STANISLAUS COUNTY PLANNING COMMISSION

April 18, 2013

STAFF REPORT

USE PERMIT APPLICATION NO. 2011-11
BELTRAN RANCH SOLAR FACILITY
(STATE CLEARINGHOUSE NO. 2011112013)

REQUEST: TO ESTABLISH A 140 MEGAWATT SOLAR PHOTOVOLTAIC FACILITY ON 606± ACRES OF A 1,720± ACRE SITE.

APPLICATION INFORMATION

Applicant:	Alternative Energy Group, Inc.
Property Owner:	Beltran
Agent:	MVE Civil Solutions
Location:	Davis Road, west of I-5, southwest of the Fink Road Landfill, in the Newman/Crows Landing area
Section, Township, Range:	35/36-6-7, 30/31-6-8, 1-7-7
Supervisorial District:	Five (Supervisor DeMartini)
Assessor's Parcel:	025-017-019; 026-012-003; and 027-017-063, 077, 080, 082
Referrals:	See Exhibit "M" Environmental Review Referrals
Area of Parcel(s):	1,720± acres
Water Supply:	Private Well
Sewage Disposal:	Septic System
Existing Zoning:	A-2-40/160 (General Agriculture)
General Plan Designation:	Agriculture
Sphere of Influence:	Not Applicable
Community Plan Designation:	Not Applicable
Williamson Act Contract No.:	76-2170 (APN: 027-017-082)
Environmental Review:	Mitigated Negative Declaration

RECOMMENDATION

Staff recommends the Planning Commission approve this request based on the discussion below and on the whole of the record provided. If the Planning Commission decides to approve the project, "Exhibit A" provides an overview of the required findings for project approval.

PROJECT DESCRIPTION

This is a request to establish a 140 megawatt (MW) solar photovoltaic (PV) facility on 606± acres of a 1,720± acre site. Additional site improvements include: all weather fire access roads; maintenance building; security fencing; construction staging area; office trailer; sheds; and a substation. A 30 foot high overhead power line will be added to the existing above ground power lines to connect the solar facility to the on-site substation. A transmission interconnect to PG&E's

existing Salado-Newman transmission line will also be added. Use Permit 2010-09 – Scatec Westside Solar Ranch was approved on November 4, 2010, to occupy 382 acres of the 1,720± acre site. If this project is approved and both projects are constructed, 988± acres of the 1,720± acre site will be devoted to solar facility development. (See Exhibit B-5 – *Maps [Site Plan]*.)

This project will be developed in three (3) phases:

Phase I	Solar Site 1	112± acres	26 MW
Phase II	Solar Site 2	168± acres	40 MW
Phase III	Solar Site 3	326± acres	74 MW
Total		**606± acres**	**140 MW**

The basic solar array, or "block," is approximately 1.65 acres in size and is comprised of 20 rows, each containing 48 panels mounted within a structural frame, and supported by 13 steel columns per row. Each block of panels has a central driving motor which continuously moves the rows of panels following the sun east to west to capture maximum solar radiation. The energy of four (4) blocks is delivered to an inverter/transformer, and from the inverter to the sub-station, and then to the PG&E grid. Every block is easily accessible from the network of gravel roads for maintenance and Fire Department access. At completion, there will be approximately 300 arrays containing nearly 280,000 PV panels, 75 inverters, and one substation delivering approximately 140 MW to the PG&E grid at peak performance.

The solar panels are dark in color and non-reflective. The PV panels are low-profile when horizontal resting approximately four (4) feet from the ground. The highest end of the tilted panel stands less than 10 feet above ground level. The rows of panels will be spaced based on a panel tilt angle to prevent them from shading one another. The installation of each increment of 25 MW will take approximately six (6) to eight (8) months. The entire project of 140 MW will take roughly three (3) years to complete once construction is initiated. Additional information can be found in the Applicant's Project Description. (See Exhibit D – Applicant's Project Description.)

Solar Facilities are unique in that actual construction of a facility is dependent on the finalization of Power Purchase Agreements and land lease agreements before construction can begin. Condition of Approval No. 1 recognizes the unique timing of solar projects and allows development to occur anytime within five (5) years of Use Permit Approval. (See Exhibit C - *Conditions of Approval*.)

SITE DESCRIPTION

The subject property is off Davis Road, west of Interstate 5, southwest of the Fink Road Landfill, in the Newman/Crows Landing area. The project site is comprised of six (6) Assessor parcels with a combined acreage of 1,720± acres.

The project site is currently planted in dry crops, grazing land, and almonds and walnuts. Existing structures within the project area include a small storage shed at the East edge of Solar Site III which will remain and a storage building within Solar Site I which will be removed during construction. (See Exhibit B - *Maps*.) Surrounding uses include: the landfill, waste to energy plant, and Fink Road Solar Farm (not yet constructed) to the north; orchards, Beltran Ranch home site, Interstate 5, the California Aqueduct, and Davis Road to the east; rolling hills/grazing land and Crow Creek to the south; and rolling hills/grazing land to the west. The site is currently served by private well water, both domestic and agricultural.

GENERAL PLAN CONSISTENCY

The site is zoned A-2-40 and A-2-160 (General Agriculture) and is designated "Agriculture" in the General Plan. The Agriculture designation of the Land Use Element of the General Plan states that the intent of the agriculture designation recognizes the value and importance of agriculture by acting to preclude incompatible urban development within agricultural areas. This designation establishes agriculture as the primary use in land so designated but allows other uses, which by their unique nature are not compatible with urban uses, provided they do not conflict with the primary use.

The establishment of utilities in the A-2 zoning district is primarily supported by the following goal and objective of the Conservation/Open Space Element of the County General Plan:

Goal Eleven: Conserve resources through promotion of waste reduction, reuse, recycling, composting, ride-share programs, and alternative energy sources such as mini-hydroelectric plants, gas and oil exploration, and transformation facilities such as waste-to-energy plants.

Policy Thirty-One: The County shall provide zoning mechanisms for locating material recovery facilities, recycling facilities, composting facilities, and new energy producers when the proposed location does not conflict with surrounding land uses.

Goal Eleven of the General Plan was written before solar energy was recognized as a valid energy source; however, the Goal clearly recognizes and promotes the development of alternative energy sources. After construction of the facility, the site will be unmanned and monitored via the internet. Maintenance workers will be dispatched as needed for repairs and quarterly washing of the solar panels. Nothing in the record indicates that this project would conflict with surrounding land uses.

The Stanislaus County Agricultural Element incorporates guidelines for the implementation of agricultural buffers applicable to new and expanding non-agricultural uses within or adjacent to the A-2 zoning district. The purpose of these guidelines is to protect the long-term health of agriculture by minimizing conflicts resulting from the interaction of agricultural and non-agricultural uses.

This application was submitted to Planning when an alternative buffer was required; however, since that time, new Agricultural Buffer and Setback Guidelines have been adopted. This project is in compliance with current standards.

Staff believes this project can be found to be consistent with the General Plan and the Buffer and Setback Guidelines and that the Planning Commission can make the necessary findings for approval of this project. The findings necessary for approval are discussed in the following section.

ZONING & SUBDIVISION ORDINANCE CONSISTENCY

Public utilities are permitted in the A-2 zoning district upon approval of a Use Permit as a Tier Three use. Tier Three uses are defined as uses not directly related to agriculture but may be necessary to serve the A-2 district or may be difficult to locate in an urban area. Some Tier Three uses can be people-intensive and, as a result, have the potential to adversely impact agriculture. Tier Three uses may be allowed when the Planning Commission finds that:

1. The use as proposed will not be substantially detrimental to or in conflict with agricultural use of other property in the vicinity; and

2. The parcel on which such use is requested is not located in one of the County's "most productive agricultural areas," as that term is used in the Agricultural Element of the General Plan; or the character of the use that is requested is such that the land may reasonably be returned to agricultural use in the future. "Most productive agricultural area" does not include any land within LAFCO-approved Spheres of Influence of cities or community services districts and sanitary districts serving unincorporated communities.

The site is not located within any LAFCO adopted Spheres of Influence and is designated as "Prime Farmland" by the State Department of Conservation Farmland Mapping and Monitoring Program. The Stanislaus County General Plan states:

> "The term "Most Productive Agricultural Areas" will be determined on a case-by-case basis when a proposal is made for the conversion of agricultural land. Factors to be considered include, but are not limited to, soil types and potential for agricultural production; the availability of irrigation water; ownership and parcelization patterns; uniqueness and flexibility of use; the existence of Williamson Act contracts; existing uses and their contributions to the agricultural sector of the local economy."

Based on the site's "Prime Farmland" designation, availability of irrigation, and surrounding uses, staff believes the site meets the County's definition of "Most Productive Agricultural Area". As such, in order to approve the project, the Planning Commission must find that the character of the use is such that the project site may reasonably be returned to agricultural use in the future.

Staff feels that, like Use Permit 2010-09 - Scatec Westside Solar Ranch (a 50 MW solar facility located amidst the Beltran Ranch Solar Facility site), Use Permit 2011-10 - McHenry Solar Farm (a 25 MW solar facility located at 221 Patterson Road, in the Modesto/Riverbank area), and Use Permit 2010-03 – Fink Road Solar Farm (an 80-100 MW solar facility located at 4881 Fink Road), the character of the use that is requested is such that the land may reasonably be returned to agricultural use in the future. The property will be graded; however, none of the topsoil will be removed from the site as a part of this project and the applicant will plant a low vegetated ground cover to stabilize the soil, reduce the potential for sheet flow, and allow storm water to percolate into the ground. Furthermore, a condition of approval has been added to this project requiring the site be reclaimed to agriculture at the end of solar use. (See Exhibit C - *Conditions of Approval*.)

Solar equipment generally has a life span of 20 to 25 years. When the solar facility is no longer functional, the equipment will be removed and the land may be returned to agricultural use. (See Exhibit C - *Conditions of Approval*.) All phases of the solar facility will be constructed on land utilized for dry farming crops and orchards. Native trees are not anticipated to be removed and existing ponds and Crow Creek will be avoided as a part of this project.

Finally, there is no indication that operation of the solar facility will conflict with existing on-site agricultural use or the remaining acreage or agricultural uses in the area. As such, staff believes that all of the aforementioned findings can be made by the Planning Commission.

In addition, the following finding is required for approval of any Use Permit in the A-2 zoning district:

- The establishment, maintenance, and operation of the proposed use or building applied for is consistent with the General Plan designation of "Agriculture" and will not, under the circumstances of the particular case, be detrimental to the health, safety, and general welfare of persons residing or working in the neighborhood of the use and that it will not be

detrimental or injurious to property and improvements in the neighborhood or to the general welfare of the County.

As discussed earlier, this project is consistent with the General Plan. There is no indication that the proposed project will be detrimental to the health, safety, and general welfare of the citizens of this County or detrimental to property and improvements in the area, as each impact associated with the project was identified in the Initial Study and mitigated to a level of less than significant. (See Exhibit J - *Initial Study* and Exhibit L - *Mitigation Monitoring Plan (Revised)*.)

ISSUES AND CORRESPONDENCE

No issues have been identified as a part of this project. Staff was contacted by Mr. Steve Sharp, a neighboring land owner, who was interested in general information regarding the project.

ENVIRONMENTAL REVIEW

Pursuant to the California Environmental Quality Act (CEQA), the proposed project was circulated to all interested parties and responsible agencies for review. (See Exhibit J - *Environmental Review Referrals*.) The project incorporates mitigation measures to address air quality, biological resources, cultural resources, geology and soils, hazardous materials, and hydrology and water quality as a means of limiting any potential project impacts to a level of less than significant. A Mitigated Negative Declaration is being proposed. (See Exhibit K - *Mitigated Negative Declaration*.) Mitigation measures are reflected as conditions of approval placed on the project. (See Exhibit C - *Conditions of Approval*.)

Early Consultation referral responses from Modesto Regional Fire Authority, West Stanislaus Fire Protection District, and CalFire indicated that the project is located in a Fire Hazard Zone and that the project, if unmitigated, would have a potentially significant effect on the environment. Consequently, mitigation measures, as recommended by the Fire Authorities were incorporated into the Initial Study and Mitigation Monitoring Plan to reduce impacts to a level of less than significant. The Stanislaus County Environmental Review Committee revised three (3) of the Hazardous Materials (HM) mitigation measures, circulated with the Initial Study, to clarify the language and specify the need for a second point of emergency vehicle access. (See Exhibit E – *Referral response from the Stanislaus County Environmental Review Committee dated April 10, 2013*.) The mitigation measures have been modified as follows (new wording is in **bold**, and deleted wording will have a ~~line through it.~~):

- **HM-2:** ~~A Vegetation Management Plan shall be prepared to the satisfaction of Stanislaus County and the Fire Protection District.~~ **This project is in the State Responsibility Area – Modesto Fire Hazard Severity Zone and therefore must have a Vegetation Management Plan and defensible space of 100 feet. (California Public Resources Code.)**

- **HM-3:** ~~A defensible space of 100' shall be incorporated into the project design prior to construction.~~ **No development shall occur without approved fire department (emergency vehicle) access and water supply.**

- **HM-4:** ~~Adequate access and Fire Protection Water supply shall be provided prior to construction.~~ **A second point of emergency vehicle access from either the north of the project (Fink Road) or from the south of Davis Road shall be built to California Standards.**

Staff received a letter from the California Department of Fish and Wildlife (DFW) dated April 9, 2013, requesting that the existing Biological Resources (BIO) mitigation measures be modified, replaced, and/or that additional mitigation measures be added to insure that project impacts to biological resources were reduced to a less than significant impact. According to DFW's letter, revised standards for detecting, relocating, and avoiding protected species were not included in the Biological Resource Assessment. (See Exhibit F – *Referral Response from the California Department of Fish and Wildlife dated April 9, 2013,* and Exhibit I – *Biological Resource Assessment.*) The DFW letter, DFW website links to the new standards for species detection, and the revised Mitigation Monitoring Plan were forwarded to the applicant for review. The revised Mitigation Monitoring Plan was signed by the applicant. (See Exhibit L – *Mitigation Monitoring Plan (Revised).*) The mitigation measures have been modified as follows (new wording is in **bold**, and deleted wording will have a ~~line through it.~~):

- **BIO-1:** Preconstruction**,** pre-activity**, and pre-decommissioning** surveys shall be conducted no less than 14 days and no more than 30 days prior to the beginning of ground disturbance and/or construction activities or any project activity likely to impact the SJKF. The survey area shall include all areas subject to disturbance, and a 250 buffer area extending beyond areas subject to disturbance. In the event that an active San Joaquin kit fox den is detected during preconstruction surveys, DFG and USFWS shall be contacted immediately and no project activity shall begin until appropriate avoidance measure have been implemented, and DFG and USFWS have provided written authorization that project construction may proceed.

- **BIO-3:** To prevent inadvertent entrapment of SJKF or other animals during the construction phase, all excavated, steep-walled holes or trenches more than two (2) feet deep shall be covered at the close of each working day by plywood or similar materials, or provided with one or more escape ramps constructed of earth fill or wooden planks. **Each excavation shall be inspected for animals at the beginning of each day.** Before such holes or trenches are filled, they should be thoroughly inspected for trapped animals.

