigation measures.		
d. Would the project result in the loss of forest land or conversion of forest land to non-forest use?	No applicable mitigation measures.		

Table 4-1 Mitigation Monitoring and Reporting Plan for the RE Mustang, RE Kent South, and RE Orion Solar Generation Facility Projects

CEQA Checklist Questions	Mitigation Measures (MMs)	Responsibility for Compliance	Timing
e. Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use?	MM AG-1: Soil Reclamation Plan. MM AG-2: Financial Assurance.	Applicants, Kings County Community Development Division	Plan submittal prior to construction with plan performance within 12 months of CUP expiration. Prior to issuance of building permits.
3.3 Air Quality			
	No applicable mitigation measures.		

Table 4-1 Mitigation Monitoring and Reporting Plan for the RE Mustang, RE Kent South, and RE Orion Solar Generation Facility Projects

CEQA Checklist Questions	Mitigation Measures (MMs)	Responsibility for Compliance	Timing
3.4 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 Game or U.S. Fish and Wildlife Service?*	MM BIO-1: Pre-construction Wildlife and Plant Surveys. For each SGF project site, a qualified biologist will perform pre-construction surveys for nesting birds, ~~and~~ other common and special status wildlife, and special status plants in suitable habitats (including the irrigation channels and alkaline wetland) in and adjacent to (i.e., within 250 feet of) the SGF project sites. Pre-construction surveys for Swainson's hawks shall extend 0.5 miles from the project sites boundary. Pre-construction wildlife clearance surveys will be conducted no more than 30 days in advance of construction (i.e., initial site clearing or other activity that removes vegetation or disrupts soils). If special status wildlife species are identified on site during pre-construction wildlife surveys, the respective applicant will implement MM BIO-2 ~~(nesting bird avoidance measures).~~ to BIO-7, depending on the species. If special status plant species are identified in a location that would result in impacts from Project activity, the respective applicant shall establish a 50 foot buffer or apply appropriate avoidance protective, or relocation measures as determined by the qualified biologist in consultation with the CDFG. ~~If species avoidance measures cannot be applied, the respective applicant shall work in concert with the CDFG to determine the appropriate management requirements for the species.~~ MM BIO-2: Nesting Bird Avoidance Measures. For each SGF project site, construction activities that cannot be conducted without undertaking clearing or grading or placing equipment or personnel in sensitive wildlife habitats, including riparian areas, woodlands, and jurisdictional drainages, will be timed to avoid nesting birds. During the avian nesting season, which generally occurs from February 1 to September 15, where pre-construction surveys identify active nests of protected bird species, exclusion areas will be marked with stakes, and colored flagging tape will be maintained around all active nests until birds have fledged. Buffers from nesting birds (non-raptor) shall be a minimum of 250 feet. If an	Applicants, Kings County Community Development Division, CDFG	Prior to construction (30 days); during construction.

Table 4-1 Mitigation Monitoring and Reporting Plan for the RE Mustang, RE Kent South, and RE Orion Solar Generation Facility Projects

CEQA Checklist Questions	Mitigation Measures (MMs)	Responsibility for Compliance	Timing
	active Swainson's hawk nest(s) is found within 0.5 miles of the project sites, or if any other active special status species raptor nest is found within 500 feet of the project sites, the respective project applicant shall apply appropriate avoidance/protective measures as determined by a qualified biologist in consultation with the CDFG and the Kings County Development Agency. MM BIO-3: Pre-construction Take-Avoidance Surveys for Burrowing Owls. For each SGF project site, a qualified biologist will conduct pre-construction take-avoidance surveys for burrowing owls in all potential habitats throughout the project area; thus, any action that disrupts surface soils (e.g., clearing and grubbing, excavation, and compaction for temporary staging areas or permanent construction sites) will be subject to pre-construction surveys. Surveys will be undertaken not more than 14 days prior to ground-disturbing activity to ensure avoidance of burrowing owls during construction, as recommended by the CDFG's 2012 *Staff Report on Burrowing Owl Mitigation*. All areas within 150 meters of the project area will be surveyed where site access and visibility allows. MM BIO-4: Burrowing Owl Impact Avoidance. For each SGF project site, if pre-construction take-avoidance surveys reveal the presence of any active burrowing owl nests during breeding season, then the occupied burrows will be flagged. If the occupied nests are determined to have resident owls that have begun egg laying or incubation, or juveniles that are incapable of independent survival, the respective project applicant will avoid the burrows by creating a buffer between the burrows and the construction area. Buffer zones will range from 50 to 500 meters, depending on the type of construction disturbance, and will be determined by a qualified biologist in consultation with the CDFG and the Kings County Community Development Agency, as recommended by the CDFG's CDFG *Staff Report on Burrowing Owl Mitigation*. If occupied nests are identified outside the breeding season or if a biologist determines during the breeding season that either the resident owls have not yet begun egg laying or incubation or that		

