



**PLANNING DIVISION**

15900 Smoke Tree, Hesperia, CA 92345  
(760) 995-8140 Fax (760) 995-8167  
<http://www.sbcounty.gov/landuseservices>

**CHRISTINE KELLY**  
Director

February 10, 2011

**TO: RESPONSIBLE TRUSTEE AGENCIES  
INTERESTED ORGANIZATIONS AND INDIVIDUALS**

**NOTICE OF AVAILABILITY OF A MITIGATED NEGATIVE DECLARATION FOR THE  
SUNLIGHT PARTNERS 1 MEGAWATT SOLAR PROJECT LOCATED IN AN  
UNINCORPORATED AREA NEAR THE TOWN OF APPLE VALLEY, SAN BERNARDINO  
COUNTY; APN:0439-281-35; PROJECT #: P201000546/CF**

The San Bernardino County Land Use Services Department has completed an Initial Study/Environmental Checklist Form and intends to adopt a Negative Declaration for the proposed **Sunlight Partners 1 Megawatt Solar Project** (project) located on the northeast corner of Esaws Road and Joshua Road in the community of Apple Valley, County of San Bernardino. The proposed project would establish a 1 Megawatt (MW) photovoltaic solar energy facility on a 10-acre portion of a 20-acre parcel.

The document has been prepared to meet the State requirements of the California Environmental Quality Act and is available for review at the following location:

**San Bernardino County  
Environmental Health-Land Use Services  
Planning Division  
15900 Smoke Tree Street  
Hesperia, CA 92345**

The public comment period will end on **March 10, 2011**. Interested parties can view the Initial Study / Environmental Checklist online at [www.sbcounty.gov/landuseservices](http://www.sbcounty.gov/landuseservices) by clicking on Public Notices-Projects. To obtain further information or to obtain a copy, call 760-995-8140. Address written comments to Tracy Creason, Senior Planner, 15900 Smoke Tree Street, Hesperia, CA 92345.

Sincerely,

Judy Tatman, AICP, Principal Planner  
Planning Division



# SAN BERNARDINO COUNTY INITIAL STUDY ENVIRONMENTAL CHECKLIST FORM

This form and the descriptive information, in the application package constitute the contents of Initial Study pursuant to County Guidelines (Ord.3040) and State CEQA Guidelines (Section 15063).

## PROJECT LABEL:

<b>APN:</b>	<b>0439-281-35</b>
<b>APPLICANT:</b>	Sunlight Partners
<b>COMMUNITY:</b>	Apple Valley
<b>LOCATION:</b>	Northeast corner of Esaws Ave & Joshua Rd
<b>PROJECT NO:</b>	P201000546/CF
<b>STAFF:</b>	Tracy Creason
<b>REP(S):</b>	Mark Roberts – Sunlight Partners
<b>PROPOSAL:</b>	Conditional Use Permit to establish a 1 MW solar photovoltaic power generating facility with a major variance to allow a gravel roadway in lieu of paving on 20 acres

**USGS Quad:** Apple Valley North  
**T, R, Section:** T5N R3W Sec. 24 NW¼  
**Thomas Bros.:** 4388, D-1

**Planning Area:** Desert Region  
**Zoning:** AG  
**Overlays:** Biological

## PROJECT CONTACT INFORMATION:

**Lead agency:** County of San Bernardino  
Land Use Services - Planning  
15900 Smoke Tree St.  
Hesperia, CA 92345

**Contact person:** TRACY CREASON, Senior Planner  
**Phone No:** (760) 995-8140  
**E-mail:** tcreason@lud.sbcounty.gov

**Fax No:** (760) 995-8167

**Project Sponsor:** Mark Roberts – Sunlight Partners  
4215 East McDowell Road  
Mesa, AZ 85215  
(480) 924-5519; (877) 283-6317  
Mark.roberts@sunlightpartners.com

## PROJECT DESCRIPTION:

Sunlight Partners (applicant) proposes to develop and operate a utility scale 1 MW high-efficiency solar power plant on a 13-acre portion of a 20-acre parcel of disturbed land. The proposed facility will include approximately 6,000 photovoltaic (PV) modules and three centrally located 6 x 30 foot concrete pads each supporting a 500 kW AC inverter and other mechanical components. The project site is east of the Town of Apple Valley on the northeast corner of Joshua Road and Esaws Avenue in unincorporated San Bernardino County. The project is in the First Supervisorial District. The Land Use Zoning designation for the site is AG (Agriculture). The Biological Resource overlay regulates the site.

## ENVIRONMENTAL/EXISTING SITE CONDITIONS:

The project site is within the Mojave Desert and is essentially flat, with elevations on-site ranging from 2,923 to 2,925 feet above mean sea level. The site of the proposed project lies within the Mojave Desert region, which is characterized by mountain ranges, broad alluvial fans, terraces, and playas. Approximately seven acres of the site is developed with a single-family residence and scattered outbuildings. According to the *General Biological Resources Assessment* prepared by RCA Associates, LLC, and Ryan Young, "the portion of the site that would be utilized for the solar facility has been cleared of virtually all native vegetation."

AREA	EXISTING LAND USE	ZONING/OVERLAY DISTRICTS
Site	Single Family Residence	AG – Agriculture
North	Scattered Residences	AG – Agriculture
South	Scattered Residences; Victor Valley Fabricators	RL – Rural Living; IC – Community Industrial
East	Scattered Residences; Vacant	AG – Agriculture
West	Vacant	Town of Apple Valley

**PROJECT SUMMARY:**

The proposed project is for the development of a solar power electric generation facility in one phase. The solar arrays will be mounted on a tracking system that can accommodate either single or dual axis tracking. The trackers will be arranged in rows of varying lengths with the legs of the trackers supported on concrete foundations or vibrated into the ground at a depth of six to eight feet. There will be between 5,000 and 7,000 solar panels measuring approximately three feet by six feet for the entire project. The height of the panels is expected to be approximately 13 feet at level and up to 21 feet at maximum tilt. The site is designed with appropriate access roads for emergency vehicles. No buildings will be constructed as part of this project.

Construction of the project will take approximately ten weeks. The first two weeks will include moving heavy machinery onsite, grading the ground, and compaction of the service roads in preparation for construction. Installation of the steel beams into the ground will take place during the third week in which the beams will be transported on site and installed. During this process, the remaining steel components will be transported to the site at a rate of about ten truckloads a day where they will be welded together to create the platform in which the tracking system and the PV panels will be mounted. During this process, up to 45 workers will be on site. Once completed the PV panels will be transported to the site and installed. During week seven, the electrical lines will be buried in trenches and the concrete will be laid for the inverters during this time. By the tenth week, the panels and inverters are expected to be completely installed and the solar plant connected to the electrical grid. Once construction is over, the solar plant will go online. After construction, maintenance will be performed on a regular basis and will include the mowing of grasses and shrubs and PV panel and electrical upkeep. Water will be trucked in from off-site for this periodic maintenance.

This Project is an unmanned installation, with only two or three accesses per year for maintenance. Therefore, the applicant submitted a variance request from existing code requirements for paved access. Should this request be granted, it would:

- A. Reduce the amount of air pollution caused by diesel burning road-paving equipment
- B. Reduce the consumption of petroleum products (main ingredients in asphalt)
- C. Reduce the amount of runoff of toxic materials from asphalt to surface water
- D. Increase absorption of water into the native soil by limiting use of impervious materials

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These are discussed in the appropriate sections below.