- **BIO-8:** An employee education program shall be conducted containing a brief presentation **on all special-status wildlife species having the potential to occur on or surrounding the Project site. This program shall also include education and a brief presentation** by persons knowledgeable in SJKF biology and legislative protection to explain endangered species concerns to contractors and their employees. The program shall include the following: a description of the SJKF and its habitat needs; a report of the occurrence of SJKF in the project area; an explanation of the status of the species and its protection under state and federal Endangered Species Acts; and a list of measures being taken to avoid impacts to the species during construction and implementation. A fact sheet conveying this information shall be prepared for distribution to attendees of the training and anyone else who may enter the project site.

- **BIO-11:** For Swainson's hawk, the pre-construction survey shall be extended to within ½ mile of the project area. ~~In the event that Swainson's Hawk is detected, a determination shall be made by a qualified biologist experienced in Swainson's Hawk biology as to the measures to be undertaken to minimize adverse impacts to this species including provision of construction buffers and any further monitoring of the nesting site that maybe required during construction activities.~~ **If an active SWHA nest is found within 0.5 mile of the Project site, the Project proponent shall implement a 0.5 mile no-disturbance buffer around the nest until consultation with DFW occurs and appropriate avoidance**

measures are approved by DFW in writing and are implemented to prevent take of the species or to determine if issuance of an ITP is warranted.

- ~~**BIO-12:** For burrowing owl, pre-construction surveys shall be undertaken no more than 30 days before the onset of any ground-disturbing activities at any time of the year. During the breeding season (February 1 – August 15), any burrows occupied by burrowing owls can be assumed to possess young and a minimum 250-foot no construction buffer zone, unless a biologist verifies through non-invasive methods that either:
(1) the birds have not begun egg laying and incubation; or
(2) That juveniles from the occupied burrows are foraging independently and are capable of independent survival. If burrowing owls occupy the site during the non-breeding season, a passive relocation effort may be instituted by a qualified biologist.~~

  ~~If construction occurs during the non-breeding season (September 1 to February 15, ground disturbance and tree removal may occur without pre-construction breeding bird surveys (with the exception noted above for the burrowing owl). No restrictions shall apply after construction starts.~~ **Pre-construction and pre-decommissioning surveys, relocation, avoidance, and compensatory measures for Burrowing Owl shall utilize the recommendations listed in the DFW *Staff Report on Burrowing Owl Mitigation* (2012).**

- **BIO-13:** An assessment of CTS and CRLF habitat will be completed as part of pre-construction **and pre-decommissioning** surveys to determine whether any avoidance is necessary. **Habitat assessment shall follow the USFWS's *Interim Guidance on Site Assessment and Field Surveys for Determining Presence or a Negative Finding of the California Tiger Salamander* (2003) and the *Revised Guidance on Site Assessments and Field Surveys for the California Red-legged Frog (2005).***

- **BIO-14: A 250 foot no-disturbance buffer shall be clearly delineated around the stockponds and Crow Creek to protect water quality and wildlife that may depend on these water features. The no-disturbance buffer shall be maintained during construction, operations, and decommissioning activities.**

- **BIO-15: The developer shall apply DFW's "Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities" (DFG 2009) to determine presence or infer absence of special-status plants in and near the Project site, to evaluate potential impacts, and to design ways to mitigate Project impacts. If State-listed plants are detected during surveys, consultation with the Department is warranted to discuss the potential for "take" under CESA.**

Staff believes that the revised/additional Mitigation Measures are equivalent to or more effective than the previous Mitigation Measures circulated with the Initial Study and that they, themselves, will not cause any potentially significant effect on the environment.

A referral response from the San Joaquin Valley Air Pollution Control District (SJVAPCD) dated March 28, 2013, indicated that although the District does not require full quantification of construction emissions, it does recommend that construction related impacts be evaluated including demolition, construction exhaust emission, on and off road mobile sources, fugitive dust emission, etc. (See Exhibit G - *Referral response from the San Joaquin Valley Air Pollution Control District dated March 28, 2013*.) Project emissions were not quantified but emission sources were identified and addressed in compliance with CEQA. Staff has determined that the incorporation of mitigation measures and conditions of approval as discussed in the Initial Study and recommended by the

SJVAPCD will reduce air quality impacts to a level of less than significant.

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Note: Pursuant to California Fish and Game Code Section 711.4, all project applicants subject to the California Environmental Quality Act (CEQA) shall pay a filing fee for each project; therefore, the applicant will further be required to pay **$2,213.25** for the California Department of Fish and Wildlife (formerly the Department of Fish and Game) and the Clerk Recorder filing fees. Planning staff will ensure that this will occur.

Contact Person: Rachel Wyse, Associate Planner, (209) 525-6330

Attachments:

Exhibit A - Findings and Actions Required for Project Approval
Exhibit B - Maps
Exhibit C - Conditions of Approval
Exhibit D - Applicant's Project Description
Exhibit E - Referral response from the Stanislaus County Environmental Review Committee dated April 10, 2013
Exhibit F - Referral response from the California Department of Fish and Wildlife dated April 9, 2013
Exhibit G - Referral response from the San Joaquin Valley Air Pollution Control District dated March 28, 2013
Exhibit H - Applicant's response to the San Joaquin Valley Air Pollution Control District letter
Exhibit I - Biological Resource Assessment
Exhibit J - Initial Study
Exhibit K - Mitigated Negative Declaration
Exhibit L - Mitigation Monitoring Plan (Revised)
Exhibit M - Environmental Review Referrals

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Exhibit A
Findings and Actions Required for Project Approval

1. Adopt the Mitigated Negative Declaration pursuant to CEQA Guidelines Section 15074(b), by finding that on the basis of the whole record, including the Initial Study and any comments received, that there is no substantial evidence the project will have a significant effect on the environment and that the Mitigated Negative Declaration reflects Stanislaus County's independent judgment and analysis.

2. Find that the amended and new mitigation measures, as discussed in the staff report and revised Mitigation Monitoring Plan, are equivalent to or more effective than the previous Mitigation Measures circulated with the Initial Study and that they, themselves, will not cause any potentially significant effect on the environment pursuant to CEQA guidelines section 15074.1.

3. Order the filing of a Notice of Determination with the Stanislaus County Clerk-Recorder and State Clearinghouse pursuant to Public Resources Code Section 21152 and CEQA Guidelines Section 15075.

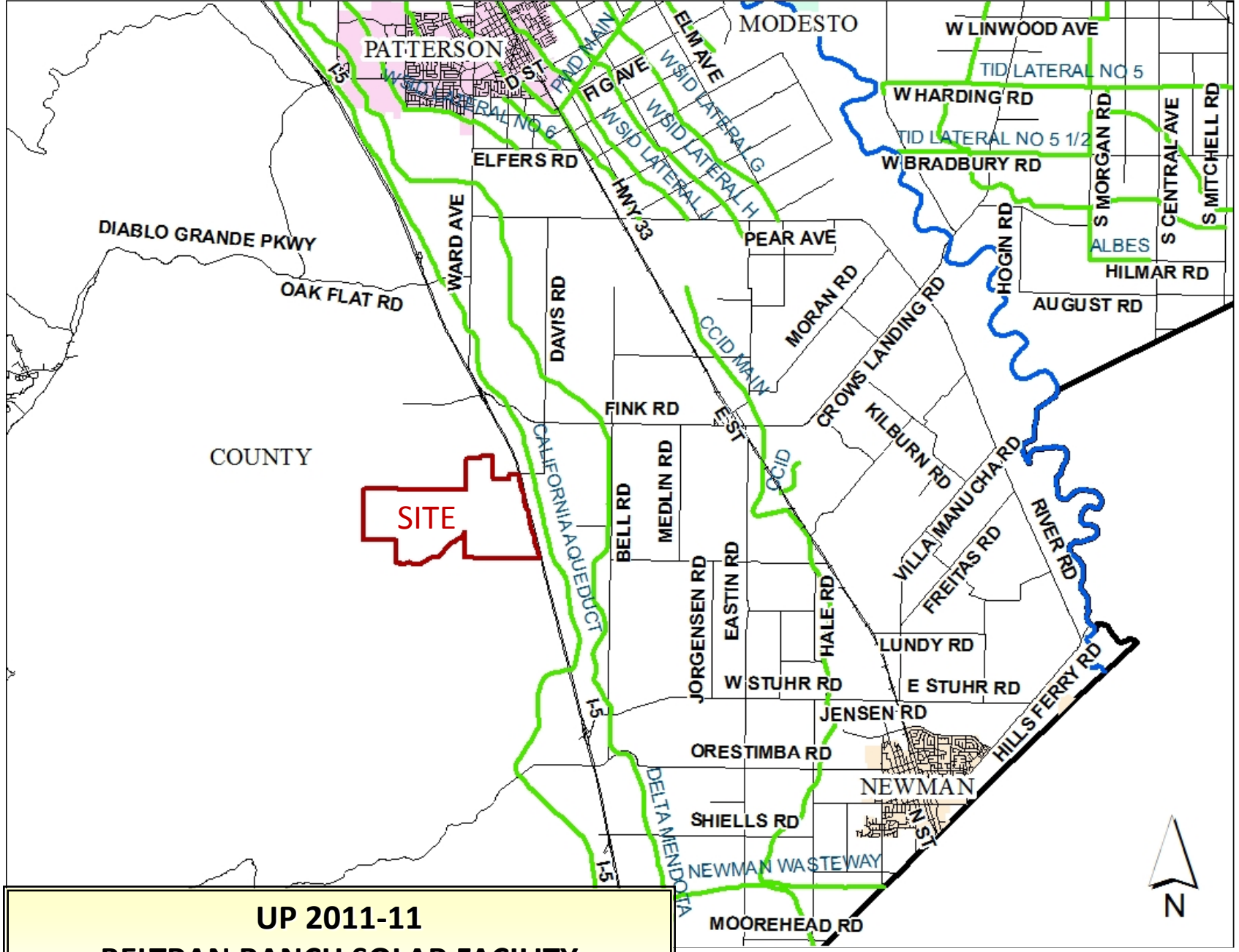
4. Find That:

    A. The establishment, maintenance, and operation of the proposed use or building applied for is consistent with the General Plan designation of "Agriculture" and will not, under the circumstances of the particular case, be detrimental to the health, safety, and general welfare of persons residing or working in the neighborhood of the use and that it will not be detrimental or injurious to property and improvements in the neighborhood or to the general welfare of the County;

    B. The establishment as proposed will not be substantially detrimental to or in conflict with agricultural use of other property in the vicinity; and

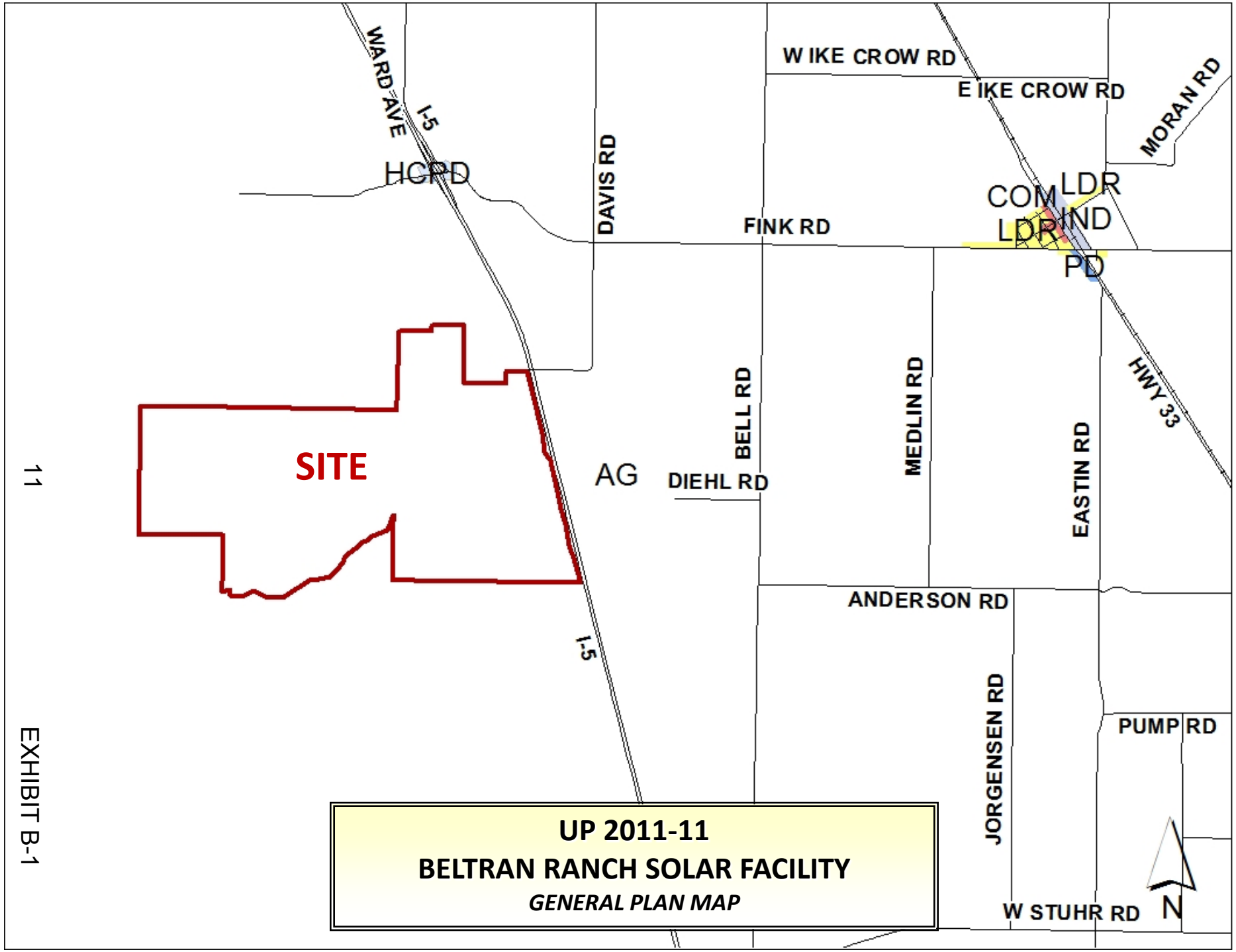
    C. The parcel on which such use is requested is not located in one of the County's "most productive agricultural areas," as that term is used in the Agricultural Element of the General Plan; or the character of the use that is requested is such that the land may reasonably be returned to agricultural use in the future.

5. Approve Use Permit Application No. 2011-11 – Beltran Ranch Solar Facility subject to the attached Conditions of Approval and Mitigation Measures.