Table 4-1 Mitigation Monitoring and Reporting Plan for the RE Mustang, RE Kent South, and RE Orion Solar Generation Facility Projects

CEQA Checklist Questions	Mitigation Measures (MMs)	Responsibility for Compliance	Timing
	the juveniles are foraging independently and capable of independent survival, then the respective project applicant may passively relocate the resident burrowing owls. Passive relocation of the owls, if required, will occur prior to commencing construction and in accordance with Appendix E (Example Components for Burrowing Owl Artificial Burrow and Exclusion Plans) of the CDFG's 2012 *Staff Report on Burrowing Owl Mitigation*. Owls would be excluded from any burrows within 50 meters (160 feet) of the direct impact zone by installing one-way doors in burrow entrances. One-way doors (e.g., modified dryer vents) would be left in place for 48 hours to ensure that owls have left the burrow before construction begins. If surveys reveal, either within 50 meters (160 feet) of the direct impact zone in the non-breeding season or within 75 meters (250 feet) of the direct impact zone in the breeding season, any unoccupied burrows, crevices, or holes made by other animals, which could potentially provide habitat to burrowing owls, then access to these potential burrows would be barred either through installation of one-way doors or through collapsing of the burrows prior to construction. After a thorough inspection, a qualified biologist will determine whether the potential burrow can be safely collapsed or whether it may contain another resident species that requires relocation. By blocking burrowing owls' access to these burrows, the respective project applicant will ensure that no un-surveyed burrowing owls are adversely impacted by the projects. MM BIO-5: Burrowing Owl On- or Off-Site Mitigation. For each SGF project site, for each occupied burrow rendered biologically unsuitable during breeding season by construction and operation of the projects, the project proponents will provide two natural or artificial burrows outside the 50-meter (160-foot) buffer zone. Suitable off-site locations for artificial burrows will be identified using the 13 best practice guidance points recommended in the CDFG's 2012 *Staff Report on Burrowing Owl Mitigation* (pp. 11–12). The project area will be monitored daily for one week to confirm that the owls are using their new, alternative burrows		

Table 4-1 Mitigation Monitoring and Reporting Plan for the RE Mustang, RE Kent South, and RE Orion Solar Generation Facility Projects

CEQA Checklist Questions	Mitigation Measures (MMs)	Responsibility for Compliance	Timing
	before construction begins. During construction, sections of flexible plastic pipe will be inserted into occupied tunnels to maintain an escape route for any animals inside the burrows. If suitable nesting habitat is determined to be available on site, compensatory measures may be required to ensure that no undue impacts on nesting owl habitat occurs. Compensatory mitigation may be required as a precursor to granting authorization to evict owls during the breeding season from construction sites. The CDFG's 2012 *Staff Report on Burrowing Owl Mitigation* states that compensatory mitigation land should be determined on a case-by-case basis to account for the "wide variation in natal area, home range, foraging area, and other factors influencing burrowing owls and burrowing owl population persistence in a particular area" (page 12). Accordingly, compensatory mitigation shall be determined by a qualified biologist, in consultation with CDFG and the lead agency. This mitigation will adhere to the CDFG's recommendations that the ratio of off-site mitigation required be based on the habitat attributes of the impacted and conserved land, as determined by type and structure of habitat being impacted or conserved; density of burrowing owls in impacted and conserved habitat; and significance of impacted or conserved habitat to the species range-wide (CDFG 2012). MM BIO-6: San Joaquin Kit Fox Protection Measures. For each SGF project site, prior to and during any ground-disturbing activities occurring within the SGF area, each respective applicant will adopt and include the following applicable "Standardized recommendations for protection of the San Joaquin kit fox prior to or during ground disturbance" (USFWS 1999) into the project construction plan: 1. Project-related vehicles will observe a 20-mile-per-hour (mph) speed limit in all project areas, except on county roads and State and federal highways; this is particularly important at night, when kit foxes are most active. To the greatest extent practicable, nighttime construction will be minimized.		