**Other public agencies whose approval may be required (e.g., permits, financing approval, or participation agreement.):**

Federal: U.S. Army Corps of Engineers, U.S. Fish and Wildlife

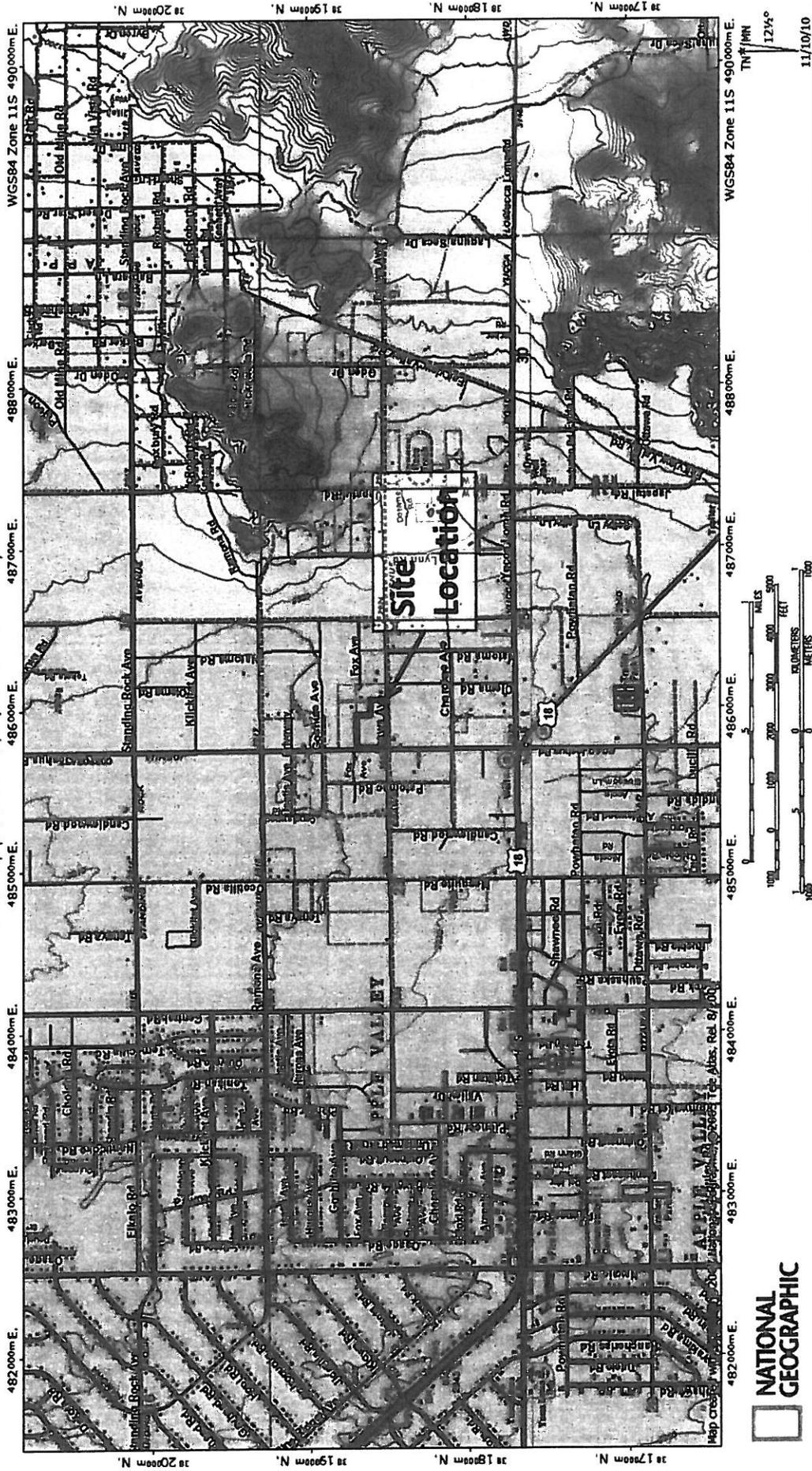
State of California: Fish and Game, Caltrans, Regional Water Quality Control Board (Lahontan Region), Mojave Desert Air Quality Management District

County of San Bernardino: Land Use Services – Code Enforcement, Building and Safety; Public Health – Environmental Health Services; Public Works – Land Development, Solid Waste, Traffic; and

Local: Town of Apple Valley, Apple Valley Fire

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TOPO! map printed on 11/10/10 from "Untitled.tpo"



 NATIONAL  
GEOGRAPHIC

Vicinity Map

Westech Company 2010  
Source: National Geographic TOPO 2007

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**EVALUATION FORMAT**

This initial study is prepared in compliance with the California Environmental Quality Act (CEQA) Guidelines. This format of the study is presented as follows. The project is evaluated based upon its effect on 17 major categories of environmental factors. Each factor is reviewed by responding to a series of questions regarding the impact of the project on each element of the overall factor. The Initial Study Checklist provides a formatted analysis that provides a determination of the effect of the project on the factor and its elements. The effect of the project is categorized into one of the following four categories of possible determinations:

Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant Impact	No Impact
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Substantiation is then provided to justify each determination. One of the four following conclusions is then provided as a summary of the analysis for each of the major environmental factors, these respectively

1. Significant adverse impacts have been identified or anticipated. An Environmental Impact Report (EIR) is required to evaluate these impacts, which are (Listing the impacts requiring analysis within the EIR).
2. Possible significant adverse impacts have been identified or anticipated and the following mitigation measures are required as a condition of project approval to reduce these impacts to a level below significant. The required mitigation measures are: (List mitigation measures)
3. No significant adverse impacts are identified or anticipated and no mitigation measures are required. (Optional mitigation may be added by stating: "As a precautionary measure to further reduce any potential for impacts, the following requirement shall apply"):
4. No impacts are identified or anticipated and no mitigation measures are required.

At the end of the analysis the required mitigation measures are restated and categorized as being either self- monitoring or as requiring a Mitigation Monitoring and Reporting Program.

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**ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:**

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

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

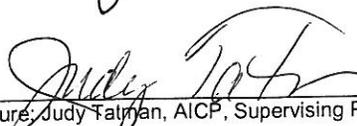
**DETERMINATION:** (To be completed by the Lead Agency)

On the basis of this initial evaluation, the following finding is made:

- The proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- Although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- The proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- The proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- Although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

  
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Signature (prepared by): Tracy Creason, Project Planner

10 Feb 2011  
\_\_\_\_\_  
Date

  
\_\_\_\_\_  
Signature: Judy Fatman, AICP, Supervising Planner

2/10/2011  
\_\_\_\_\_  
Date

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	Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant	No Impact
I. <b>AESTHETICS</b> - Would the project				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**SUBSTANTIATION** (Check  if project is located within the view-shed of any Scenic Route listed in the General Plan):