UP 2011-11
BELTRAN RANCH SOLAR FACILITY
AREA MAP

EXHIBIT B

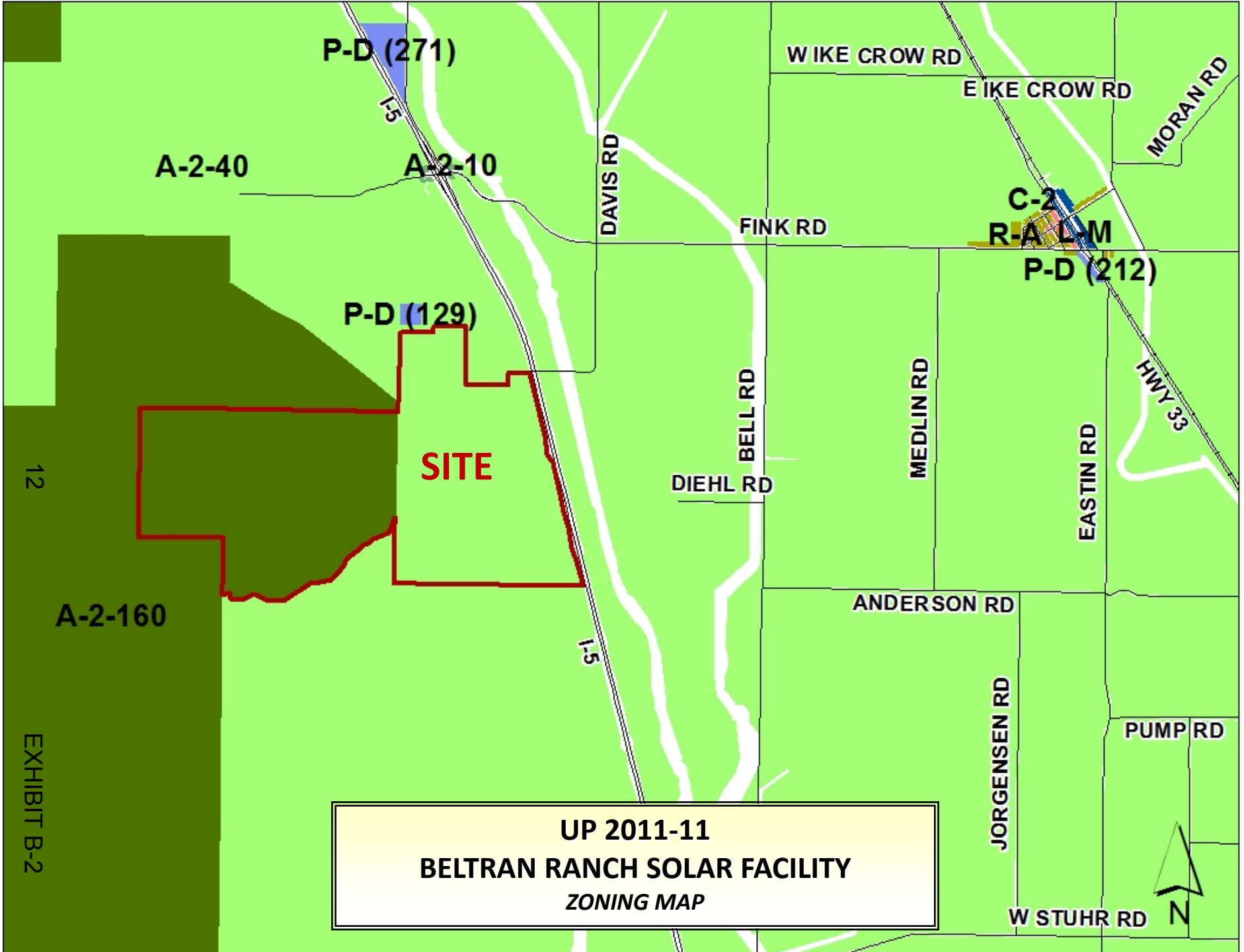


UP 2011-11

BELTRAN RANCH SOLAR FACILITY

GENERAL PLAN MAP

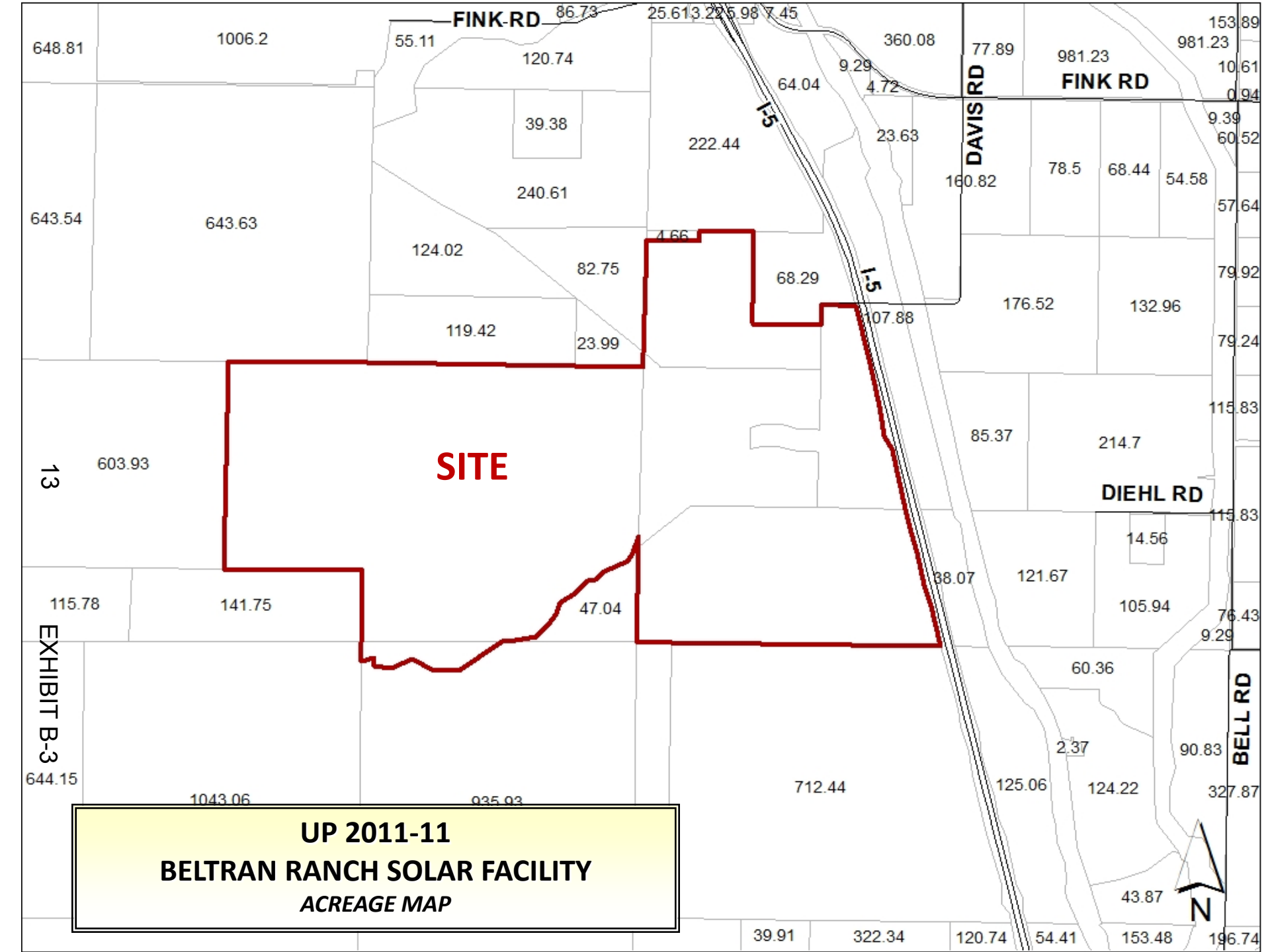
EXHIBIT B-1



UP 2011-11

BELTRAN RANCH SOLAR FACILITY

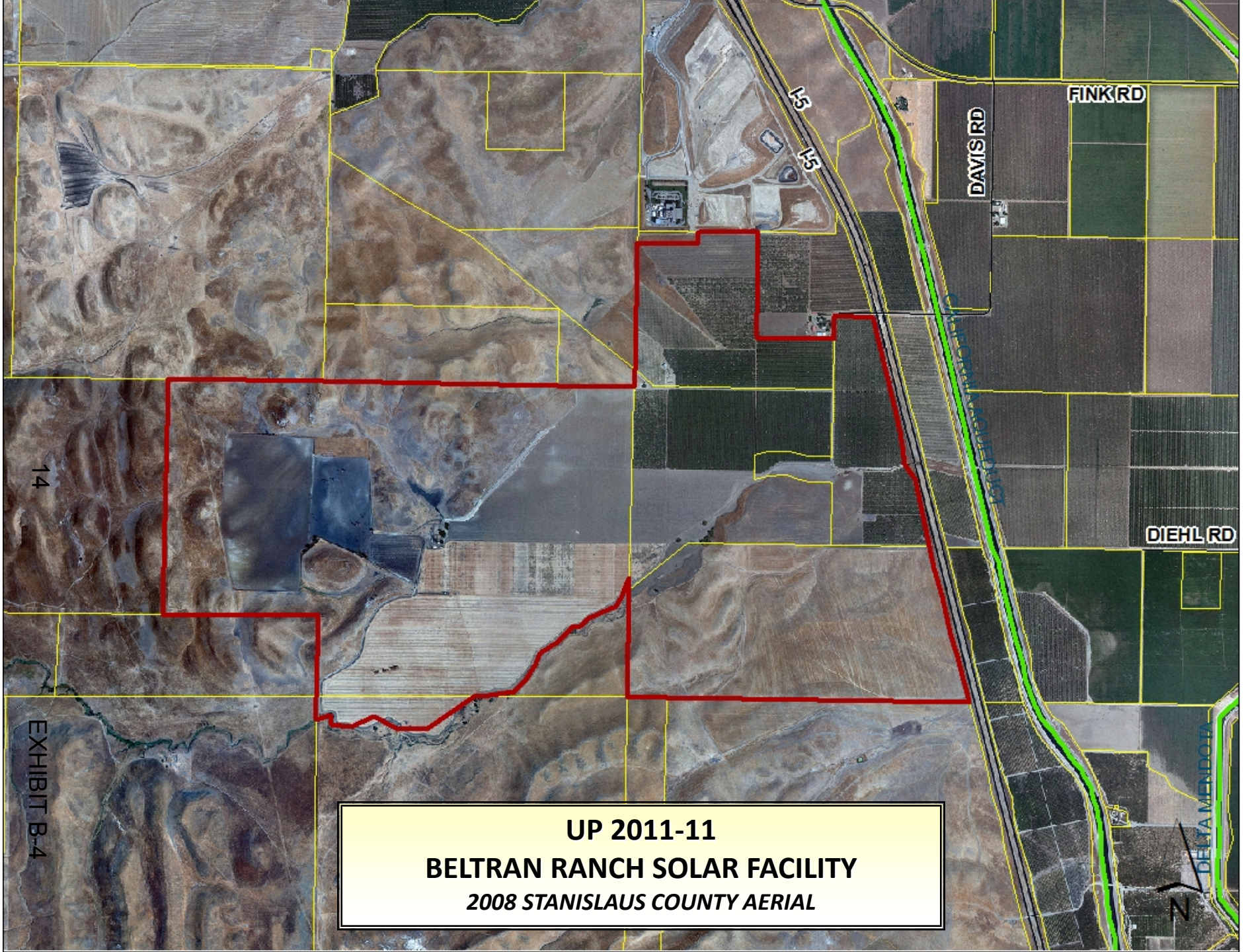
ZONING MAP



UP 2011-11

BELTRAN RANCH SOLAR FACILITY

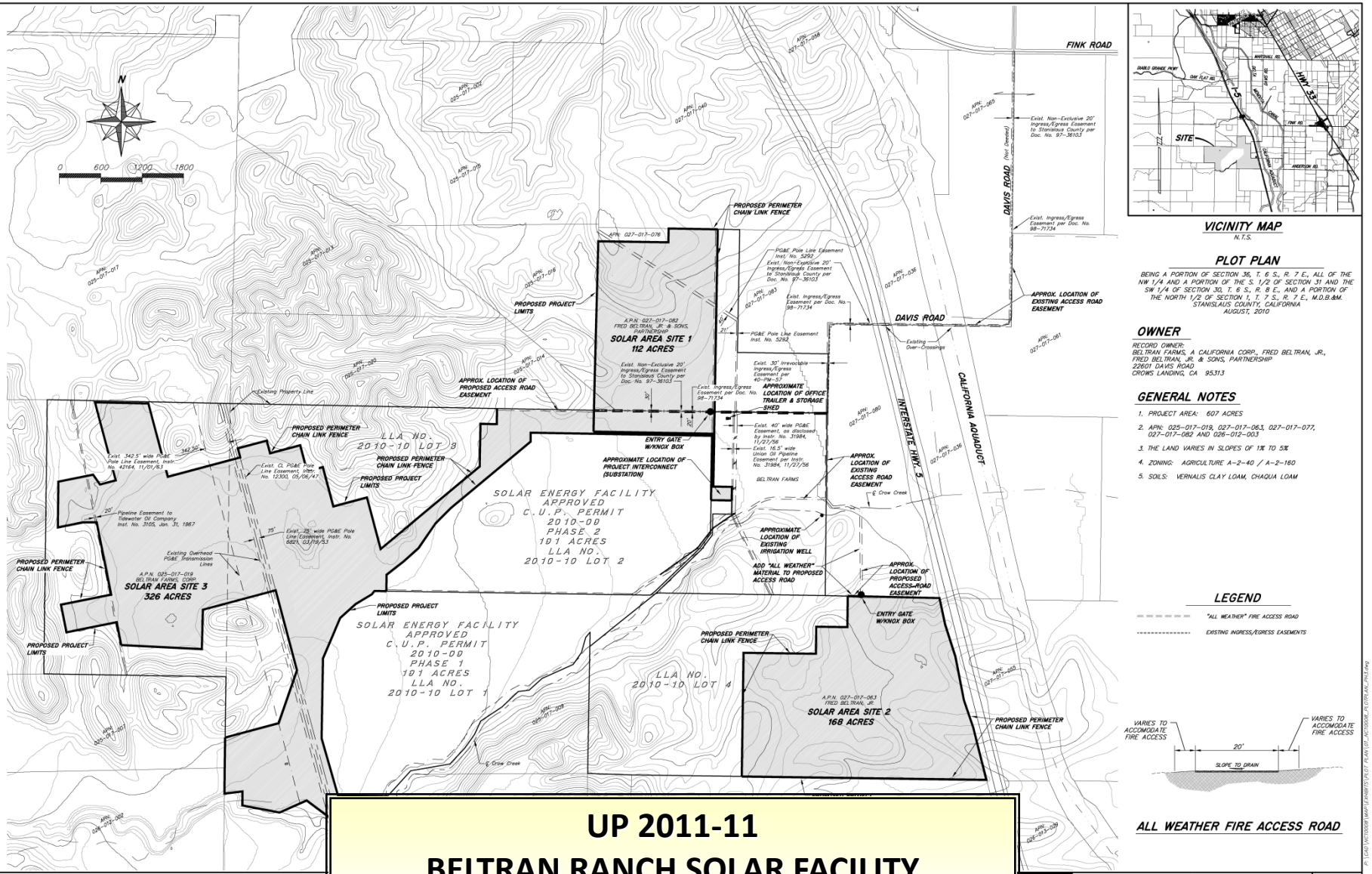
ACREAGE MAP



UP 2011-11

BELTRAN RANCH SOLAR FACILITY

2008 STANISLAUS COUNTY AERIAL



UP 2011-11
BELTRAN RANCH SOLAR FACILITY
SITE PLAN

NORTHERN CALIFORNIA • SOUTHERN CALIFORNIA • NEVADA • ARIZONA

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BELTRAN RANCH SOLAR FARM
PLOT PLAN
STANISLAUS COUNTY CALIFORNIA

SHEET 1 OF 3

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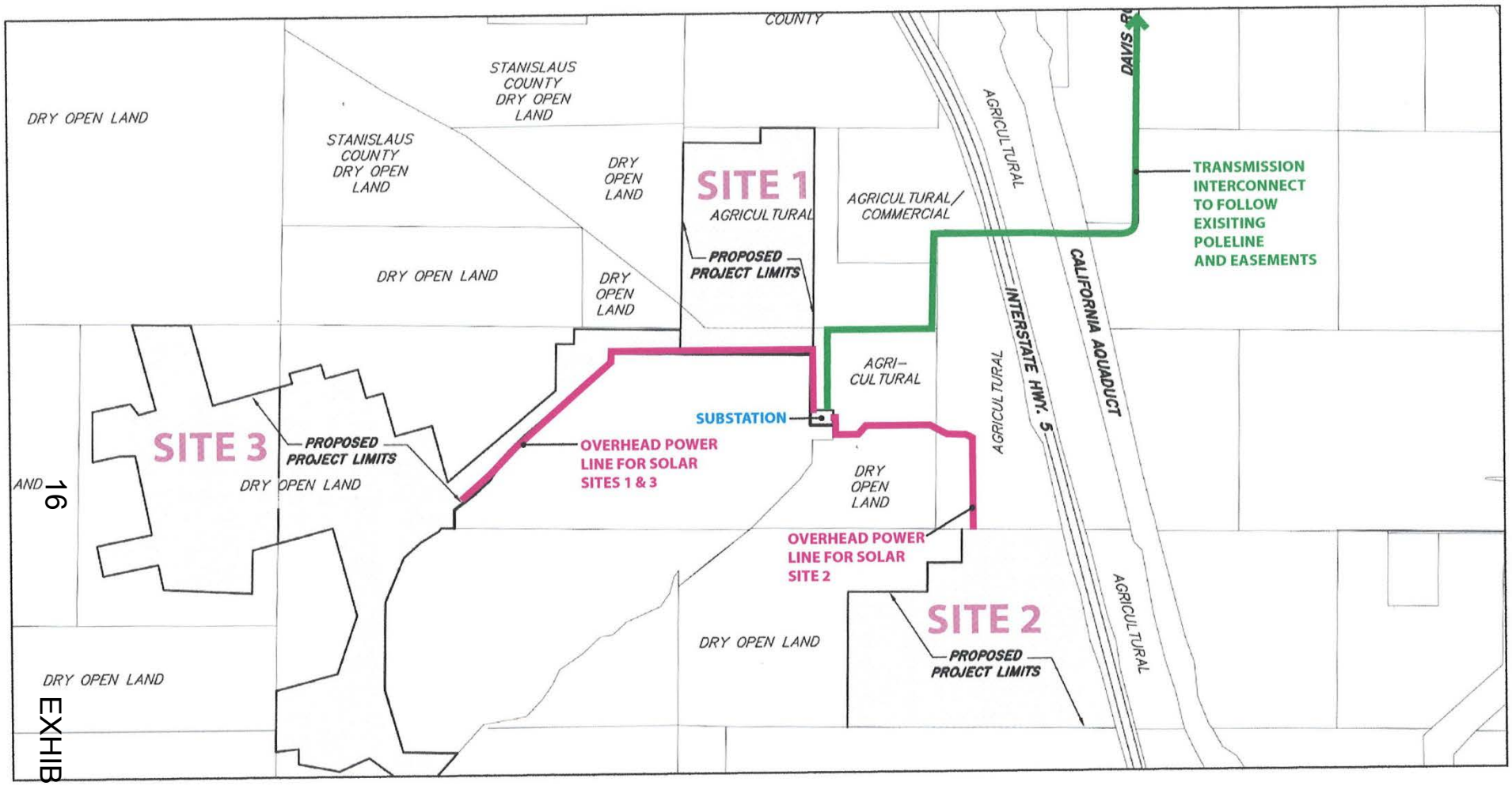
EXHIBIT B-5



AND 16

EXHIBIT B-6

04.09.13

MVE Inc.
1117 L Street
Modesto, CA 95354
866.526.4214
www.mve.net

Project Management • Civil/Structural E ... g • Construction Staking • Graphics

UP 2011-11
BELTRAN RANCH SOLAR FARM
SUBSTATION MAP

Alternative Energy Group

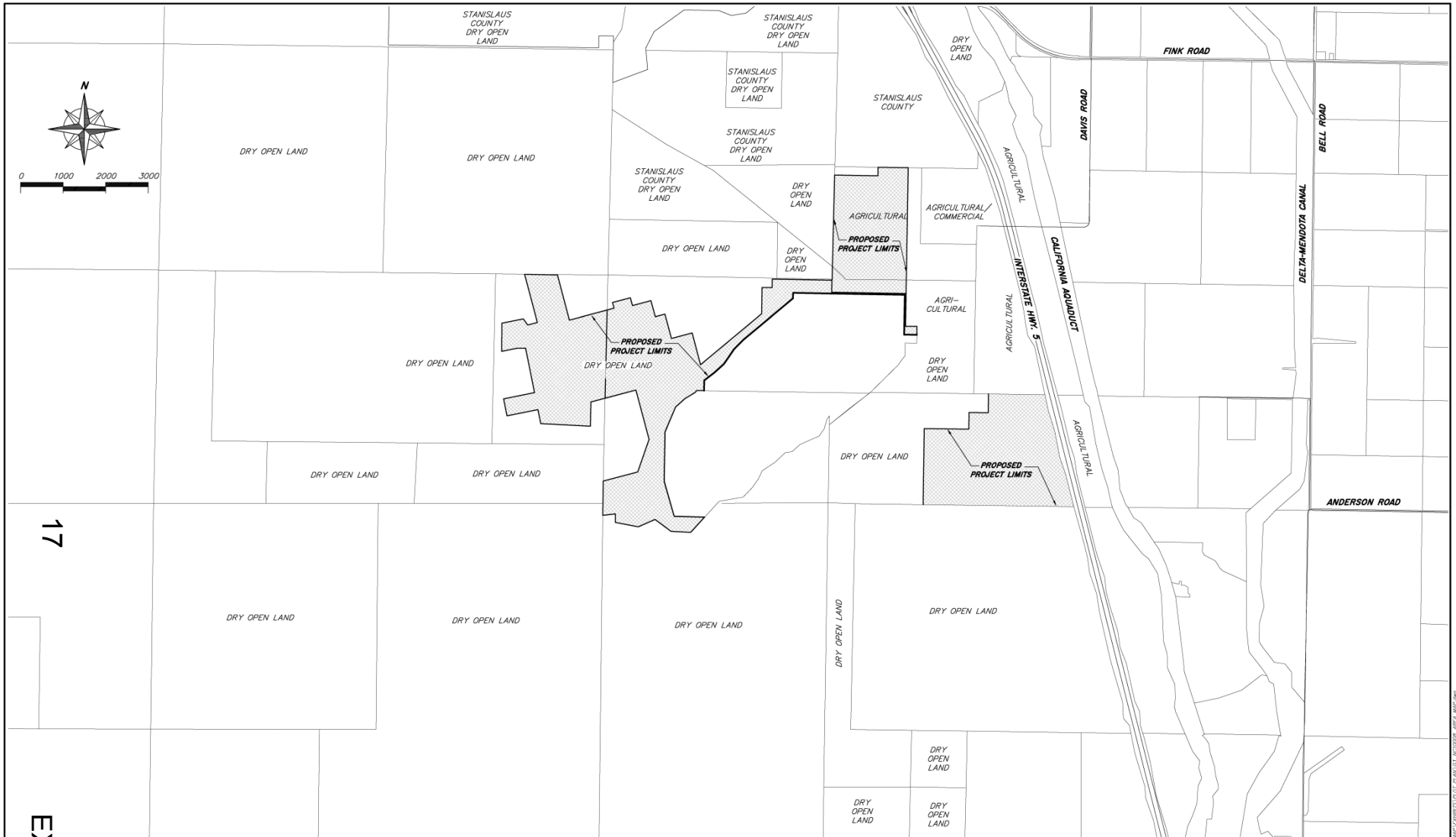


EXHIBIT B-7

UP 2011-11
BELTRAN RANCH SOLAR FACILITY
LAND USE MAP

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BELTRAN RANCH SOLAR FARM
AREA MAP
STANISLAUS COUNTY CALIFORNIA

SHEET 3 OF 3

EXHIBIT B-8

PRELIMINARY DESIGN. DO NOT USE FOR CONSTRUCTION

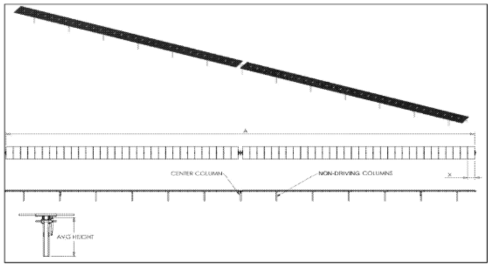
System Block	
Ground Coverage Ratio	33.3%
Tracker Rows/Motor	23

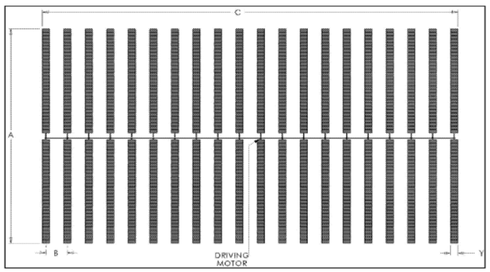
Single-Motor Block Dimensions	Var.	Value
Module Assembly Width (in)	X	39.1
Module Assembly Length (in)	Y	77
Tracker Array Length (ft)	A	168.1
Tracker Row Spacing (ft)	B	19.30
Tracker Array Width (ft)	C	431.00
Area needed/Block (ft^2)		72451.1
Area needed/Block (acres)		1.66325
DC Power/Tracker Row (W)		12960
DC Power/Module (W)		270
DC Power/Block (kW)		298.08
DC Power/acre (kW)		179.22
DC Power/ft^2 (W)		4.11422

Module Summary
Designed with SunTech 260-280W Modules
Mounted with Universal uMW Clamps
12 Modules Per String
4 Strings Per Tracker
48 Modules Per Tracker Row

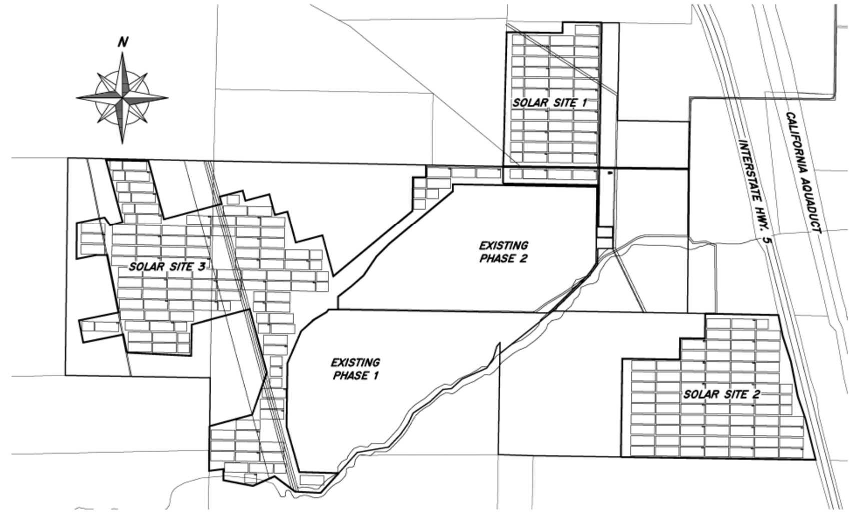
Structural Summary
13 Columns Per Tracker Row
6" Pipe Size ERW for Center Column, 1 per Tracker Row
4" Pipe Size ERW for Non-Driving Column, 12 per Tracker Row
48" Average Torque Tube Height
65.5" Maximum Torque Tube Height
45.2" Minimum Torque Tube Height ,18" Clearance
20.3" Variability in Torque Tube Height

Wind Loading Summary	
90 mph Design Wind Speed, Exp C	
Importance Factor, I	1
Topographic Factor, Kzt	1





NOTE:
Pictures are for representation and reference only. The number of tracker rows, columns and lengths pictured may not be correct. Please refer to tables above for all dimensions and quantities. Lengths are to part edges and do not include spacing for access or service roads.