Table 4-1 Mitigation Monitoring and Reporting Plan for the RE Mustang, RE Kent South, and RE Orion Solar Generation Facility Projects

CEQA Checklist Questions	Mitigation Measures (MMs)	Responsibility for Compliance	Timing
	However, if nighttime construction does occur, then the speed limit will be reduced to 10 mph. Off-road traffic outside of designated project areas will be prohibited. 2. To prevent inadvertent entrapment of kit foxes during the construction phase of the projects, all excavated, steep-walled holes or trenches more than 2 feet deep will 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. Before such holes or trenches are filled, they will be thoroughly inspected for trapped animals. If at any time a trapped or injured kit fox is discovered, the procedures under numbers 8, 11, 12, and 13 of this section will be followed. 3. Kit foxes are attracted to den-like structures such as pipes and may enter stored pipe and become trapped or injured. All construction pipes, culverts, or similar structures with a diameter of 4 inches or greater that are stored at the construction sites for one or more overnight periods will be thoroughly inspected for kit foxes before the pipe is subsequently buried, capped, or otherwise used or moved in any way. If a kit fox is discovered inside a pipe, then that section of pipe will not be moved until the USFWS has been consulted. If necessary, and under the direct supervision of the biologist, the pipe may be moved once to remove it from the path of construction activity until the fox has escaped. 4. All food-related trash items such as wrappers, cans, bottles, and food scraps will be disposed of in securely closed containers and removed at least once a week from the construction/project sites. 5. No firearms will be allowed on the project sites, except for on-site security purposes. 6. To prevent harassment or mortality of kit foxes or destruction of dens by dogs or cats, no pets will be permitted on project sites. 7. The use of rodenticides and herbicides in project areas will be		

Table 4-1 Mitigation Monitoring and Reporting Plan for the RE Mustang, RE Kent South, and RE Orion Solar Generation Facility Projects

CEQA Checklist Questions	Mitigation Measures (MMs)	Responsibility for Compliance	Timing
	restricted. This is necessary to prevent primary or secondary poisoning of kit foxes and the depletion of prey populations on which they depend. All uses of such compounds will observe label and other restrictions mandated by the U.S. Environmental Protection Agency, California Department of Food and Agriculture, and other State and federal legislation, as well as additional project-related restrictions deemed necessary by the USFWS. If rodent control must be conducted, zinc phosphide will be used because of its proven lower risk to kit foxes. 8. The applicants will appoint a representative who will be the contact source for any employee or contractor who might inadvertently kill or injure a kit fox or who finds a dead, injured, or entrapped individual of the species. This representative will be identified during the employee education program. The representative's name and telephone number will be provided to the USFWS. 9. An employee education program will be conducted for each project. This program will consist of a brief presentation by persons knowledgeable in kit fox biology and legislative protection to explain endangered species concerns to contractors, their employees, and agency personnel involved in the projects. The program will include the following: a description of the San Joaquin kit fox and its habitat needs; a report of the occurrence of kit fox in the project area; an explanation of the status of the species and its protection under the ESA; and a list of measures being taken to reduce impacts on the species during construction and implementation. A fact sheet conveying this information will be prepared for distribution to the contractors, their employees, agency personnel involved in the projects, and anyone else who may enter the project sites. 10. Upon completion of the projects, all areas subject to temporary ground disturbances, including storage and staging areas, temporary roads, pipeline corridors, etc., will be		

Table 4-1 Mitigation Monitoring and Reporting Plan for the RE Mustang, RE Kent South, and RE Orion Solar Generation Facility Projects