- I a) **Less than Significant Impact.** The proposed project is not visible from many areas easily accessible to the public, is situated on low-lying land below natural berms and ridges and is in an area with few viewers. The visual change potential of the proposed project is minimal, as the development would alter the existing desert area but would conform to the existing adjacent facilities. As a result, the scenic integrity of the areas surrounding this parcel would be affected slightly from its current state but would not be significantly impacted.
- I b) **Less than Significant Impact.** The project would not substantially damage scenic resources or historic buildings associated with a state-designated scenic highway, as there are no state designated scenic highways in the vicinity of the project area. A scenic highway is officially designated as a state scenic highway when the local jurisdiction adopts a scenic corridor protection program, applies for the California Department of Transportation for scenic highway approval, and receives notification from Caltrans that the highway has been designated as an official scenic highway. The proposed project will not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway, because the site is not adjacent to a state scenic highway and there are no trees, rock outcroppings, or historic buildings on the project site. The nearest scenic corridor, State Highway 18, is approximately 1/2 mile south of the southwest corner of the site.
- I c) **Less than Significant Impact.** The proposed project will have a low profile (approximately 21-feet high at vertical) and will utilize infrared cameras in lieu of lighting for security. It will not substantially degrade the existing visual character or quality of the site and its surroundings. The current visual character of the site includes desert wilderness, hills, ridges, and scattered residences. As a precautionary measure, landscaping buffers between the solar panel field and the on-site residence will be installed.
- I d) **Less than Significant Impact.** The project could be a new source of glare with the potential to adversely impact daytime views of the desert. However, the use of dark

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photovoltaic solar panels is proposed, which produce much less glare than other solar panel technologies. No light will be emitted by the photovoltaic panels. As mentioned previously, infrared cameras are proposed for security in lieu of on-site lighting. The project is also required to comply with San Bernardino County Ordinance No. 3900 that regulates glare, outdoor lighting, and night sky protection in the desert region. Therefore, the proposed facility would not have a significant impact on daytime or nighttime views in the area.

**No significant adverse impacts are identified or anticipated and no mitigation measures are required. As a precautionary measure, landscaping buffers between the solar panel field and the on-site residence will be installed.**

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	Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant	No Impact
<p><b>II. AGRICULTURE AND FOREST RESOURCES</b> - In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project, and the forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:</p>				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forestland or conversion of forestland to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forestland to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**SUBSTANTIATION** (Check  if project is located in the Important Farmlands Overlay):

- II a, c- **No Impact.** The proposed project will not convert Prime Farmland, Unique Farmland, or  
 e) Farmland of Statewide Importance (Farmland) as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use. Though the proposed project is located in an agriculture land use zoning district, it is designated "other" land on the maps prepared pursuant to the Farmland Mapping and Monitoring Program due to the area having mainly low density rural

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development. The Town of Apple Valley is adjacent to the project site at the west. Parcel sizes in the general vicinity range from one-acre to 60-acres, but are predominantly 2.5-acres in size. The proposed project is in a high desert area and will have no impact on forest resources.

- II b) While the zoning on site is Agriculture, the property has been used only for livestock grazing or exercising. Of the 20-acre site, ten acres will continue to be used by the existing residence, barn, arena, and assorted outbuildings as a rural residential use. Zoning on the adjacent and nearby properties includes IC (Community Industrial), RL (Rural Living), Neighborhood Commercial (CN), General Commercial (CG), and Agriculture (AG). Typical uses in the area are rural residential, with scattered, small-scale industrial uses. Owners of the site and other AG zoned properties in the area do not use them for such activities. As mentioned above, the proposed project site is in the high desert of Southern California, an area of extreme high and low temperatures, extremely low humidity, and water scarcity.

**No significant adverse impacts are identified or anticipated and no mitigation measures are required.**

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	Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant	No Impact
<p><b>III. AIR QUALITY</b> - Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:</p>				
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions, which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**SUBSTANTIATION** (Discuss conformity with the Mojave Desert Air Quality Management Plan, if applicable):

III a) **Less than Significant Impact.** The Project site is located within the jurisdiction of the MDAQMP. The MDAQMD adopted the Mojave Desert Planning Area-Federal Particulate Matter Attainment Plan (Plan) in 1995 and the Ozone Attainment Plan in 2004. Air quality impacts would include construction exhaust emissions generated from construction equipment, vegetation clearing and earth movement activities, construction workers' commute, and construction material hauling for the entire construction period. These activities would involve the use of diesel- and gasoline-powered equipment that would generate emissions of criteria pollutants such as Carbon Monoxide (CO), Nitrogen Oxides (NOX), Reactive Organic Gases (ROG) or Volatile Organic Compounds (VOC), Sulfur Oxides (SOX), Particulate Matter less than 10 microns (PM10), and Particulate Matter less than 2.5 microns (PM2.5). The project construction activities also represent sources of vehicle re-entrained fugitive dust (which includes PM10), a potential concern because the proposed project is in a non-attainment area for ozone and PM-10. However, construction-related increases in emissions of fugitive dust and exhaust from construction equipment and employee commute vehicles would be temporary and limited to the time required to construct the project.

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- III b) **Less than Significant Impact with Mitigation.** The project would contribute criteria pollutants in the area during the short-term project construction period. None of the activities associated with the proposed project would create a substantial permanent increase in the emissions of criteria pollutants that would be cumulatively considerable. The project will not violate any air quality standard or contribute substantially to an existing or projected air quality violation, because the proposed use(s) do not exceed established thresholds of concern as established by the District. The MDAQMD provided a response to the project notice indicating their support for “the development of renewable energy sources”, stating “such development is expected to produce cumulative and regional environmental benefits.” The MDAQMD’s letter recommended “the County require that a fugitive dust best management practices (including but not limited to applicable provisions of District Rule 403.2) be implemented in the grading and construction phases of the project.” A dust control plan will be required as mitigation measure to regulate construction activities that could create wind blown dust. As a mitigation measure to control emissions of fugitive dust and exhaust during construction, the proposed project will be required to implement an approved Dust Control Plan (DCP).
- III c) **No Impact.** Occasional patrolling and routine maintenance and repairs of the facilities would have no impact on the emissions of criteria pollutants that would be cumulatively considerable. There are no sources of potential long-term air impacts associated with the implementation of the proposed project. After construction, the amount of air pollutants are expected to be reduced considerably as photovoltaic energy production systems do not generate emissions that would cause reduction of air quality or produce objectionable odors.
- III d) **Less than Significant Impact.** The MDAQMD defines sensitive receptors as residences, schools, daycare centers, playgrounds, and medical facilities. There are scattered residences in the area, but no other sensitive receptors in close proximity to the project area. In addition, electricity generation via the use of photovoltaic systems does not generate chemical emissions that would negatively contribute to air quality. Furthermore, the County’s general conditions and standards as well as project-specific design and construction features incorporated into the proposed project such as dust suppression techniques per MDAQMD’s Rule 403 would reduce any potential impacts from the project. No significant adverse impacts are identified or anticipated and no additional mitigation measures are required.
- III e) **Less than Significant Impact.** Electricity generation via the use of photovoltaic systems does not generate chemical emissions that would negatively contribute to air quality or produce objectionable odors. Potential odor generation associated with the proposed project would be limited to construction sources such as diesel exhaust and dust. No significant odor impacts related to project implementation are anticipated due to the nature and short-term extent of potential sources, as well as the intervening distance to sensitive receptors. Therefore, the operation of the project would have a less than significant impact associated with the creation of objectionable odors affecting a substantial number of people.