PRELIMINARY SOLAR PANEL LAYOUT

SCALE: 1"=1000'

UP 2011-11

BELTRAN RANCH SOLAR FACILITY

PRELIMINARY DESIGN & LAYOUT

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BELTRAN RANCH SOLAR FARM

DETAILS & SOLAR PANEL LAYOUT

STANISLAUS COUNTY *CALIFORNIA*

SHEET 2 OF 3

NOTE: Approval of this application is valid only if the following conditions are met. This permit shall expire unless activated within 18 months of the date of approval. In order to activate the permit, it must be signed by the applicant and one of the following actions must occur: (a) a valid building permit must be obtained to construct the necessary structures and appurtenances; or, (b) the property must be used for the purpose for which the permit is granted. (Stanislaus County Ordinance 21.104.030)

CONDITIONS OF APPROVAL

USE PERMIT APPLICATION NO. 2011-11
BELTRAN RANCH SOLAR FACILITY
(STATE CLEARINGHOUSE NO. 2011112013)

Department of Planning and Community Development

1. Use(s) shall be conducted as described in the application and supporting information (including the plot plan) as approved by the Planning Commission and/or Board of Supervisors and in accordance with other laws and ordinances. Construction of the initial phase of this project shall be allowed to begin within five (5) years of project approval provided it can be demonstrated that efforts to secure a Power Purchase Agreement and necessary building permits have been on-going.

2. Pursuant to Section 711.4 of the California Fish and Game Code (effective January 1, 2013), the applicant is required to pay a California Department of Fish and Wildlife (formerly the Department of Fish and Game) fee at the time of filing a "Notice of Determination." Within five (5) days of approval of this project by the Planning Commission or Board of Supervisors, the applicant shall submit to the Department of Planning and Community Development a check for **$2,213.25**, made payable to **Stanislaus County**, for the payment of California Department of Fish and Wildlife and Clerk Recorder filing fees.

   Pursuant to Section 711.4 (e)(3) of the California Fish and Game Code, no project shall be operative, vested, or final, nor shall local government permits for the project be valid, until the filing fees required pursuant to this section are paid.

3. Developer shall pay all Public Facilities Impact Fees and Fire Facilities Fees as adopted by Resolution of the Board of Supervisors. The fees shall be payable at the time of issuance of a building permit for any construction in the development project and shall be based on the rates in effect at the time of building permit issuance.