CEQA Checklist Questions	Mitigation Measures (MMs)	Responsibility for Compliance	Timing
	recontoured, if necessary, and revegetated to promote restoration of the area to pre-project conditions or to promote grazing conditions, if this option is being implemented (see Section 1.0 for more details). An area subject to "temporary" disturbance means any area that is disturbed during the project but which, after completion, will not be subject to further disturbance and has the potential to be revegetated. Appropriate methods and plant species used to revegetate such areas should be determined on a site-specific basis in consultation with the USFWS, CDFG, and revegetation experts. 11. In the case of trapped animals, escape ramps or structures will be installed immediately to allow the animal(s) to escape, or the USFWS will be contacted for advice. 12. Any contractor, employee, or agency personnel who inadvertently kills or injures a San Joaquin kit fox will immediately report the incident to their representative. This representative will contact the CDFG immediately in the case of a dead, injured, or entrapped kit fox, as well as notify the Kings County Community Development Agency. The CDFG contact for immediate assistance is State Dispatch at (916) 445-0045. The representative will also contact the local warden or CDFG wildlife biologist Paul Hoffman at (530) 934-9309. The USFWS should be contacted at the numbers below. 13. The Sacramento Fish and Wildlife Office and CDFG will be notified in writing within three working days of the accidental death of or injury to a San Joaquin kit fox during project-related activities. Notification must include the date, time, and location of the incident or of the finding of a dead or injured animal and any other pertinent information. The USFWS contact is the Chief of the Division of Endangered Species, at the addresses and telephone numbers below. The CDFG contact is Paul Hoffman at 1701 Nimbus Road, Suite A, Rancho Cordova, California 95670, (530) 934-9309.		

Table 4-1 Mitigation Monitoring and Reporting Plan for the RE Mustang, RE Kent South, and RE Orion Solar Generation Facility Projects

CEQA Checklist Questions	Mitigation Measures (MMs)	Responsibility for Compliance	Timing
	14. New sightings of kit fox shall be reported to the California Natural Diversity Database (CNDDB). A copy of the reporting form and a topographic map clearly marked with the location of where the kit fox was observed should also be provided to the USFWS at the address below. U.S. Fish and Wildlife Service Endangered Species Division 2800 Cottage Way, Suite W2605 Sacramento, California 95825-1846 (916) 414-6620 or (916) 414-6600 MM BIO-7: Protection of Western Spadefoot and Western Pond Turtle. For each SGF project site, if suitable habitat for Western Spadefoot and Western Pond Turtle is identified during the preconstruction surveys, ~~construction activities occur during the wet season,~~ temporary silt fencing will be installed and maintained throughout construction around the wetland and suitable irrigation drainages to prevent amphibians and turtles from moving into the work areas. The location of the fencing will be determined by the biological monitor and the construction supervisor. Plastic monofilament netting (erosion control matting) or similar material will not be used for erosion control or other purposes in the construction area proximate to the wetland and irrigation drainages to prevent the possibility that amphibians and turtles could become entangled or trapped. Examples of acceptable substitutes include coconut coir matting or hydro-seeding.		
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	No applicable mitigation measures.		
c. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal	No applicable mitigation measures.		

Table 4-1 Mitigation Monitoring and Reporting Plan for the RE Mustang, RE Kent South, and RE Orion Solar Generation Facility Projects

CEQA Checklist Questions	Mitigation Measures (MMs)	Responsibility for Compliance	Timing
pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?			
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	MM BIO-1: Pre-construction Wildlife Surveys. MM BIO-2: Nesting Bird Avoidance Measures. MM BIO-3: Pre-construction Take-Avoidance Surveys for Burrowing Owls. MM BIO-4: Burrowing Owl Impact Avoidance. MM BIO-5: Burrowing Owl On- or Off-Site Mitigation. MM BIO-6: San Joaquin Kit Fox Protection Measures. MM BIO-7: Protection of Western Spadefoot.	Applicants, Kings County Community Development Division, CDFG	Prior to construction (30 days); during construction.
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	No applicable mitigation measures.		
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?	No applicable mitigation measures.		
3.5 Cultural Resources			
a. Would the project cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	MM CR-1: Preparation of a Construction Monitoring Plan. Prior to construction, each project applicant will retain the services of a cultural resources consultant who meets the Professional Qualifications Standards established by the U.S. Secretary of the Interior (per the Standards and Guidelines for Archeology and Historic Preservation, 48 FR 44716). The consultant or consultants will prepare a Construction Monitoring and Unanticipated Cultural Resources Discovery Plan for each project site, to be implemented if an unanticipated discovery is made. Each plan will include the following provisions: 1. If subsurface historical or archeological resources are encountered during construction, construction activities at the	Applicants	Prior to and during construction.