**Possible significant adverse impacts have been identified or anticipated and the following mitigation measures are required as conditions of project approval to reduce these impacts to a level below significant.**

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## Mitigation Measures

**AQ – Construction Mitigation.** Developer shall submit written verification that all construction contracts and sub-contracts for the project contain provisions that require adherence to the following standards to reduce impacts to air quality: During construction, each contractor and subcontractor shall implement the following, whenever feasible:

- Approved Dust Control Plan (DCP) submitted with the Grading Plans.
- Provide documentation prior to beginning construction demonstrating that the project proponents will comply with all MDAQMD regulations.
- Suspend use of all construction equipment operations during second stage smog alerts. For daily forecast, call (800) 367-4710 (San Bernardino and Riverside counties).
- Trucks/equipment shall not be left idling on site for periods in excess of ten minutes.
- Provide temporary traffic control during all phases of construction.
- Provide on-site food service for construction workers.
- Use reformulated low-sulfur diesel fuel in equipment and use low-NO<sub>x</sub> engines, alternative fuels and electrification. Apply 4-6 degree injection timing retard to diesel IC engines. Use catalytic converters on gasoline-powered equipment.
- Minimize concurrent use of equipment through equipment phasing.
- Substitute electric and gasoline-powered equipment for diesel-powered equipment.
- Onsite electrical power hook-ups shall be provided for electric construction tools to eliminate the need for diesel-powered electronic generators.
- Maintain construction equipment engines in good order to reduce emissions. The developer shall have each contractor certify that all construction equipment is properly serviced and maintained in good operating condition.
- Install storm water control systems to prevent mud deposition onto paved areas.
- Contractors shall use low sulfur fuel for stationary construction equipment as required by AQMD Rules 431.1 and 431.2 to reduce the release of undesirable emissions.

**AQ – Dust Control Plan.** The developer shall submit to County Planning a Dust Control Plan (DCP) consistent with MDAQMD guidelines and a letter agreeing to include in any construction contracts and/or subcontracts a requirement that the contractors adhere to the requirements of the DCP. The DCP shall include these elements to reduce dust production:

- Exposed soil shall be kept continually moist through a minimum of twice daily waterings to reduce fugitive dust during all grading and construction activities
  - Street sweeping shall be conducted when visible soil accumulations occur along site access roadways to remove dirt dropped by construction vehicles.
  - Site access driveways and adjacent streets shall be washed daily, if there are visible signs of any dirt track-out at the conclusion of any workday.
  - Tires of vehicles will be washed before the vehicle leaves the project site and enters a paved road.
  - All trucks hauling dirt away from the site shall be covered
  - During high wind conditions (i.e., wind speeds exceeding 25 mph), areas with disturbed soil shall be watered hourly and activities on unpaved surfaces shall be terminated until wind speeds no longer exceed 25 mph.
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- **Storage piles that are to be left in place for more than three working days shall either be:**
    - **Sprayed with a non-toxic soil binder, or**
    - **Covered with plastic, or**
    - **Re-vegetated until placed in use.**

**AQ – Energy Conservation.** The developer shall incorporate the following design elements:

- **Energy efficient lighting.**
  - **Alternative energy resources such as active and passive solar energy features.**
  - **California Energy Commission insulation standards.**
  - **All new and modified stationary sources of emissions shall be subject to MDAQMD Regulation. New and modified stationary sources shall be required to install Best Available Control Technology and offset any new emissions such that there is no net gain in emissions within the air basin.**
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	Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant	No Impact
<b>IV. BIOLOGICAL RESOURCES - Would the project:</b>				
a) Have substantial adverse effects, either directly or through habitat modifications, on any species identified as a candidate, sensitive or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc...) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**SUBSTANTIATION** (Check if project is located in the Biological Resources Overlay or contains habitat for any species listed in the California Natural Diversity Database ):

IV a) **Less Than Significant with Mitigation.** According to the General Biological Resource Assessment including Focused Surveys for Desert Tortoise and Burrowing Owl, and Habitat Assessment for Mohave Ground Squirrel prepared by RCA Associates, LLC and Ryan Young of Phoenix Biological, "the portion of the site that would be utilized for the solar facility has been cleared of virtually all native vegetation." The project area, which was used previously for livestock grazing or exercising, has been cleared of native vegetation and very little re-vegetation has occurred over the last few years. Vegetation present in the western portion during the field investigation included a few small saltbush

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(*Atriplex canescens*), yellow-green matchweed (*Sarothrae mexicana*), and Russian thistle (*Salsola tragus*) shrubs which were present primarily along the edge of the property. Erodium (*Erodium texanum*), schismus (*Schismus barbatus*), and brome grass (*Bromus* sp.) were the primary annuals. A few deciduous trees were also present along the northern edge of the property.

Few wildlife species utilized the property given the absence of native plant communities and the current level of disturbance. Birds were the only wildlife observed during the field investigations and included ravens (*Corvus corax*), song sparrows (*Melospiza melodia*), sage sparrows (*Amphispiza belli*), morning doves (*Zenaida macroura*), and American robins (*Turdus migratorius*). No reptiles or mammals were observed and given the absence of native vegetation and the amount of disturbance, few if any reptiles or mammals are expected to inhabit the Site. No distinct wildlife corridors were identified on the Site or in the immediate surrounding area. Sensitive species which have been documented in the area include the desert tortoise (*Gopherus agassizii*), burrowing owl (*Athene cunicularia*), Mohave ground squirrel (*Spermophilus mohavensis*), and LeConte's thrasher (*Toxostoma lecontei*). However, none of these species were observed on the property. Based on the existing site conditions and lack of native vegetation, none of these sensitive species is expected to inhabit the site.

The Mohave Ground Squirrel (MGS) has a mapped historic range. The proposed project site is within the MGS mapped historic range. For proposed projects located within the MGS range, the CDFG Mohave Ground Squirrel Survey Protocol identifies two methods for addressing Mohave Ground Squirrel. These two methods are 1) Trapping survey(s), or 2) Assuming MGS presence at the project site and applying for a CDFG incidental-take permit (2081 permit). "General Habitat Assessments" are not sufficient replacements for "MGS Protocol Surveys", and do not achieve the purpose of "MGS Protocol Surveys". Further, the site has been cleared of the native vegetation. Based on the clearance of the native vegetation from the site, the "Biological Assessment" states the site does not support habitat for the Mohave ground squirrel and the species is not expected to occur on the property in the future. However, surrounding properties include vegetation and habitat suitable for MGS, and in-fact, as stated in the biological report, MGS has been identified nearby. Therefore, given the current circumstances of the proposed project site, it is possible that CDFG may elect to apply (or require) some form of condition/mitigation relative to MGS. A copy of the Biological Report (August 28, 2010) will be provided to CDFG along with this Initial Study for review.

Due to their migratory nature, as a precautionary measure to ensure that burrowing owls have not moved into the site, a 30-day pre-construction survey for burrowing owl is required. Compliance with any requirements of this survey is also required.