4. The applicant/owner is required to defend, indemnify, or hold harmless the County, its officers, and employees from any claim, action, or proceedings against the County to set aside the approval of the project which is brought within the applicable statute of limitations. The County shall promptly notify the applicant of any claim, action, or proceeding to set aside the approval and shall cooperate fully in the defense.

5. All exterior lighting shall be designed (aimed down and toward the site) to provide adequate illumination without a glare effect. This shall include, but not be limited to, the use of shielded light fixtures to prevent skyglow (light spilling into the night sky) and the installation of shielded fixtures to prevent light trespass (glare and spill light that shines onto neighboring properties).

6. Pursuant to Section 404 of the Clean Water Act, prior to construction, the developer shall be responsible for contacting the US Army Corps of Engineers to determine if any "wetlands," "waters of the United States," or other areas under the jurisdiction of the Corps of Engineers are present on the project site, and shall be responsible for obtaining all appropriate permits or authorizations from the Corps, including all necessary water quality certifications, if necessary.

7. Any construction resulting from this project shall comply with standardized dust controls adopted by the San Joaquin Valley Air Pollution Control District (SJVAPCD).

8. A sign plan for all proposed on-site signs indicating the location, height, area of the sign(s), and message must be approved by the Planning Director or appointed designee(s) prior to installation.

9. Pursuant to Sections 1600 and 1603 of the California Fish and Game Code, prior to construction, the developer shall be responsible for contacting the California Department of Fish and Wildlife (formerly the Department of Fish and Game) and shall be responsible for obtaining all appropriate stream-bed alteration agreements, permits, or authorizations, if necessary.

10. The Department of Planning and Community Development shall record a Notice of Administrative Conditions and Restrictions with the County Recorder's Office within 30 days of project approval. The Notice includes: Conditions of Approval/Development Standards and Schedule; any adopted Mitigation Measures; and a project area map.

11. Pursuant to State Water Resources Control Board Order 99-08-DWQ and National Pollutant Discharge Elimination System (NPDES) General Permit No. CAS000002, prior to construction, the developer shall be responsible for contacting the California Regional Water Quality Control Board to determine if a "Notice of Intent" is necessary, and shall prepare all appropriate documentation, including a Storm Water Pollution Prevention Plan (SWPPP). Once complete, and prior to construction, a copy of the SWPPP shall be submitted to the Stanislaus County Department of Public Works.

12. Assessor Parcel No. 027-017-082 is currently enrolled in a Williamson Act Contract which, due to the filing of a Non-Renewal, will expire December 31, 2013. No development associated with this project shall take place on this parcel until January 1, 2014.

13. At the end of project life, all solar equipment, appurtenant structures, and concrete footings shall be removed from the property and recycled, if applicable. Solar sites shall be re-vegetated and reclaimed to agriculture. Soil remediation shall be incorporated if necessary.

14. Davis Road and all appurtenant structures, specifically the bridges over the California Aqueduct and Interstate 5, are not owned or maintained by the County. The applicant shall be responsible for maintaining and repairing the road and all appurtenant structures, including the bridges. Prior to issuance of any building or grading permit, the applicant shall provide adequate assurances from the Department of Water Resources (DWR) to the Planning Department that the applicant's right to use the DWR bridge remains intact for this project.

15. The access for the project takes place over several parcels to reach the project site. The applicant shall show that the listed easements are contiguous to the project site. The

applicant shall obtain recorded irrevocable access easements over private Davis Road and through the project site from the property owners who hold legal right to the parcels on which the private road and easements are or will be developed. The recorded document(s) shall be submitted to the Planning Department prior to issuance of a grading and/or building permit associated with this project.

16. The applicant is responsible for obtaining rights and a secondary irrevocable emergency and access ingress/egress agreement to the project site. This access agreement shall be approved by the Fire Authority and recorded on the property. A copy of the recorded document shall be submitted to the Planning Department prior to issuance of a grading and/or building permit associated with this project.

17. The project applicant/developer/operator shall obtain a street address within the unincorporated portion of Stanislaus County for acquisition, purchasing, and billing purposes; register this address with the State Board of Equalization (BOE) to file Use Tax Returns; and use this address for acquisition, purchasing, and billing purposes associated with the proposed project. A copy of the BOE registration, including the account number and subsequent Use Tax Returns, shall be provided to the Planning Department within 10 days of a written request.

Department of Public Works

18. Prior to any work being done in the Stanislaus County road right-of-way, the applicant will obtain an encroachment permit.

19. Public Works shall approve the location and width of any new driveway approaches on any County maintained roadway.

20. A grading and drainage plan for the project site shall be submitted before any building permit for the site is issued. Public Works will review and approve the drainage calculations. The grading and drainage plan shall include the following information:

    A. Drainage calculations shall be prepared as per the Stanislaus County Standards and Specifications that are current at the time the permit is issued;

    B. The plan shall contain enough information to verify that all runoff will be kept from going onto adjacent properties and Stanislaus County road right-of-way;

    C. The grading and drainage plan shall comply with the current Stanislaus County National Pollutant Discharge Elimination System (NPDES) General Permit and the Quality Control standards for New Development and Redevelopment contained therein;

    D. An Engineer's Estimate shall be submitted for the grading and drainage work; and

    E. The grading, drainage, and associated work shall be accepted by Stanislaus County Public Works prior to a final inspection or occupancy, as required by the building permit.

    The applicant of the building permit shall pay the current Stanislaus County Public Works weighted labor rate for the plan review of the building and/or grading plan.

21. The applicant of the building permit shall pay the current Stanislaus County Public Works weighted labor rate for all on-site inspections. A preliminary Engineer's Estimate for the grading and drainage work shall be submitted to determine the amount of deposit for the inspection of the grading. The deposit shall be made prior to the issuance of the building permit. The Public Works inspector shall be contacted 48 hours prior to the commencement of any grading or drainage work on-site. The Public Works inspector will not sign on the grading or building permit until such time that all inspection fees have been paid. Any fees left over from the deposit shall be returned to the applicant at the completion and acceptance of the grading and drainage construction by Stanislaus County Public Works.

Department of Environmental Resources (DER)

22. On-site wastewater disposal system (OSWDS) shall be by individual Primary and Secondary wastewater treatment units operated under conditions and guidelines established by Measure X.

23. On-site wastewater disposal system (OSWDS) shall be designed according to type and maximum occupancy of the proposed structure to estimated waste/sewage design flow rate and in accordance to number of plumbing fixture units proposed within the building. The dispersal field shall be designed and sized using field data collected from soil profile and percolation tests performed at the locations proposed for dispersal field(s) and the 100% future reserved expansion area.

24. The applicant shall determine, to the satisfaction of the Department of Environmental Resources (DER), that a site containing (or formerly containing) residences, farm buildings, or structures has been fully investigated (via Phase I study and Phase II study if necessary) prior to the issuance of a grading permit. DER recommends research be conducted to determine if pesticides were used on the proposed development site; if confirmed, suspect site areas should be tested for organic pesticides and metals. Any discovery of underground storage tanks, former underground storage tank locations, buried chemicals, buried refuse, or contaminated soil shall be brought to the immediate attention of DER.

Building Permits Division

25. Building permits are required and the project must conform with the California Code of Regulations, Title 24.

San Joaquin Valley Air Pollution Control District (SJVAPCD)

26. The proposed project is subject to District Rule 9510 (Indirect Source Review). The applicant shall submit an Air Impact Assessment (AIA) application to the SJVAPCD and pay any applicable off-site mitigation fees before issuance of the first building permit.

27. The proposed project may be subject to District Rules and Regulations, including but not limited to:
    - Regulation VIII (Fugitive PM10 Prohibitions)
    - Rule 4102 (Nuisance)
    - Rule 4601 (Architectural Coatings)
    - Rule 4641 (Cutback, Slow Cure, and Emulsified Asphalt, Paving and Maintenance Operations)
    - Rule 4002 (National Emission Standards for Hazardous Air Pollutants)

Department of Water Resources (DWR)

28. The Beltran Ranch Solar Facility Project, et al shall not exceed H20 loading on DWR's Davis Road Bridge.

29. The proposed weight limits from the applicant indicate loads will approach the capacity of DWR's bridge. Therefore the Beltran Ranch Solar Facility Project, et al and DWR shall jointly inspect and perform a condition assessment for pre and post construction of the Davis Road Bridge and approach roads. The Beltran Ranch Solar Facility Project, et al shall acknowledge their responsibilities for any damage which may occur due to their use of the bridge and roadway and repair any damage identified at the end of construction or sooner if warranted by DWR. Loads shall not exceed legal limits for vehicles used based on California vehicle code weight limitations.

30. The Beltran Ranch Solar Facility Project, et al shall provide a seven (7) day advance notification prior to starting work within DWR's right of way. Please contact DWR's Division of Engineering EP Section. The San Luis Field Division shall be simultaneously notified. In addition, the Beltran Ranch Solar Facility Project, et al shall contact the Division of O&M for the pre and post assessment prior to construction.

31. DWR's ongoing operations and maintenance activities shall not be disrupted during construction. The primary or secondary operating road along open canals must be kept available for DWR use at all times. Access to Davis Road Bridge shall remain open for the duration of construction and traffic controls shall be placed to warn all cross traffic on DWR's primary and secondary roads.

32. Any additional development that affects DWR right of way requires an Encroachment Permit/Review from DWR prior to the start of construction.

MITIGATION MEASURES

(Pursuant to California Public Resources Code 15074.1: Prior to deleting and substituting for a mitigation measure, the lead agency shall do both of the following:
1) Hold a public hearing to consider the project; and
2) Adopt a written finding that the new measure is equivalent or more effective in mitigating or avoiding potential significant effects and that it in itself will not cause any potentially significant effect on the environment.)

33. **AQ-1:** Implement all feasible fugitive dust control requirements of the San Joaquin Valley Air Pollution Control District (SJVAPCD), Regulation VIII. The following measures shall be implemented to reduce PM 10 exhaust emissions and further reduce the already less-than-significant impacts associated with ROG and NO x emissions:

- Provide commercial electric power to the project site in adequate capacity to avoid or minimize the use of portable electric generators and any other equipment.

- Where feasible, substitute electric-powered equipment for diesel engine driven equipment, or implement the use of diesel particulate traps.

- When not in use, avoid idling of on-site equipment.

- Where feasible, avoid operation of multiple pieces of heavy duty equipment.

- Require contractors to use the best available emission reduction and economically feasible technology on an established percentage of the equipment fleet. It is anticipated that in the near future PM 10 control equipment will be available. The SJVAPCD shall be consulted with on this process. This requirement shall be included in construction bid specifications.

34. **AQ-2:** Comply with SJVAPCD's Regulation VIII-Fugitive Dust Prohibitions and implement the following applicable control measures, as required by law:

- An owner/operator shall submit a Dust Control Plan to the Air Pollution Control Officer (APCO) prior to the start of any construction activity on any site that will include 5 acres or more of disturbed surface area for non-residential development, or will include moving, depositing, or relocating more than 2,500 cubic yards per day of bulk materials. Construction activities shall not commence until the APCO has approved or conditionally approved the Dust Control Plan. An owner/operator shall provide written notification to the APCO within 10 days prior to the commencement of earthmoving activities via fax or mail. The requirement to submit a dust control plan shall apply to all construction related activities conducted at the project site.

- The owner/operator shall submit a construction notification form to the APCO at least 48 hours prior to the start of any construction activity on the project site that includes greater than one acre of disturbed surface area.

35. **AQ-3:** Implement SJVAPCD-recommended enhanced and additional control measures to further reduce fugitive PMIO dust emissions from public roadways.

- Install sandbags or other erosion control measures to prevent silt runoff to public roadways from adjacent project areas with a slope greater than 1% in accordance the project's Storm water Pollution Prevention Plan (SWPPP), which conforms with the required elements of the General Permit No. CAS000002 issued by the State of California, State Water Resources Control Board.

- The area encompassing the San Joaquin Valley Air Basin (SJVAB) boundary is also classified as nonattainmentforPM2.S•TheSJVAPCD approach for achieving attainment of the PM2.Sstandard is has two components. The first component is that the existing PMIO reduction strategies will reduce the fugitive component of PM2.5 emissions within the SJVAPCD. The second component is to address the indirect formation ofPM2.5' as with ozone Knox is a precursor ofPM2.Sso the district reduction strategies for the reduction of NO x throughout the basin will also reduce the formation ofPM2.S. In addition since the emissions estimate for PMIO was compared to PM2.5 thresholds; if PM10 emissions estimates are below the PM2.S thresholds then PM2.S must also be below the threshold. The proposed project shall be required to comply with the SJVAPCD's Regulation VIII (SJVAPCD 2009) control measures for construction emissions of PMI0. One of these control measures includes the use of water with all "land clearing, grubbing, scraping, excavation, land leveling, grading, cut and fill, and demolition activities" for fugitive dust suppression. Compliance with SJVAPCD Regulation VIII will further reduce emissions.

36. **BIO-1:** Preconstruction, pre-activity, and pre-decommissioning surveys shall be conducted no less than 14 days and no more than 30 days prior to the beginning of ground disturbance

and/or construction activities or any project activity likely to impact the SJKF. The survey area shall include all areas subject to disturbance, and a 250 buffer area extending beyond areas subject to disturbance. In the event that an active San Joaquin kit fox den is detected during preconstruction surveys, DFG and USFWS shall be contacted immediately and no project activity shall begin until appropriate avoidance measure have been implemented, and DFG and USFWS have provided written authorization that project construction may proceed.

37. **BIO-2:** Project- related vehicles shall observe a 20-mph speed limit in all project areas; this is particularly important at night when SJKF are most active. To the extent possible, night-time construction should be minimized. Off-road traffic outside of designated project areas should be prohibited.

38. **BIO-3:** To prevent inadvertent entrapment of SJKF or other animals during the construction phase, all excavated, steep-walled holes or trenches more than two (2) feet deep shall be covered at the close of each working day by plywood or similar materials, or provided with one or more escape ramps constructed of earth fill or wooden planks. Each excavation shall be inspected for animals at the beginning of each day. Before such holes or trenches are filled, they should be thoroughly inspected for trapped animals.

39. **BIO-4:** SJKF are attracted to den-like structures such as pipes and may enter stored pipe. All construction pipes, culverts, or similar structures with a diameter of 4 inches or greater that are stored at a construction site for one or more overnight periods shall be thoroughly inspected for SJKF before the pipe is subsequently buried, capped, or otherwise used or moved in any way. IF a SJKF is discovered inside a pipe, all work in the area shall stop until the animal leaves the area on its own.

40. **BIO-5:** All food-related trash items such as wrappers, cans, bottles, and food scraps shall be disposed of in closed containers and removed at least once a week from a construction site.

41. **BIO-6:** No firearms shall be allowed on the project site except for police and security personnel.

42. **BIO-7:** To prevent harassment, mortality of SJKF or destruction of dens by dogs or cares, no pets shall be permitted on the project site during construction.

43. **BIO-8:** An employee education program shall be conducted containing a brief presentation on all special-status wildlife species having the potential to occur on or surrounding the Project site. This program shall also include education and a brief presentation by persons knowledgeable in SJKF biology and legislative protection to explain endangered species concerns to contractors and their employees. The program shall include the following: a description of the SJKF and its habitat needs; a report of the occurrence of SJKF in the project area; an explanation of the status of the species and its protection under state and federal Endangered Species Acts; and a list of measures being taken to avoid impacts to the species during construction and implementation. A fact sheet conveying this information shall be prepared for distribution to attendees of the training and anyone else who may enter the project site.