Table 4-1 Mitigation Monitoring and Reporting Plan for the RE Mustang, RE Kent South, and RE Orion Solar Generation Facility Projects

CEQA Checklist Questions	Mitigation Measures (MMs)	Responsibility for Compliance	Timing
	respective SGF site will cease in the immediate vicinity of the find, and a qualified archaeologist will be retained to evaluate the significance of the resources. 2. If human remains are encountered during construction of the respective SGF site, construction activities at the site will cease in the immediate vicinity of the discovered remains, and the County coroner and a qualified archaeologist will be notified according to the provisions of California Public Resources Code Sections 5097.98 and 5097.99. 3. If paleontological resources are discovered during excavation activities at the respective SGF site, work in the immediate vicinity of the find will cease, and a qualified professional paleontologist will be retained to evaluate the significance of the resources. At a minimum, each Construction Monitoring and Unanticipated Cultural Resources Discovery Plan will detail the following elements: • Worker and supervisor training in the identification of cultural resources that could be found in the respective project area, and the implications of disturbing and collecting cultural resources pursuant to the Archaeological Resources Protection Act of 1979. Training will include guidance in identifying signs that cultural resources may be present and a notification protocol to ensure that construction can be immediately halted in any affected areas and that appropriate (applicant and other) personnel can be quickly notified. • Worker and supervisor response procedures to be followed in the event of an unanticipated discovery, including appropriate points of contact for professionals qualified to make decisions about the potential significance of any find. If subsurface cultural (historical, archeological, paleontological) resources are encountered during construction, construction activities at the respective SGF site will cease in the immediate vicinity of the find, and a qualified archaeologist will be retained to evaluate the significance of the resource.		

Table 4-1 Mitigation Monitoring and Reporting Plan for the RE Mustang, RE Kent South, and RE Orion Solar Generation Facility Projects

CEQA Checklist Questions	Mitigation Measures (MMs)	Responsibility for Compliance	Timing
	• Identities of persons authorized to stop or redirect work that could affect the discovery and their on-call contact information. • Procedures for monitoring construction activities in archaeologically sensitive areas. • A minimum radius around any discovery within which work will be halted until the significance of the resource has been evaluated and mitigation implemented as appropriate. • Procedures for identifying and evaluating the historical significance of a discovery. • Procedures for consulting Native Americans when identifying and evaluating the significance of discoveries involving Native American cultural materials. • Procedures to be followed for treatment of discovered human remains in accordance with current State law and protocol developed in consultation with Native Americans. If human remains are encountered during construction of the respective SGF, construction activities at the site will cease in the immediate vicinity of the discovered remains and the County coroner and a qualified archaeologist will be notified according to the provisions of California Public Resources Code Sections 5097.98 and 5097.99. MM CR-2: Evaluate Unavoidable Cultural Resources. Cultural resources discovered during construction of any of the three project sites that cannot be avoided and that have not been evaluated to determine eligibility for listing in the California Register of Historic Resources (CRHR) will be evaluated to determine their historical significance. Evaluation studies will be conducted and documented according to applicable laws, regulations, guidelines, and professional standards. If a site proves to be a unique resource eligible for listing in the CRHR and unavoidable by construction activities, appropriate procedures such as data recovery excavations will be undertaken to mitigate the impact on the resource, and the resource will be submitted to the appropriate curation repository, pursuant to the requirements of CEQA		

Table 4-1 Mitigation Monitoring and Reporting Plan for the RE Mustang, RE Kent South, and RE Orion Solar Generation Facility Projects