- IV b) **No Impact.** This project will not have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Game or US Fish and Wildlife Service. The project site, which was previously disturbed by livestock grazing or exercising and is partially developed with an existing residence, barn, arena, and assorted outbuildings, has no such riparian habitat or sensitive natural community identified on site.
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- IV c) **No Impact.** This project will not have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means, because the project is not within an identified protected wetland. As a condition of project approval, the project is required to comply with the Statewide National Pollutant Discharge Elimination System (NPDES) General Permit for discharges of storm water associated with construction activity. If the project disturbs one acre or more of land, including construction staging areas, a Construction General Permit in compliance with the State Water Resources Control Board requirements will be required.
- IV d) **No Impact.** This project will not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites. The biological assessment identified no distinct wildlife corridors or nursery sites within or near the project site.
- IV e) **Less Than Significant Impact.** This project will not conflict with any local policies or ordinances protecting biological resources, as the site has been previously disturbed and there are no identified biological resources that are subject to such regulation.
- IV f) **Less Than Significant Impact.** This project will not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan, because no such plan has been adopted in the area of the project site. The site is within the proposed boundary of the West Mojave Plan, which covers 9.3 million acres in the western portion of the Mojave Desert. This interagency habitat conservation plan remains under review.

**Possible significant adverse impacts have been identified and the following mitigation measures are required as conditions of project approval to reduce these impacts to a level below significant:**

#### **Mitigation Measures**

**A 30-day pre-construction survey for burrowing owl is required. If found on site, as compensation for the direct loss of burrowing owl nesting and foraging habitat, the project proponent shall mitigate by acquiring and permanently protecting known burrowing owl nesting and foraging habitat at the following ratio:**

- a. **Replacement of occupied habitat with occupied habitat at 1.5 times 6.5 acres per pair or single bird;**
  - b. **Replacement of occupied habitat with habitat contiguous with occupied habitat at 2 times 6.5 acres per pair or single bird; and/or**
  - c. **Replacement of occupied habitat with suitable unoccupied habitat at 3 times 6.5 acres per pair or single bird.**
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All owls associated with occupied burrows that will be directly impacted (temporarily or permanently) by the project shall be relocated and the following measures shall be implemented to avoid take of owls:

- a. Occupied burrows shall not be disturbed during the nesting season of February 1 through August 31, unless a qualified biologist can verify through non-invasive methods that either the owls have not begun egg laying and incubation or that juveniles from the occupied burrows are foraging independently and are capable of independent flight.
- b. Owls must be relocated by a qualified biologist from any occupied burrows that will be impacted by project activities. Suitable habitat must be available adjacent to or near the disturbance site or artificial burrows will need to be provided nearby. Once the biologist has confirmed that the owls have left the burrow, burrows should be excavated using hand tools and refilled to prevent reoccupation.
- c. All relocation shall be approved by the Department. The permitted biologist shall monitor the relocated owls a minimum of three days per week for a minimum of three weeks. A report summarizing the results of the relocation and monitoring shall be submitted to the Department within 30 days following completion of the relocation and monitoring of the owls.

A Burrowing Owl Mitigation and Monitoring Plan (Plan) shall be submitted to the CDFG for review and approval prior to relocation of owls. The Plan shall describe proposed relocation and monitoring plans. The Plan shall include the number and location of occupied burrow sites and details on adjacent or nearby suitable habitat available to owls for relocation. If no suitable habitat is available nearby for relocation, details regarding the creation of artificial burrows (numbers, location and type of burrows) shall also be included in the Plan. The Plan shall also describe proposed offsite areas to preserve for compensation for impacts to burrowing owls/occupied burrows at the project site as required above.

The project proponent shall establish a non-wasting endowment account for the long-term management of the preservation site for burrowing owls. The site shall be managed for the benefit of burrowing owls. The preservation site, site management, and endowment shall be approved by the CDFG.

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	Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant	No Impact
<b>V. CULTURAL RESOURCES</b> - Would the project				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**SUBSTANTIATION** (Check if the project is located in the Cultural  or Paleontologic  Resources overlays or cite results of cultural resource review):

- V a) **Less Than Significant Impact.** No historic resources were identified within the project area. As a precautionary measure to further reduce the potential for impacts, a condition shall be added to the project that requires the developer to contact the County Museum for determination of appropriate mitigation measures, if any finds are made during project construction.
- V b) **Less Than Significant Impact.** No archaeological resources were identified within the project area. As a precautionary measure to further reduce the potential for impacts, a condition shall be added to the project that requires the developer to contact the County Museum for determination of appropriate mitigation measures, if any finds are made during project construction.
- V c) **Less Than Significant Impact.** This project will not directly or indirectly destroy a unique paleontological resource or site or unique geologic feature, because no such resources have been identified on the site. As a precautionary measure to further reduce the potential for impacts, a condition shall be added to the project that requires the developer to contact the County Museum for determination of appropriate mitigation measures, if any finds are made during project construction.
- V d) **Less Than Significant Impact.** This project will not disturb any human remains, including those interred outside of formal cemeteries, because no such burials grounds are identified on this project site. If any human remains are discovered, during construction of this project, the developer is required to contact the County Coroner, County Museum for determination of appropriate mitigation measures and a Native American representative, if the remains are determined to be of Native American origin.

**No significant adverse impacts are identified or anticipated and no mitigation measures are required. As a precautionary measure to further reduce any potential for impacts, the following requirement shall apply:**

### **Precautionary Measure**

**Cultural Resources.** If archaeological, paleontological and/or historical resources are uncovered during ground disturbing activities, all work in that area shall cease. A qualified expert (e.g. archaeologist or paleontologist), as determined by County Planning in consultation with the County Museum shall be hired to record the find and recommend any further mitigation. If human remains are uncovered during ground disturbing activities, the San Bernardino County Coroner shall be contacted within 24 hours of the find and all work shall halt until clearance is received. If the remains or cultural artifacts are determined to be of Native American origin, the local Native American representative shall be notified.

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	Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant	No Impact
<b>VI. GEOLOGY AND SOILS - Would the project:</b>				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map Issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii. Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii. Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv. Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on or off site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the California Building Code (2001) creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**SUBSTANTIATION** (Check  if project is located in the Geologic Hazards Overlay District):

VI a) **Less Than Significant Impact.** (i-iv) The entire San Bernardino County area is particularly susceptible to strong ground shaking and other geologic hazards. However, the proposed project site is not located within an Alquist-Priolo Special Studies Zone, meaning that the site is not within 500 feet of major active faults, nor is the site within 200 to 300 feet of a trough created by minor faults. With adherence to the California Building Code and the incorporation of applicable measures into project design and construction, potential project impacts associated with strong seismic ground shaking would be less than

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significant. The project will be reviewed and approved by County Building and Safety with appropriate seismic standards imposed.

- VI b) **Less Than Significant Impact.** No substantial grading or vegetation removal would occur for the installation of the proposed project. The retention of the vegetation onsite would reduce wind speeds near ground level to the extent that erosion, if it occurs, would be minor. Erosion control plans will be required to be submitted, approved, and implemented.
- VI c) **Less Than Significant Impact.** The project is not identified as being located on a geologic unit or soil that has been identified as being unstable or having the potential to result in on or off site landslide, lateral spreading, subsidence, liquefaction, or collapse. Potential project impacts associated with landslides or liquefaction would be less than significant.
- VI d) **Less Than Significant Impact.** The project site is not located in an area that has been identified by the County Building and Safety Geologist as having the potential for expansive soils. As a standard condition of approval, the project applicant will submit a soils report to the County Building and Safety Geologist for review and approval.
- VI e) **No Impact.** When the proposed project is implemented, it will be an unmanned facility and will not use septic tanks or alternative wastewater disposal systems; therefore, no impacts are anticipated.