44. **BIO-9:** Design perimeter fencing to be wildlife friendly by raising the bottom of the fence six inches above the ground to allow SJKF to move into and out of the project site.

45. **BIO-10:** If ground disturbance or tree removal occurs during the bird breeding season (Feb 15- September 1), breeding bird surveys for both tree and ground dwelling species shall be conducted within 20 days of proposed ground disturbance to avoid disturbance to active nests, eggs, and/or young of these and other bird species. A minimum no-disturbance buffer of 250 feet shall be delineated around active nests of non-listed species and ½ mile from listed species 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 best or parental care for survival.

46. **BIO-11:** For Swainson's hawk, the pre-construction survey shall be extended to within ½ mile of the project area. If an active SWHA nest is found within 0.5 mile of the Project site, the Project proponent shall implement a 0.5 mile no-disturbance buffer around the nest until consultation with DFW occurs and appropriate avoidance measures are approved by DFW in writing and are implemented to prevent take of the species or to determine if issuance of an ITP is warranted.

47. **BIO-12:** Pre-construction and pre-decommissioning surveys, relocation, avoidance, and compensatory measures for Burrowing Owl shall utilize the recommendations listed in the DFW *Staff Report on Burrowing Owl Mitigation* (2012).

48. **BIO-13:** An assessment of CTS and CRLF habitat will be completed as part of pre-construction and pre-decommissioning surveys to determine whether any avoidance is necessary. Habitat assessment shall follow the USFWS's *Interim Guidance on Site Assessment and Field Surveys for Determining Presence or a Negative Finding of the California Tiger Salamander* (2003) and the *Revised Guidance on Site Assessments and Field Surveys for the California Red-legged Frog (2005)*.

49. **BIO-14:** A 250 foot no-disturbance buffer shall be clearly delineated around the stockponds and Crow Creek to protect water quality and wildlife that may depend on these water features. The no-disturbance buffer shall be maintained during construction, operations, and decommissioning activities.

50. **BIO-15:** The developer shall apply DFW's "Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities" (DFG 2009) to determine presence or infer absence of special-status plants in and near the Project site, to evaluate potential impacts, and to design ways to mitigate Project impacts. If State-listed plants are detected during surveys, consultation with the Department is warranted to discuss the potential for "take" under CESA.

51. **CR-1:** Stop Work if Previously Unknown Archaeological Resources Are Uncovered during Project Construction, Assess the Significance of the Find, and Pursue Appropriate Management.

    - If an inadvertent discovery of cultural materials (e.g., unusual amounts of shell, animal bone, bottle glass, ceramics, structure/building remains) is made during project-related construction activities, ground disturbances in the area of the find shall be halted and a qualified professional archaeologist shall be notified regarding the discovery. The archaeologist shall determine whether the resource is potentially significant as per the California Register of Historic Resources (CRHR) and develop appropriate treatment measures.

52. **CR-2:** Stop Work if Human Remains Are Uncovered during Project Construction, Assess the Significance of the Find, and Pursue Appropriate Management.

- If human remains are uncovered during ground-disturbing activities, the contractor and/or the project applicant shall immediately halt potentially damaging excavation in the area of the find and notify the County Coroner and a professional archaeologist to determine the nature of the remains. The coroner is required to examine all discoveries of human remains within 48 hours of receiving notice of a discovery on private or state lands (Health and Safety Code Section 7050.5[bD. If the coroner determines that the remains are those of a Native American, he or she must contact the Native American Heritage Commission (NAHC) by phone within 24 hours of making that determination (Health and Safety Code Section 7050[c]). Following the coroner's findings, the property owner, contractor or project proponent, an archaeologist, and the NAHC-designated Most Likely Descendent (MLD) shall determine the ultimate treatment and disposition of the remains and take appropriate steps to ensure that additional human interments are not disturbed. The responsibilities for acting upon notification of a discovery of Native American human remains are identified in California PRC 5097.9.

- Upon the discovery of Native American remains, the project applicant, in consultation with the County shall ensure that the immediate vicinity (according to generally accepted cultural or archaeological standards and practices) is not damaged or disturbed by further development activity until consultation with the MLD has taken place. The MLD shall have 48 hours to complete a site inspection and make recommendations after being granted access to the site. A range of possible treatments for the remains, including nondestructive removal and analysis, preservation in place, relinquishment of the remains and associated items to the descendents, or other culturally appropriate treatment may be discussed. California PRC 5097.9 suggests that the concerned parties may extend discussions beyond the initial 48 hours to allow for the discovery of additional remains. The following is a list of site protection measures that the project applicant shall employ:

  - record the site with the NAHC or the appropriate Information Center,
  - use an open space or conservation zoning designation or easement,
  - and record a document with Stanislaus County.

- The project applicant or their authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity on the property in a location not subject to further subsurface disturbance if the NAHC is unable to identify a MLD or the MLD fails to make a recommendation within 48 hours after being granted access to the site. The landowner or their authorized representative may also re-inter the remains in a location not subject to further disturbance if they reject the recommendation of the MLD, and mediation by the NAHC fails to provide measures acceptable to the County.

53. **GEO-1:** Implement a Storm Water Pollution Prevention Plan (SWPPP) and associated Best Management Practices (BMPs) for disturbance of more than one acre.

54. **GEO-2:** Prepare and submit for County review and approval, and implement a grading and erosion control plan.

55. **HM-1:** Keep hazardous materials in an Identified Staging Area and Prepare and Implement an Accidental Spill Prevention Plan during Construction

    - Before construction begins, the project applicant shall require the construction contractor to identify a staging area where hazardous materials will be stored during construction. The staging area shall not be located in an undisturbed area. The contractor shall also be required to prepare an accidental spill prevention and response plan, which shall be reviewed and approved by the project applicant and the County, that identifies measures to prevent accidental spills from leaving the site and methods for responding to and cleaning up spills before neighboring properties are exposed to hazardous materials.

56. **HM-2:** This project is in the State Responsibility Area – Modesto Fire Hazard Severity Zone and therefore must have a Vegetation Management Plan and defensible space of 100 feet. (California Public Resources Code.)

57. **HM-3:** No development shall occur without approved fire department (emergency vehicle) access and water supply.

58. **HM-4:** A second point of emergency vehicle access from either the north of the project (Fink Road) or from the south of Davis Road shall be built to California Standards.

59. **HM-5:** Electrical Infrastructure shall be constructed to the latest California PUC Standards and AVIAN Protection Standards.

60. **WQ-I:** A Storm water Pollution Prevention Plan (SWPPP) for the proposed project will be prepared by the project applicant, approved by the Stanislaus County Public Works Department prior to commencing with any ground-disturbing construction related activities, and implemented by the project applicant.

    Best Management Practices (BMPs) will be included in the SWPPP for runoff, erosion and water quality, and the BNIPs will be put in place and maintained during the duration of ground-disturbing activities during the rainy season or when rain is forecast.

61. **WQ-2:** A grading and drainage plan will be prepared, submitted to the Stanislaus County Public Works Department for approval prior to issuance of any new building permits, and implemented by the project applicant. Drainage calculations will be prepared as per the Stanislaus County Standards and Specifications that are current at the time a permit is issued. The plan will contain enough information to verify that all runoff will be kept from going onto adjacent properties, into Little Salado Creek or its tributaries, and into the Stanislaus County road right-of-way. All grading and drainage work for the site's access roads will keep runoff within the historic (natural) drainage shed for that area. The grading and drainage plan will comply with the current Stanislaus County National Pollutant Discharge Elimination System (NPDES) General Permit and the Quality Control standards for New Development.

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*Please note: If Conditions of Approval/Development Standards are amended by the Planning Commission or Board of Supervisors, such amendments will be noted in the upper right-hand corner of the Conditions of Approval/Development Standards; new wording is in **bold**, and deleted wording will have a ~~line through it.~~*

Alternative Energy Group
Beltran Ranch Solar Facility
Project Description

Overview

Alternative Energy Group, Inc. ("AEG"), the applicant, proposes to construct and operate a combined 140 Megawatt (MW) solar photovoltaic (PV) energy generating facility (Project) on approximately 606± acres in western Stanislaus County. The land is currently zoned and operated for agricultural purposes in the A-2-40 acre and A-2-160 acre zones. A Use Permit approved by the Stanislaus County Planning Commission is required.

While under construction, the Project will employ about 100 persons for a period of approximately three years. AEG has invited union engineering, procurement, and construction contractors to bid on the Project, including Rosedin Electric and Swearingen Electric.

This Project is in addition to a prior approved Use Permit No. 2010-09 for a 382 acre/50 MW Solar Energy Facility within the same property. The new Project site location was identified in the prior Use Permit as "Future Solar Site 1 - 580 acres" and "Future Solar Site 2 - 110 acres". No change is proposed to the approved Use Permit. It is understood that a separate Use Permit is required for this new Project.

Findings for approval of a Solar Energy Facility Use Permit

A Solar Energy Facility is a desirable use in Stanislaus County. The applicant has demonstrated positively that the use is consistent with the General Plan; is not detrimental in any way to persons, environment, or property; and, is beneficial to the welfare of the people of Stanislaus County.

Project Site and Location

The Project site is contained within several contiguous parcels totaling approximately 1162 +/- acres, generally referred to as the Beltran Ranch, located just west of Interstate 5 and the California Aqueduct, and one mile south of the Fink Road interchange. All of the property owners are participating with the applicant and have signed the application and pertinent forms. The Project site is accessed via Fink Road, and south on Davis Road, a private road which provides a grade separation overpass of both the California Aqueduct and Interstate 5.

Other land uses in the vicinity of the Project include:

- **North**: the Stanislaus Resource Recovery Facility (waste-to-energy facility) (operated by Covanta Stanislaus, Inc.), and the Fink Road Landfill (operated by the Stanislaus County Environmental Resources Department).
- **West:** Agricultural lands which are not currently under production.

- **South**: Crow Creek. (Note: there are no wetlands or waterways present within the boundaries of the Project site which has been designed to fully avoid or mitigate any impacts to the adjacent Creek.)
- **East**: Interstate 5 and the California Aqueduct. (Note that the Beltran Ranch includes the land between the Highway and Aqueduct, however this area is not a part of this Project.)
- **Within**: 382 acres within the Beltran Ranch has been approved (UP 2010-09) for a Solar PV project of 50 MW. (Note that this site is not a part of the proposed Project.)

Historically, the Beltran Ranch has been used for nut farming operations (primarily almond and walnut) and other agricultural products. The property relies on the California Aqueduct for its annual water allocation, which has been restricted over the past several years to just 50% of normal. There is insufficient water available to cultivate a significant portion of the Project site and formerly productive land is now fallow. Much of the land consists of bare ground subject to frequent discing.

According to a letter dated June 25, 2010, Christine Almen, of the Stanislaus County Environmental Review Committee, stated that the Agriculture Commissioner and Sealer of Weights and Measures noted that "while this project (Scatec) may take agricultural land out of production in Stanislaus County, it is located in a preferred area for projects such as this."

Therefore, it is intended that the Project will utilize the least agriculturally productive portion of the Beltran Ranch. The proposed Project is not subject to a Williamson Act contract and is not expected to conflict with surrounding uses, including agriculture, and the continuance of surrounding uses will not adversely affect the Project.

Project Description

The Project parameters are based on the best available PV technology in today's market. Approximately 1 Megawatt of electrical energy can be produced on 4.25 acres of solar PV arrays. Based on the proposed Lot layout the Project will be constructed in three phases:

Phase I	Lot 1	113 acres	26 MW
Phase II	Lot 2	167 acres	40 MW
Phase III	Lot 3	326 acres	74 MW
Total		**606 acres**	**140 MW**

At completion, there will be approximately 300 arrays containing nearly 280,000 PV panels, 75 inverters, and one substation delivering about 140 MW to the PG&E grid at peak performance.

- Building of a substation (services all phases; within a fenced 248' x 188' area) that will transform system output voltage to grid connection voltage; and
- Connection to the Salado-Newman Pacific Gas & Electric (PG&E) transmission line which passes through the Project site.
- A 30' high overhead power line will be added to existing above ground power lines to connect the solar facility to the substation.
- Accessory structures such as an office trailer, storage sheds, and other Project related facilities.

Project Design

PV Panels, Inverters/Transformers, Substation

The basic solar array, or "Block", is approximately 1.65 acres in size and is comprised of 20 rows, each containing 48 panels mounted within a structural frame, and supported by 13 steel columns per row. Each Block of panels has a central driving motor which continuously moves the rows of panels following the sun east to west to capture maximum solar radiation. The energy of four Blocks is delivered to an inverter/transformer, and from the inverter to the sub-station, and then to the PG&E grid. Every block is easily accessible from a network of gravel roads for maintenance and Fire Department.

The solar panels are dark in color and non-reflective. The PV panels are low-profile and when horizontal they are approximately 4 feet from the ground. The highest end of the tilted panel stands less than 10 feet above the level ground. The rows of panels will be spaced based on a panel tilt angle to prevent them from shading one another.

Project Access

The Project site will be accessed from I-5 via Fink Road and Davis Road. Davis Road is a paved road that is privately owned and maintained by adjacent landowners, and a non-exclusive 20' ingress/egress easement is granted to Stanislaus County. The property owner has agreed to provide AEG an irrevocable access easement in recordable form for the shared use and maintenance of the road.

As a condition of the previously approved Solar Facility (UP 2010-09) the owners have obtained DWR approval of the existing Davis Road bridge crossing the California Aqueduct. Caltrans had previously indicated that the Davis Road bridge over I-5 was approved. These documents are attached as exhibits to this Project Description.

All areas of the Project are fully accessible to the Fire Department and its equipment as required. Within each Phase, unpaved, compressed, and crowned dirt type, or gravel, aisle ways will be created between the blocks of arrays for vehicle service access. The interior aisle ways will be a minimum of 20 feet wide per Fire Department requirements.

Fencing

The site will be secured by a 6' chain link fence around the perimeter. Emergency access will be provided through gates secured by a Knox Box. In accordance with the approved Mitigation Measures, the fence will be installed with a minimum 6" clearance at the base to allow the movement of the SJKF.

Construction

Each phase may involve minor tilling of the existing bare ground, shallow (approx. 1-2 feet deep) trenching for cables between inverter boxes, concrete bases to support the inverter boxes, and where orchards are present, there will be clearing and grubbing of the trees to allow for PV panel installation. No removal of native trees is anticipated. Construction of all-weather access and interior roads, in compliance with Fire Department standards, will require some minor grading and installation of gravel road base.

Each solar array row is supported by 13 steel columns. The columns will be driven 10 to 12 feet into the ground; about 78,000 columns will be installed. The use of supporting columns reduces the impact of the structures on the existing land (as compared to concrete foundation or piers supporting a structural frame).

Approximately 100 workers will be hired during the site improvement and installation work; typical work schedules are expected to be during daylight hours only. Several pile drivers, forklifts, excavators, water trucks and bulldozers will be required to install the system and create the all weather road network. Trucks delivering materials to the site will make an estimated 6 trips per day. All trucks will be under the maximum weight capacity of the access overpass of Davis Road.