CEQA Checklist Questions	Mitigation Measures (MMs)	Responsibility for Compliance	Timing
	Guidelines Section 15064.5(f).		
b. Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	MM CR-1: Preparation of a Construction Monitoring Plan. MM CR-2: Evaluate Unavoidable Cultural Resources.	Applicants	Prior to and during construction.
c. Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	MM CR-1: Preparation of a Construction Monitoring Plan. MM CR-3: Paleontological Resources Consultation. If paleontological resources are discovered during excavation activities at any of the three SGF project sites, work in the immediate vicinity of the find will cease, and a qualified professional paleontologist will be retained to evaluate the significance of the resource. If determined to be significant, the resource will be excavated and submitted to the appropriate curation repository.	Applicants	Prior to and during construction.
d. Would the project disturb any human remains, including those interred outside of formal cemeteries?	MM CR-1: Preparation of a Construction Monitoring Plan. MM CR-4: Inadvertent Discovery of Human Remains. Any human remains discovered during project activities in California will be protected in accordance with current State law, specifically Section 7050.5 of the California Health and Safety Code, Section 5097.98 of the California Public Resources Code, and Assembly Bill 2641. In the event that human remains are recovered on private land, the landholder will have the right to designate the repository for the remains if they are determined not to be Native American or if their family affiliation cannot be determined.	Applicants	Prior to and during construction.
3.6 Geology, Soils, and Mineral Resources			
	No applicable mitigation measures.		
3.7 Greenhouse Gas Emissions			
	No applicable mitigation measures.		

Table 4-1 Mitigation Monitoring and Reporting Plan for the RE Mustang, RE Kent South, and RE Orion Solar Generation Facility Projects

CEQA Checklist Questions	Mitigation Measures (MMs)	Responsibility for Compliance	Timing
3.8 Hazards and Hazardous Materials			
	No applicable mitigation measures.		
3.9 Hydrology and Water Quality			
	No applicable mitigation measures.		
3.10 Land Use and Planning			
	No applicable mitigation measures.		
3.11 Noise			
	No applicable mitigation measures.		
3.12 Population and Housing			
	No applicable mitigation measures.		
3.13 Public Services, Utilities and Service Systems			
	No applicable mitigation measures.		
3.14 Recreation			
	No applicable mitigation measures.		

Table 4-1 Mitigation Monitoring and Reporting Plan for the RE Mustang, RE Kent South, and RE Orion Solar Generation Facility Projects

CEQA Checklist Questions	Mitigation Measures (MMs)	Responsibility for Compliance	Timing
3.15 Transportation/Traffic			
a. Would the project cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?	MM TT-1: Traffic Measures. Each SGF project applicant will consult with the Kings County Public Works Department prior to initiation of construction activities that may affect area traffic (such as equipment and supply delivery necessitating lane closures, trenching, etc.) and will implement appropriate traffic controls in accordance with the California Vehicle Code and other state and local requirements to avoid or minimize impacts on traffic. Traffic measures that will be implemented during construction activities include the following: 1. Construction traffic will not block emergency equipment routes. 2. Construction activities will be designed to minimize work on, and use of, local streets. 3. Construction will comply with San Joaquin Valley Air Pollution Control District standards for unpaved roads, which include a requirement to keep vehicle speeds below 15 miles per hour and to have fewer than 150 trips per day per unpaved road.	Applicants, Kings County Community Development Division	Prior to and during construction.
b. Would the project exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	MM TT-1: Traffic Measures.	Applicants, Kings County Community Development Division	Prior to and during construction.
c. Would the project result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	No applicable mitigation measures.		
d. Would the project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	No applicable mitigation measures.		

Table 4-1 Mitigation Monitoring and Reporting Plan for the RE Mustang, RE Kent South, and RE Orion Solar Generation Facility Projects

CEQA Checklist Questions	Mitigation Measures (MMs)	Responsibility for Compliance	Timing
e. Would the project result in inadequate emergency access?	MM TT-1: Traffic Measures.	Applicants, Kings County Community Development Division	Prior to and during construction.
f. Would the project result in inadequate parking capacity?	No applicable mitigation measures.		
g. Would the project conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	No applicable mitigation measures.		
3.16 Mandatory Findings of Significance			
	No applicable mitigation measures other than those described in preceding sections.		