**No significant adverse impacts are identified or anticipated and no mitigation measures are required.**

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

**SUBSTANTIATION:**

VII a, b) **Less than Significant Impact.** In September 2006, Governor Schwarzenegger signed the Global Warming Solutions Act (Assembly Bill 32), which was created to address the Global Warming situation in California. The Act requires that the greenhouse gas (GHG) emissions in California be reduced to 1990 levels by 2020. This is part of a larger plan in which California hopes to reduce its emissions to 80 percent below 1990 levels by 2050. This reduction shall be accomplished through an enforceable statewide cap on GHG emissions that shall be phased in starting in 2012 and regulated by the California Air Resources Board (CARB). With this Act in place, CARB is in charge of setting specific standards for different source emissions, as well as monitoring whether they are being met.

As discussed in Section III of this document, the proposed project’s primary contribution to air emissions is attributable to construction activities. Project construction shall result in greenhouse gas (GHG) emissions from the following construction related sources: (1) construction equipment emissions and (2) emissions from construction workers personal vehicles traveling to and from construction site. Construction-related GHG emissions vary depending on the level of activity, length of the construction period, specific construction operations, types of equipment, and number of personnel.

The primary emissions that would result from the proposed project occur as carbon dioxide (CO<sub>2</sub>) from gasoline and diesel combustion, with more limited vehicle tailpipe emissions of nitrous oxide (N<sub>2</sub>O) and methane (CH<sub>4</sub>), as well as other GHG emissions related to vehicle cooling systems. Although construction emissions are a one-time event, GHG emissions such as CO<sub>2</sub> can persist in the atmosphere for decades.

Currently, neither the MDAQMD nor the County has established a quantitative threshold or standard for determining whether a project’s GHG emissions are significant. In December 2008, the South Coast Air Quality Management District (SCAQMD) adopted interim CEQA GHG significance thresholds of 10,000 metric tons of CO<sub>2</sub>e (MTCO<sub>2</sub>e) per year for stationary/industrial projects that include a tiered approach for assessing the significance of GHG emissions from a project (SCAQMD 2008). For the purposes of determining whether GHG emissions from a project are significant, SCAQMD recommends summing emissions from amortized construction emissions over the life of

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the proposed project, generally defined as 30 years, and operational emissions, and comparing the result with the established interim GHG significance threshold. While the individual project emissions would be less than 10,000 MTCO<sub>2</sub>e/yr, it is recognized that small increases in GHG emissions associated with construction and operation of the proposed project would contribute to regional increases in GHG emissions.

GHGs and criteria pollutants would realize co-beneficial emissions reduction from the implementation of mitigation measures discussed in Section III, Air Quality, in this document. Furthermore, the construction of this project would result in “green” electric power generation that would otherwise be produced at a traditional fossil fuel burning plant, which generate considerably more GHG emissions. For these reasons, it is unlikely that this project would impede the state’s ability to meet the reduction targets of AB32.

**No significant adverse impacts are identified or anticipated and no mitigation measures are required.**

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

**SUBSTANTIATION**

VIII a) **Less Than Significant Impact.** The project will not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials, because no use approved on the site is anticipated to be involved in such activities.

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Implementation of the proposed project would not entail the routine transport, use or disposal of hazardous materials, with the potential exception of short-term construction-related substances such as fuels, lubricants, adhesives, and solvents. If the variance to waive the paving is approved, the resultant reduction in asphalt would reduce the associated toxicity. The potential risk associated with the accidental discharge during use and storage of such construction-related hazardous materials during project construction is considered low because the handling of any such materials would be addressed through the implementation of Best Management Practices (BMPs) pursuant to the intent of the NPDES General Construction Permit. Operation of the proposed project would not require the use or storage of significant quantities of hazardous substances; therefore, no substantial potential for accidental explosion or major releases of hazardous substances is expected. The photovoltaic panels used in the proposed project are environmentally sealed collections of photovoltaic cells that require no chemicals and produce no waste materials. There is no a battery backup component, thus minimizing the need for transporting, using, or disposing of the hazardous materials that may be associated with the project. Furthermore, standard operating procedures would prevent the use of these materials from causing a significant hazard to the public or environment.

- VIII b) **Less Than Significant Impact.** The project will not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment, because any proposed use or construction activity that might use hazardous materials is subject to permit and inspection by the Hazardous Materials Division of the County Fire Department.
- VIII c) **Less Than Significant Impact.** There are no existing or proposed schools within ¼ mile of the proposed project site. The nearest school is located approximately ½ mile west of the project site in the Town of Apple Valley. Additionally, operation and maintenance of the project would not produce hazardous emissions.
- VIII d) **Less Than Significant Impact.** The project site is not included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. The proposed project will not create a significant hazard to the public or the environment. No impacts related to this topic will occur as a result of implementing the proposed project and, therefore, no mitigation measures are required.
- VIII e) **Less Than Significant Impact.** The project site is not within the vicinity or approach/departure flight path of a public airport. The nearest public airport, Apple Valley County Airport, is approximately 4 ½ miles northwest of the project site.
- VIII f) **Less Than Significant Impact.** The project site is not within the vicinity or approach/departure flight path of a private airstrip. The nearest private airstrip, Holiday Ranch Airport, is approximately 5 ½ miles northeast of the project site.
- VIII g) **No Impact.** Activities associated with the proposed project would not impede existing emergency response plans for the project site and/or other land uses in the project vicinity. All vehicles and stationary equipment would be staged off public roads and would not block emergency access routes. Accordingly, implementation of the proposed project will not impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan.
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VIII h) **Less Than Significant Impact.** The project will not expose people or structures to a significant risk of loss, injury, or death involving wildland fires. The proposed project includes installation of non-combustible poles and panels. On-site soil compaction and periodic vegetation trimming will reduce available fuel. Other than an external source, the only risk of onsite wildfire ignition is due to electrical malfunctions resulting from poor installation. As long as the electrical equipment is installed properly and follows all state and county safety codes, the risk of onsite ignition is minimal.

**No significant adverse impacts are identified or anticipated and no mitigation measures are required.**

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		Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant	No Impact
<b>IX.</b>	<b>HYDROLOGY AND WATER QUALITY - Would the project:</b>				
a)	Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b)	Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level, which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e)	Create or contribute runoff water, which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f)	Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g)	Place housing within a 100-year flood hazard area as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h)	Place within a 100-year flood hazard area structure that would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i)	Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
j)	Inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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## SUBSTANTIATION

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- IX a, b, e, f) **Less than Significant Impact.** Potential water quality impacts from the proposed project are associated with short-term (construction-related) erosion/sedimentation and hazardous material use/discharge. Potential erosion/sedimentation and hazardous materials impacts would be avoided or reduced below a level of significance through conformance with applicable elements of the required NPDES Construction Permit. During construction, water would be trucked in from a private water supplier for dust suppression and the discharged water is expected to be absorbed into the soils onsite. Most of the ground within the proposed project area would not be covered with impermeable material, so water percolation and groundwater recharge would not be significantly impacted by the implementation of the project.
- IX c, d) **Less than Significant Impact.** The project will not substantially alter the existing drainage pattern of the site or area, including the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on- or off-site. The footprint of the solar arrays is small. The proposed project does not include any impervious surfaces that would divert any drainage pattern. During construction, a silt fence will be placed along the edge of the residence fence to reduce any flow of sediments into that portion of the site. This silt fence will also assist in filtering any stormwater runoff in the event of precipitation during construction. Adherence with the County Public Works Best Management Practices (BMPs) is a standard condition of approval.
- IX g, h) **No Impact.** The proposed project would not create or result in housing within a 100-year flood hazard area or result in the placement within a 100-year flood hazard area, any structures which would impede or redirect flood flows. Furthermore, Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map, Panel Number 5845 H, indicates that the proposed project area is within Zone D - an Undetermined Risk Area. No indicators of hydrologic activity, topographical or geological were observed onsite.
- IX i) **No Impact.** The project will not expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam. The project site is not within any identified path of a potential inundation flow that might result in the event of a dam or levee failure or that might occur from a river, stream, lake, or sheet flow situation.
- IX j) **No Impact.** The project will not be impacted by inundation by seiche, tsunami, or mudflow, because the project is not adjacent to any body of water that has the potential of seiche or tsunami nor is the project site in the path of any potential mudflow.