During the construction period, water will be needed for uses such as dust control, initial panel washing, and concrete manufacturing. Water will be provided from the Beltran Ranch shares in the Aqueduct, existing irrigation system wells, and on site storage. Soil disturbance and earth moving will be kept to a minimum and will follow typical procedures to minimize impacts and enhance reclamation.

The installation of each increment of 25 MW will take approximately six to eight months. The entire project of 140 MW will take about 3 years to complete.

Operations and Maintenance

Once the PV panel installation process is completed, the system will be monitored on a daily basis by a designated maintenance operator and maintenance personnel.

The solar panels will be washed down (no chemical cleaners are used) by a water truck approximately two (2) times per year. No water needs to be stored on-site for this wash down process as water is drawn from existing irrigation wells. Cumulatively, about 16 acre-feet of water is necessary for the Project. Water is currently supplied to the Beltran Farms via an allocation from the California Aqueduct located parallel and just

east of I-5. This allocation runs with the land and quantities sufficient to serve the Project will be granted to AEG.

Other Design Features

In addition to the general Project components described above, the Project incorporates several environmentally-sensitive design features.

Drainage and Erosion Control

Pre-construction and Design Features: The Project includes the implementation of measures to maintain the volume and quality of storm-water runoff at historic levels. The natural drainage pattern of the project site is generally toward the north-east/east with relative flat slopes. The project proposes no changes to the existing drainage pattern and no new road crossings of the existing natural drainage courses. The runoff from the PV panels will generally be redistributed directly into the slow growing vegetation beneath the structures which will allow for maximum percolation into the ground. Drainage swales or other buffer techniques will be incorporated into the project design to prevent any potential runoff. No existing storm drainage systems in the area would require further protection from runoff.

During Construction: Since construction operations will result in an area of disturbance of one acre or more, AEG is required to comply with the National Pollution Discharge Elimination System (NPDES) General Permit for Construction Activities. As part of the NPDES General Permit, AEG will file a Notice of Intent (NOI) and prepare a Storm Water Pollution Prevention Plan (SWPPP), which outlines Best Management Practices (BMP) that will be included in the Project to minimize and control construction runoff. BMP will be implemented for sediment control such as utilizing water trucks during earth work activities, installation of fiber rolls around temporary stockpiles, and implementing directional drainage swales as necessary to keep run-off within the project boundaries and away from Crow Creek. Implementation of BMP will minimize erosion, siltation and contaminated runoff from construction sites.

Post Construction. Once operational, the Project will result in minimal generation of stormwater runoff within the Project site. To prevent soil erosion and provide dust control after construction, a low vegetated ground cover will be planted under the panels to reduce potential for sheet flow and allow stormwater to percolate into the ground. Such re-vegetation will facilitate restoration of preconstruction overland flow and recharge patterns.

Industrial Waste and Toxic Substances

The Project will not generate industrial wastes or toxic substances during operation. The PV technology utilized by AEG contains no toxic metals, such as cadmium, that occur in other types of solar technology. There will be no hazardous substances stored on site.

Air Quality

The Project is providing an alternative, clean source of energy that would offset the need for older polluting power plants or new gas-fired GHG-emitting plants. During construction, the Project will minimize its impacts to air quality by implementing a dust control plan that meets the requirements of the San Joaquin Valley Air Pollution Control District (SJVAPCD).

Biological

The Project site is characterized and surrounded by agricultural and grazing lands, including orchards, field and row crops, and grazed fallow cropland; most of the land is subject to frequent discing. No sensitive plant communities are found in the Project area.

A report on the possible impacts to biological resources has been prepared by WRA. No significant impact on any Special Status Wildlife Species is reported. To avoid impacts that the project might have on wildlife species, the applicant will implement those conditions of approval and mitigation measures adopted in the prior approved Use Permit No. 2010-09 and incorporated within this project description.

Summary of Initial Study Comments
Scatec Westside Solar Ranch
Stanislaus County Use Permit 2010-09
Approved November 4, 2010

Background of the Scatec Westside Solar Ranch

In 2010, **Scatec Solar**, a solar energy development company, submitted an application for Use Permit 2010-09 review of a proposed solar energy facility called Scatec Westside Solar Ranch. Following a thorough review by multiple agencies, the 382 acre, 50MW, project was approved, with conditional environmental mitigation measures, by the Stanislaus County Board of County Commissioners in November 2010.

AEG and Scatec sited in the same locale

The new project proposed by **Alternative Energy Group, AEG**, comprises 606 acres in the Solar Farm area, and 1160 acres of land total within the Parcel Map. The approved 382 acre Scatec project is at the center of the lands now proposed for the new solar farm of about 140 MW. The Scatec project is not a part of the new AEG project.

While the new AEG project is larger at 1160 acres, the land it encompasses shares substantially the same characteristics and type as the 382 acre Scatec project. New studies by WRA have been completed to analyze and understand potential impacts of developing a solar farm on the additional new lands. The report finds no difference between the project analysis and impacts of the Scatec project, and the same analysis and impacts of the new AEG project. Therefore, the applicant presents the following synopsis of potential impacts, mitigation measures, implementation and monitoring Plan adopted for the Scatec project. Similarly, AEG proposes to adopt the same Mitigation Monitoring Plan.

Synopsis of Scatec Mitigation Measures Conditioned in UP 2010-09:

Biological

San Joaquin Kit Fox Mitigations

No. 1 Mitigation Measure: Preconstruction /pre-activity surveys shall be conducted no less than 14 days and no more than 30 days prior to the beginning of ground disturbance and/or construction activities or any project activity likely to impact the SJKF.

No. 2 Mitigation Measure: Project related vehicles shall observe a 20-mph speed limit in all project areas; this is particularly important at night when SJKF are most active. To the extent possible, nighttime construction should be minimized. Off-road traffic outside of designated project areas should be prohibited.

No. 3 Mitigation Measure: To prevent inadvertent entrapment of SJKF or other animals during the construction phase, all excavated, steep-walled holes or trenches more than 2 feet deep shall be covered at the close of each working day by plywood or similar materials, or provided with one or more escape ramps constructed of earth fill or wooden planks. Before such holes or trenches are filled, they should be thoroughly inspected for trapped animals.

No. 4 Mitigation Measure: SJKF are attracted to den-like structures such as pipes and may enter stored pipe. All construction pipes, culverts, or similar structures with a diameter of 4 inches or greater that are stored at a construction site for one or more overnight periods shall be thoroughly inspected for SJKF before the pipe is subsequently buried, capped, or otherwise used or moved in any way. If a SJKF is discovered inside a pipe, all work in the area shall stop until the animal leaves the area on its own.

No. 5 Mitigation Measure: All food-related trash items such as wrappers, cans, bottles, and food scraps shall be disposed of in closed containers and removed at least once a week from a construction site.

No. 6 Mitigation Measure: No firearms shall be allowed on the project site except for police and security personnel.

No. 7 Mitigation Measure: To prevent harassment, mortality of SJKF or destruction of dens by dogs or cares, no pets shall be permitted on the project site during construction.

No. 8 Mitigation Measure: An employee education program shall be conducted containing a brief presentation by persons knowledgeable in SJKF biology and legislative protection to explain endangered species concerns to contractors and their employees, The program shall include the following: a description of the SJKF and its habitat needs; a report of the occurrence of SJKF in the project areal an explanation of the status of the species and its protection under state and federal Endangered Species Acts; and a list of measures being taken to avoid impacts to the species during construction and implementation. A fact sheet conveying this information shall be prepared for distribution to attendees of the training and anyone else who may enter the project site.

No. 9 Mitigation Measure: Design perimeter fencing to be wildlife friendly by raising the bottom of the fence six inches above the ground to allow SJKF to move into and out of the project site.

Breeding Bird Mitigations (Including Raptors)

No. 10 Mitigation Measure: If ground disturbance or tree removal occurs during the bird breeding season (Feb 15- September 1), breeding bird surveys for both tree and ground dwelling species shall be conducted within 20 days of proposed ground disturbance to avoid disturbance to active nests, eggs, and/or young of these and other bird species. A minimum no-disturbance buffer of 250 feet shall be delineated around active nests of non-listed species and ½ mile from listed species 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 best or parental care for survival.

For Swainson's hawk, the pre-construction survey shall be extended to within ½ mile of the project area. In the event that Swainson's Hawk is detected, a determination shall be made by a qualified biologist experienced in Swainson's Hawk provision of construction buffers and any further monitoring of the nesting site that maybe required during construction activities.

For burrowing owl, pre-construction surveys shall be undertaken no more than 30 days before the onset of any ground-disturbing activities at any time of the year. During the breeding season (February 1 – August 15), any burrows occupied by burrowing owls can be assumed to possess young and a minimum 250-foot no construction buffer zone, unless a biologist verifies through non-invasive methods that either (1) the birds have not begun egg laying and incubation; or (2) that juveniles from the occupied burrows are foraging independently and are capable of independent survival. If burrowing owls occupy the site during the non-breeding season, a passive relocation effort may be instituted by a qualified biologist.

If construction occurs during the non-breeding season (September 1 to February 15, ground disturbance and tree removal may occur without pre-construction breeding bird surveys (with the exception noted above for the burrowing owl). No restrictions shall apply after construction starts.

V. Cultural Resources

No. 11 Mitigation Measure: During the construction phases of the project, if any human remains or significant or potentially unique archaeological, cultural, or historic resources are found, all construction activities in the area shall cease until a qualified archeologist can be consulted. Construction activities shall not resume in the area until an on-site archeological mitigation program has been approved by a qualified archeologist.

Other responsible agency comments:

1. West Stanislaus County Fire Protection District

   AEG will observe all requirements for fire protection, access, water provision, and vegetation management plan.

2. Stanislaus County Public Works

   AEG will comply with all access requirements, grading and drainage plan in accordance with NPDES.

3. US Army Corps of Engineers

   The project does not impact any waterway, drainage is minimal and kept within the site.

4. Stanislaus County Environmental Resources

   The project will comply with the requirements of the DER to include recycling, use of compost, and controlling waste from construction.

5. California Dept. of Fish and Game

   The project will comply with the mitigation measures indicated above required as a condition of approval.

6. San Joaquin Valley Air Pollution Control District

   The project will comply with the mitigation measures required as a condition of approval.

Exhibit B

Davis Road Bridge crossing I-5
Caltrans Communication
No Encroachment Permit

Mike Randall

From: Nelson Magsayo [nelson_magsayo@dot.ca.gov]
Sent: Thursday, August 25, 2011 3:53 PM
To: Mark Taylor
Cc: Toni Self; Hanna Kassis; Mike Randall; Sean Tobin
Subject: RE: Route 5 P.M. 9.3

Attachments: 2011_06-28_NC10008tpm2.pdf

2011_06-28_NC100
08tpm2.pdf (49...

Hi All,
Looking at a Google aerial map of the Davis Rd OC bridge at the subject location it appears to not involve encroachment permit issues. My understanding is that trucks will be traveling from local road to local road over the highway and no access issues from I-5, other than from the nearest interchange, perfectly within the CA Vehicle Code. The only other possible issue I can think of is if the bridge can handle extra legal truck loads beyond what the bridge was designed for.

>>
Nelson Magsayo
District Permit Engineer
District 10 Encroachment Permits
(209) 948-3819
http://www.dot.ca.gov/hq/traffops/developserv/permits/

CHIEF EXECUTIVE OFFICE

Monica Nino
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Assistant Executive Officer

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Assistant Executive Officer

1010 10th Street, Suite 6800, Modesto, CA 95354
Post Office Box 3404, Modesto, CA 95353-3404

STANISLAUS COUNTY ENVIRONMENTAL REVIEW COMMITTEE

April 10, 2013 - Amended

Rachel Wyse, Associate Planner
Stanislaus County Planning & Community Development
1010 10th Street Suite 3400
Modesto, CA 95354

SUBJECT: ENVIRONMENTAL REFERRAL – USE PERMIT APPLICATION NO. 2011-11 – BELTRAN RANCH SOLAR FACILITY

Ms. Wyse:

The Stanislaus County Environmental Review Committee (ERC) has reviewed the subject project and has determined that it will have a significant effect on the environment.

The following comments/conditions are submitted by the West Stanislaus Fire Protection District (Deputy Fire Marshal):

The environmental impacts are:

1. The increased risk of wildland fires during construction and operation.
2. Inadequate access for firefighting and emergency medical incidents.
3. Increased risk of wildland and other fires from the electrical distribution equipment.

The following mitigation measures are required:

- A second point of emergency vehicle access from either the North of the project (Fink Road) or from the South of Davis Road shall be built to California Standards.

- No development shall occur without approved fire department (emergency vehicle) access and water supply.

- Project is in the State Responsibility Area – Modesto Fire Hazard Severity Zone and therefore must have a vegetation management plan and defensible space of 100 feet. (California Public Resources Code)

In addition, the ERC attaches hereto and incorporates herein by reference comments / conditions from Department of Environmental Resources (Hazardous Materials).

The ERC appreciates the opportunity to comment on this project.

Sincerely,

Mark E. Loeser

Mark Loeser
Management Consultant
Environmental Review Committee

ML:ss

cc: ERC Members

Attachment

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

April 9, 2013

Rachel Wyse
Stanislaus County
Planning and Community Development
1010 10th Street, Suite 3400
Modesto, California 95354

Subject: Mitigated Negative Declaration
Use Permit Application 2011-11
Beltran Ranch Solar Facility
SCH No. 2011112013

Dear Ms. Wyse:

The California Department of Fish and Wildlife (Department) has reviewed the Mitigated Negative Declaration (MND) for the Beltran Ranch Solar Facility (Project) submitted by the Stanislaus County Department of Planning and Community Development (Lead Agency). Approval of the Project would allow the construction and operation of a 140-megawatt (MW) solar photovoltaic facility on a 606-acre portion of a 1,720-acre site. The Project will be constructed in three phases: Phase I (113 acres, 26 MW), Phase II (167 acres, 40 MW), and Phase III (326 acres, 74 MW). Additional site improvements will include all-weather fire access roads, a maintenance building, perimeter security fencing, an office trailer, sheds, and a substation. A 30-foot-high overhead power line will be added to the existing above ground power lines to connect the Project to the substation. A transmission interconnect to Pacific Gas and Electric Company's existing Salado-Newman transmission line will also be added. The Project site is located at Davis Road, west of Interstate 5, southwest of the Fink Road Landfill, west of the unincorporated community of Crows Landing, Stanislaus County, California.

According to the information provided in the Biological Resource Assessment (BRA) dated June 22, 2011 and prepared for the Project by WRA Environmental Consultants, the Project site is in newly planted orchard, grain crops, and grazed fallow cropland. Stock and irrigation ponds located in the northern portion of the Project site are identified as potential wetlands. The BRA concludes that the proposed Project would not affect special-status species or habitats.