**No significant adverse impacts are identified or anticipated and no mitigation measures are required.**

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	Potentially Significant Impact	Less than Significant with Mitigation Incorp	Less than Significant	No Impact
<b>X. LAND USE AND PLANNING - Would the project:</b>				
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**SUBSTANTIATION**

- X a) **No Impact.** The project will not physically divide an established community, because there are no established communities present in the project area. The Town of Apple Valley exists adjacent to the west of the site.
- X b) **Less Than Significant Impact.** The current General Plan land use designation for the proposed project area is Agriculture (AG), which allows development of electrical power generation facilities with a Conditional Use Permit (CUP). The proposed project site is mapped within a Biotic Resources (BR) overlay, with potential for desert tortoise, burrowing owl, and Mohave ground squirrel in the area. As required by the BR overlay, a report was submitted with the project application that identifies all biotic resources located on and adjacent to the site. The report concluded that, with appropriate mitigation, the existence of the biotic resources did not constitute an incompatible land use with the proposed project.
- X c) **No Impact.** The project will not conflict with any applicable habitat conservation plan or natural community conservation plan, because there is no habitat conservation plan or natural community conservation plan within the area surrounding the project site. No habitat conservation lands are required to be purchased as mitigation for the proposed project.

**No significant adverse impacts are identified or anticipated and no mitigation measures are required**

	Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant	No Impact
<b>XI. MINERAL RESOURCES</b> - Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**SUBSTANTIATION** (Check  if project is located within the Mineral Resource Zone Overlay):

XI a, b) **No Impact.** The project will not result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state because there are no identified important mineral resources on the project site and the site is not within a Mineral Resource Zone Overlay.

**No significant adverse impacts are identified or anticipated and no mitigation measures are required**

	Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant	No Impact
<b>XII. NOISE</b> - Would the project:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**SUBSTANTIATION** (Check if the project is located in the Noise Hazard Overlay District  or is subject to severe noise levels according to the General Plan Noise Element ):

XII a-d) **Less Than Significant Impact.** The proposed project is adjacent to undeveloped, vacant, or scattered residential land; therefore, noise and vibration generated from the proposed project could potentially exceed ambient noise standards. Specifically, construction of the proposed project may potentially create some elevated short-term construction noise and vibration impacts from construction equipment; however, these activities will be limited to daytime hours and will comply with the noise and vibration standards of the San Bernardino County Development Code. Noise generation from construction equipment/vehicle operation would be localized, temporary, and transitory in nature; therefore, no significant impacts would be anticipated.

Operation of the proposed project would not generate audible levels of noise or perceptible levels of vibration in the surrounding area. On-site noises would be limited to the motors that rotate the photovoltaic panels on the single-axis tracking system and maintenance

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activities (including periodic cleaning, drive motor repair, tracker repair, electrical connection repair, and panel replacement). Further, the project would not include additional dwellings or other development, nor would it have the potential to generate any additional vehicle trips after construction is completed.

- XII e, f) **No Impact.** The project is not located within an airport land use plan area or within 2 miles of a public/public use airport or a private airstrip. The nearest public airport, Apple Valley County Airport, is approximately 4 ½ miles northwest of the project site. The nearest private airstrip, Holiday Ranch Airport, is approximately 5 ½ miles northeast of the project site.

**No significant adverse impacts are identified or anticipated and no mitigation measures are required.**

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	Potentially Significant Impact	Less than Significant with Mitigation Incomp.	Less than Significant	No Impact
<b>XIII. POPULATION AND HOUSING - Would the project:</b>				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**SUBSTANTIATION**

XIII a-c) **No Impact.** The project is located in a sparsely populated area of San Bernardino County. The workers needed for construction and operation of the project are expected to be drawn from the local employment base. Although there is an existing single family residence on the project site, it will remain. Therefore, displacement of housing or people will not occur. No associated impacts are anticipated to occur from the proposed project

**No significant adverse impacts are identified or anticipated and no mitigation measures are required.**

	Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant	No Impact
<b>XIV. PUBLIC SERVICES</b>				
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
Fire Protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Police Protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other Public Facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**SUBSTANTIATION**

XIV a) **Fire – Less than Significant Impact.** The project would not result in the need for additional fire protection services. Any development, along with the associated human activity, in previously undeveloped areas increases the potential of the occurrence of wildfires. Comprehensive safety measures that comply with federal, state, and local worker safety and fire protection codes and regulations would be implemented for the proposed project that would minimize the occurrences of fire due to project activities during construction and for the life of the project. Because of the low probability and short-term nature of potential fire protection needs during construction, the proposed project would not result in associated significant impacts.

**Police Protection – Less than Significant Impact.** The proposed project area and other unincorporated portions of the County are served by the San Bernardino County Sheriff's Department. The Apple Valley Sheriff's Station is located approximately 3 ½ miles to the northwest of the project site. Due to the large expanse that the station covers, deputies regularly assist and are assisted by the California Highway Patrol, Victorville Police Department, and the BLM Rangers. The proposed project would not impact service ratios, response times, or other performance objectives related to police protection. The project's short-term service requirements would not result in increases in the level of public service offered or affect these agencies' response times. The facility will include installation of infrared security cameras with remote notification to an outside security firm to provide security in addition to the eight-foot high chain link perimeter fence.

**Schools – No Impact.** Long-term operation of the proposed facilities would place no

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demand on school services because it would not involve the construction of facilities that require such services (e.g., residences) and would not involve the introduction of a temporary or permanent human population into this area.

**Parks – No Impact.** Long-term operation of the proposed facilities would place no demand on parks because it would not involve the construction of facilities that require such services (e.g., residences) and would not involve the introduction of a temporary or permanent human population into this area.

**Other Public Facilities – No Impact.** The proposed project would not result in the introduction and/or an increase in new residential homes and the proposed project would not involve the introduction of a temporary or permanent human population into this area. Based on these factors, the proposed project would not result in any long-term impacts to other public facilities.

**No significant adverse impacts are identified or anticipated and no mitigation measures are required**

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	Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant	No Impact
<b>XV. RECREATION</b>				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**SUBSTANTIATION**

XV a, b) **No Impact.** No new residences or recreational facilities would be constructed as part of the proposed project. The proposed project would not induce population growth in adjacent areas and would not increase the use of recreational facilities in surrounding neighborhoods.