In a letter dated February 22, 2012, the Department provided comments for the Lead Agency's Early Consultation request for this Project. In this letter, the Department indicated it did not concur with the conclusion in the 2011 Biological Resource Assessment that implementation of the Project would not impact special-status wildlife species. This non-concurrence was based on the Project site description, photographs provided in the 2011 Biological Resources Assessment, aerial photographs, topographic maps, and known species occurrences. Swainson's hawk (*Buteo swainsonii*, SWHA), which is listed as threatened under the California Endangered Species Act (CESA) is known to occur in the Project site vicinity. SWHA could

nest in nearby (up to 0.5 miles from the Project site) trees, including those associated with on-site structures and Crow Creek and could forage in newly planted orchard, grain crops, and grazing land identified on the Project site.

The Project site is within the range of the California tiger salamander (*Ambystoma californiense*, CTS), which is listed as threatened under CESA and the federal Endangered Species Act (ESA). CTS could potentially use the adjoining stock ponds for breeding and the on-site grazing land for upland refugia.

The San Joaquin kit fox (*Vulpes microtis mutica*, SJKF), which is listed as threatened under CESA and endangered under ESA is known to occur in the Project area vicinity and has the potential to traverse through and forage and reproduce within the Project site, especially within the on-site grazing lands.

The white-tailed kite (*Elanus leucurus*), which is a State fully protected species, and the burrowing owl (*Athene cunicularia*), the loggerhead shrike (*Lanius ludovicianus*), the ferruginous hawk (*Buteo regalis*), and the northern harrier (*Circus cyaneus*), all of which are State species of Special Concern could nest or forage on the Project site within on-site trees, within grazing land, and along edges of grain crops (depending on species). Because of the Project site's potential to provide habitat for the aforementioned species, the Department recommended that additional species-specific wildlife surveys be conducted to determine the potential Project-related impacts on special status biological resources.

A second BRA dated November 9, 2012 was prepared for the Project by WRA Environmental Consultants to gather information necessary to complete a review of biological resources under the California Environmental Quality Act (CEQA), to assess the potential for the Project site to support special-status wildlife species, and to identify other on-site sensitive biological resources. A site visit was conducted on May 28, 2011. At that time, the Project site was characterized as agricultural and grazing land, including orchards, field crops, row crops, and grazed fallow cropland, which was basically the same description given in the 2011 Biological Resource Assessment. The 2012 BRA provided recommendations for reducing potential Project-related impacts to SJKF, SWHA, BUOW, and other nesting birds. These recommendations were included in this MND.

The Department has the following comments regarding the proposed mitigation measures included in this MND.

There are no proposed mitigation measures for sensitive plant species. Both BRAs claim that native plant species do not exist on the Project site because of the intense agricultural use. However, dry grazed lands and uplands surrounding the adjacent stock ponds and along Crow Creek, and land within the stock ponds may contain sensitive plant species. It does not appear that any botanical survey efforts were made in these areas, which have the potential to be directly or indirectly impacted through Project implementation. No list of observed on-site plants was provided in either BRA.

Page 4 of the MND indicates that comments were received from the United States Fish and Wildlife Service (USFWS) during the Early Consultation for this Project. However, their letter and the Lead Agency's response to their comments are not provided in the MND documentation as stated. Therefore, the Department cannot determine what issues were brought up or how they were resolved through the MND process. Elderberry bushes, the host plant for valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*, VELB), which is listed as threatened under ESA were identified in a dry channel during the May 28, 2011 site visit for the preparation of the 2012 BRA. There was no assessment provided indicating the potential for VELB to be present in these bushes or impacted by the Project activities. There is also no assessment provided indicating whether or not federally listed invertebrates or CTS could occupy the adjoining stockponds. The Department recommends that the Project applicant consult with the USFWS, which implements the ESA, to avoid impacts to federally listed species.

Page 4 of the MND states that the BRAs identified water sources that may provide habitat for sensitive wildlife species including the two adjoining stock ponds and the adjoining Crow Creek which will be avoided by the Project. However, there is no avoidance distance provided; therefore, the Department cannot determine the appropriateness of this measure. The Department recommends the Lead Agency include an avoidance buffer to be clearly delineated on the ground during construction, operation, and decommissioning activities as a mitigation measure in the Final MND prepared for this Project.

Page 4 of the MND states that "...no drainage structures are necessary to collect, control or divert any storm water; additionally, no storage basins are proposed." However, page 39, item IX.c. states that, "The hydrologic design for the proposed project would result in all rainfall runoff being captured and detained by means of swales and temporary detention basins prior to releasing rainfall runoff off-site..." We recommend explaining or correcting this inconsistency.

Page 13, Item II a., b., and e., states that the Project site is designated Prime Farmland by the California State Department of Conservation Farmland Mapping and Monitoring Program. These items are identified as having less than significant impacts to agricultural lands. The Project site has been agriculturally productive for many years with an independent water supply from a private groundwater well and with water supplied from the California Aqueduct through the Oak Flat Water District (District). Recently reduced water supply from the District is the reason impacts to agriculture (converting prime farmland) was determined to be less than significant. However, there is no explanation as to why the decrease in District water supply cannot be made up through use of the private water well owned by the Project land owner to maintain productive agricultural crops, which may increase Project-related impacts to agricultural lands.

Mitigation Measure BIO-3 requires that all excavated, steep-walled holes or trenches more than two feet deep be covered at the close of each working day and inspected for trapped animals before they are filled. The Department recommends that the Lead Agency include additional mitigation language that each excavation be inspected for animals at the beginning of each day.

Mitigation Measure BIO-8 requires implementing an employee education program for SJKF. The Department recommends the Lead Agency expand this mitigation measure to include information about all special-status wildlife species having the potential to occur on or surrounding the Project site.

Mitigation Measure BIO-11 requires surveys for SHWA occur out to 0.5 mile of the Project site and if an active SWHA nest is found, the biologist shall determine appropriate buffers and monitoring. Because SWHA is a State-listed species, the Department recommends the Lead Agency change this mitigation measure language to, "If an active SWHA nest is found within 0.5-mile of the Project site, the Project proponent shall implement a 0.5-mile no-disturbance buffer around the nest until consultation with the Department occurs and appropriate avoidance measures are approved by the Department in writing and are implemented to prevent take of the species or to determine if issuance of an ITP is warranted."

Mitigation Measure BIO-12 requires pre-construction surveys for BUOW. BUOW survey protocol and guidelines for mitigation have been updated since the Early Consultation for this Project was requested at the end of 2011. The Department recommends that this measure be deleted and pre-construction surveys, relocation, avoidance, and compensatory mitigation found in the Department's *Staff Report on Burrowing Owl Mitigation* (2012) be added instead.

Because surveys for potential wildlife species were not conducted to determine if the on-site or immediately off-site stockponds or Crow Creek were occupied by special-status species, the Department recommends that the Lead Agency include an additional mitigation measure requiring a 250-foot no-disturbance buffer be clearly delineated around the stockponds and Crow Creek to protect water quality and wildlife that may depend on these water features. Maintain the no-disturbance buffer during construction, operations, and decommissioning activities.

The Department agrees with Mitigation Measure BIO-13 that the Project site be assessed for CTS and California red-legged frog (*Rana draytonii*). The Department recommends additional language be included in this measure requiring that habitat assessment follow the USFWS's *Interim Guidance on Site Assessment and Field Surveys for Determining Presence or a Negative Finding of the California Tiger Salamander* (2003) and the *Revised Guidance on Site Assessments and Field Surveys for the California Red-legged Frog* (2005).

The Department recommends that the Lead Agency include in the mitigation measures that require pre-construction surveys that additional pre-construction surveys occur prior to starting decommissioning activities.

Include the above additional mitigation measures or the modified language in the Mitigation Monitoring Plan.

All the mitigation measures provided for biological resources in the Mitigation Monitoring Plan indicate they are to be implemented and completed prior to construction. This makes sense for the pre-construction surveys. However, these surveys will also occur before starting

decommissioning activities and that is not reflected here. The Department recommends that the Lead Agency adjust the language requiring implementation of Mitigation Measures BIO-2 through BIO-8 before starting construction activities, ground-disturbing mainatenance activites, and decommissioning activities. We also recommend implementation of Mitigation Measures BIO-10 through BIO-13 before starting construction activities and before starting decommissioning activities.

Thank you for giving us the opportunity to provide comments on this renewable energy project. If you have any questions on these comments, please contact Lisa Gymer, Staff Environmental Scientist, at the address provided on this letterhead, by telephone at (559) 243-4014, extension 238, or by electronic mail at lisa.gymer@wildlife.ca.gov.

Sincerely,

Jeffrey R. Single, Ph.D.
Regional Manager

cc: Thomas Leeman
United States Fish and Wildlife Service
2800 Cottage Way, W-2605
Sacramento, California 95825

Kate Dadey
San Joaquin Valley Office
United States Army Corps of Engineers
1325 J Street
Sacramento, California 95814-2922

Regional Water Quality Control Board
Central Valley Region
11020 Sun Center Drive, #200
Rancho Cordova, California 95670

Alternative Energy Group, Inc.
1020 10th Street, Suite 310
Modesto, California 95354

State Clearinghouse
Post Office Box 3044
Sacramento, California 95812-3044

ec: See Page Six

ec: California Department of Fish and Wildlife
William Condon, Climate Science and Renewable Energy Branch
Stuart Itoga, Climate Science and Renewable Energy Branch
Julie Vance, Central Region
Lisa Gymer, Central Region
Dave Hacker, Central Region

Literature Cited:

California Department of Fish and Game. 2012. Staff Report on Burrowing Owl Mitigation. March 7, 2012.

California Department of Fish and Game. 2009. Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities. November, 2009.

California Department of Fish and Game. 1994. Staff report regarding mitigation for impacts to Swainson's hawks (*Buteo swainsoni*) in the Central Valley of California. Staff Report. November 1, 1994.

Swainson's Hawk Technical Advisory Committee. 2000. Recommended timing and methodology for Swainson's hawk nesting surveys in California's Central Valley. May 31, 2000.

United States Fish and Wildlife Service. 2011. Standardized recommendations for protection of the endangered San Joaquin kit fox prior to or during ground disturbance. Sacramento USFWS. January 2011.

United States Fish and Wildlife Service. 2005. Revised Guidance on Site Assessments and Field Surveys for the California Red-legged Frog. August 2005.

United States Fish and Wildlife Service. 2003. Interim guidance on site assessment and field surveys for determining presence or a negative finding of the California tiger salamander. Sacramento USFWS. October 2003.

San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT

HEALTHY AIR LIVING™

March 28, 2013

RECEIVED
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STANISLAUS CO. PLANNING & COMMUNITY DEVELOPMENT DEPT.

Rachel Wyse
County of Stanislaus
Planning & Community Development
1010 10th Street, Suite 3400
Modesto, CA 95354

Project: Use Permit No. 2011-11 – Beltran Ranch Solar Facility

District CEQA Reference No: 20110494

Dear Ms. Wyse:

The San Joaquin Valley Unified Air Pollution Control District (District) has reviewed the project referenced above consisting of Construction of a 140 MW solar facility, located at Davis Road, west of I-5, in the Newman/Crows Landing area, CA. The District offers the following comments:

1. Although the District doesn't require full quantification of construction emissions for all projects, the District recommends that construction related impacts, including demolition and construction exhaust emission in addition to fugitive dust emission, be characterized as this is a large proposed project. Therefore, the Initial Study/Mitigated Negative Declaration should be revised to include such analysis.

   In assessing construction related impacts on air quality, both on-road mobile source (transportation of building materials, worker commute, etc), off-road mobile source (mobile and non-mobile construction equipment), and fugitive dust emissions should be assessed. Construction emissions also include area source emissions such as emissions from paving and architectural coatings. Construction exhaust emissions and fugitive dust emissions can be quantified separately, and summed when determining significance.

2. Based on information provided to the District, the proposed project would equal or exceed 9,000 square feet of space. Therefore, the District concludes that the proposed project is subject to District Rule 9510 (Indirect Source Review).

Seyed Sadredin
Executive Director/Air Pollution Control Officer

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Southern Region
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EXHIBIT G

District Rule 9510 is intended to mitigate a project's impact on air quality through project design elements or by payment of applicable off-site mitigation fees. 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. If approval of the subject project constitutes the last discretionary approval by your agency, the District recommends that demonstration of compliance with District Rule 9510, including payment of all applicable fees before issuance of the first building permit, be made a condition of project approval. Information about how to comply with District Rule 9510 can be found online 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), Rule 4601 (Architectural Coatings), and Rule 4641 (Cutback, Slow Cure, and Emulsified Asphalt, Paving and Maintenance Operations). In the event an existing building will be renovated, partially demolished or removed, the project may be subject to District Rule 4002 (National Emission Standards for Hazardous Air Pollutants). The above list of rules is neither exhaustive nor exclusive. 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 online at: www.valleyair.org/rules/1ruleslist.htm.

4. The District recommends that a copy of the District's comments be provided to the project proponent.

If you have any questions or require further information, please call David McDonough, at (559) 230-5920.

Sincerely,

David Warner
Director of Permit Services

for, Arnaud Marjollet
Permit Services Manager

DW: dm

Cc: File

RESPONSE TO SAN JOAQUIN VALLEY AIR POLLUTION CONTROL DISTRICT LETTER DATED MARCH 28, 2013

Response to Item 1: The Project will generate significant clean energy reducing demands from older polluting power plants gas-fired GHG-emitting plants. By adding to the supply of clean energy the Project more than offsets the minimal air pollution impacts caused by the project. Greater reliance on solar power is frequently identified as a mitigation measure to lessen the impact of air pollution and/or greenhouse gas emissions. Air pollutants by this project would be classified as being generated from "mobile" sources. Mobile sources would generally include dust from roads, farming and automobile exhausts. Mobile sources are generally regulated by the Air Resources Board of California EPA which sets emissions for vehicles and acts on issues regarding cleaner burning fuels and alternative fuel technologies. As such, the district has addressed most criteria air pollutants through basin wide programs and policies to prevent cumulative deterioration of air quality within the basin. The primary source of air pollutants generated by this project will occur during the construction phase. The air pollutants will be a result of equipment and materials being delivered to the site and the grading operations throughout the site. Trucks make an average of 6 trips per day to deliver materials. This project will be required to implement fugitive dust control measures to reduce emissions of particulate matter during construction and operations. These measures may include watering, application of dust suppressants, handling of bulk materials and reduction of track out / carryout onto paved public roads. Likewise for other pollutants, reduction of emissions can be accomplished by reducing the number of pieces of equipment operating on site at any one time, limiting truck trips, and restricting idling times on construction equipment and trucks on site. Compliance with the SJVAPCD Rules and Regulations during construction will reduce construction-related air quality impacts from fugitive dust emissions and construction equipment emission to less than significant. Once the project has been built, the operations will have a limited amount of activity, traffic or otherwise. Employees will be dispatched to the site on an as needed, for example, there could be up to six employees maintaining the facility washing panels or inspecting/repairing facilities; or, on some occasions none on site; or, more depending on need.

With Implementation of mitigation measures AQ-1, AQ-2 and AQ-3, air quality impacts would be reduced to a less than significant level.

Response to Item 2: A condition of approval will be added stating that the project is subject to District Rule 9510.

Response to Item 3: Noted

Response to Item 4: The County has provided a copy of the district's comments to the project proponent.