**No significant adverse impacts are identified or anticipated and no mitigation measures are required.**

	Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant	No Impact
<b>XVI. TRANSPORTATION/TRAFFIC - Would the project:</b>				
a) Cause an increase in traffic, which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Result in inadequate parking capacity?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**SUBSTANTIATION**

XVI a, b) **Less Than Significant Impact.** No Traffic Impact Assessment (TIA) was conducted for the proposed project, because the project will not create significant traffic impacts to the surrounding roadway circulation system per the thresholds of significance specified by the San Bernardino County Congestion Management Plan (CMP). Traffic conditions on roadway segments and intersections during the life of the project are anticipated to be maintained at a level of service (LOS) of C or better, as required by the County General Plan. Furthermore, the proposed project is not expected to exceed any applicable level of service, either individually or cumulatively, based on the incremental level and short-term duration of project-related traffic. For estimated trip details, see table below. As a precautionary measure, warning signs that read "Trucks Entering Exiting" shall be installed along Joshua Road in both directions to alert drivers to potential delivery trucks and increased construction-related traffic.

XVI c) **No Impact.** The proposed project would not affect air traffic patterns. The operation of the proposed project is not dependent upon air transport related material, manpower, or services and would, therefore, not result in increases to air traffic levels.

- XVI d) **No Impact.** The proposed project will not introduce design features, such as sharp curves or dangerous intersections within the vicinity of the project site. There are no incompatible uses proposed by the project that would impact surrounding land uses.
- XVI e) **No Impact.** The proposed project will have adequate emergency access for both fire and medical emergency vehicles. The anticipated low operational traffic volume will not impede emergency response times.
- XVI f) **No Impact.** Construction of the proposed project would not contribute to the loss of parking capacity in the vicinity of the project as the site will provide adequate parking areas for future activities, such as deliveries, maintenance and repairs.
- XVI g) **No Impact.** The public transit provider within the area is the Victor Valley Transit Authority, which provides bus service to the cities of Adelanto, Apple Valley, Hesperia, and Victorville, as well as portions of San Bernardino County. Therefore, the project would not conflict with adopted policies, plans, or programs supporting alternative transportation.

**LABOR FORCE, DELIVERY TRUCKS, AND DUMPSTERS BY WEEK**

Week	1	2	3	4	5	6	7	8	9	10	11	12	Weekly Average
Labor - Sachs	4	8	16	24	32	32	32	32	18	12	0	0	17.50
Labor - Granite	6	10	15	15	10	10	4	2	0	0	0	0	6.00
Delivery Trucks	4	4	8	8	8	8	4	2	1	1	1	0	4.08
Trash - 10 Yd Dumpster	0	0	1	1	1	2	3	3	1	1	0	0	1.08

Source: Merrell-Johnson 2010

**No significant adverse impacts are identified or anticipated and no mitigation measures are required. As a precautionary measure, warning signs that read “Trucks Entering Exiting” shall be installed along Joshua Road in both directions to alert drivers to potential delivery trucks and increased construction-related traffic.**

	Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant	No Impact
<b>XVII. UTILITIES AND SERVICE SYSTEMS - Would the project:</b>				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Be served by a landfill(s) with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**SUBSTANTIATION**

- XVII a) **No Impact.** The proposed project does not involve the construction of facilities that would generate sewage; therefore, it would not exceed applicable wastewater treatment requirements. The proposed project's water discharge does not require treatment or permitting according to the regulations of the Lahontan RWQCB.
- XVII b) **No Impact.** The project will not require new water or wastewater treatment facilities or expansion of existing facilities. Water to clean the panels periodically will be brought to the site via water trucks from an off-site source. This equates to a negligible amount due to maintenance occurring approximately four times per year.
- XVII c) **No Impact.** The proposed project would not require the construction or expansion of storm water drainage facilities. It is assumed that the insubstantial quantity of discharged water generated on the site would be absorbed into the soils. On-site soil types are moderately well drained and are suitable for most types of development. Accordingly, no

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impacts are anticipated from implementation of the proposed project.

- XVII d) **No Impact.** Water needed for activities associated with the proposed project would be trucked in from an offsite private water company. No water is needed for the solar power generation process. Accordingly, no impacts are anticipated from implementation of the project.
- XVII e) **No Impact.** The proposed project would not require or result in the construction of new wastewater treatment facilities or the expansion of existing wastewater treatment facilities. No impacts are anticipated from implementation of the proposed project.
- XVII f, g) **Less than Significant Impact.** The proposed project will be an unmanned solar power generating facility, generating no process waste and only small quantities of solid waste requiring disposal. The project is required to comply with federal, state, and local statutes and regulations related to solid waste disposal.

**No significant adverse impacts are identified or anticipated and no mitigation measures are required.**

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	Potentially Significant Impact	Less than Significant with Mitigation Incorp	Less than Significant	No Impact
<b>XVIII. MANDATORY FINDINGS OF SIGNIFICANCE:</b>				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**SUBSTANTIATION**

- XVIII a) **Less than Significant Impact with Mitigation.** Mitigation Measures have been included to address potential impacts to Air Quality, Biological Resources, and Hydrology & Water Quality. Precautionary measures related to Aesthetics, Cultural Resources, and Traffic have been included also. However, implementation of the proposed project would not degrade the quality of the environment, substantially reduce the habitat of fish or wildlife species, cause a fish or wildlife populations to drop below self sustaining levels, threaten to eliminate a plant or animal community, or reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory with adherence to the required mitigation measures discussed within this Initial Study.
- XVIII b) **Less than Significant Impact.** The project will not have impacts that are individually limited, but cumulatively considerable. Compliance with the conditions of approval issued for the proposed development will further assure that the potential for cumulative impacts will remain below the level of significant. The project can be served adequately by all existing services and infrastructure.
- XVIII c) **Less than Significant Impact.** The incorporation of design measures, County of San Bernardino policies, standards, and guidelines would ensure that there would be no substantial adverse effects on human beings, either directly or indirectly. Impacts of the proposed project would be less than significant.

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## **XVIII. MITIGATION MEASURES**

(Any mitigation measures, which are not “self-monitoring,” shall have a Mitigation Monitoring and Reporting Program prepared and adopted at time of project approval)

**CONDITION COMPLIANCE RELEASE FORM (CCRF) MITIGATION MEASURES:** (Condition compliance will be verified by existing procedure)

**AQ – Construction Mitigation.** Developer shall submit written verification that all construction contracts and sub-contracts for the project contain provisions that require adherence to the following standards to reduce impacts to air quality: During construction, each contractor and subcontractor shall implement the following, whenever feasible:

- Approved Dust Control Plan (DCP) submitted with the Grading Plans.
- Provide documentation prior to beginning construction demonstrating that the project proponents will comply with all MDAQMD regulations.
- Suspend use of all construction equipment operations during second stage smog alerts. For daily forecast, call (800) 367-4710 (San Bernardino and Riverside counties).
- Trucks/equipment shall not be left idling on site for periods in excess of ten minutes.
- Provide temporary traffic control during all phases of construction.
- Provide on-site food service for construction workers.
- Use reformulated low-sulfur diesel fuel in equipment and use low-NOx engines, alternative fuels, and electrification. Apply 4-6 degree injection timing retard to diesel IC engines. Use catalytic converters on gasoline-powered equipment.
- Minimize concurrent use of equipment through equipment phasing.
- Substitute electric and gasoline-powered equipment for diesel-powered equipment.
- Onsite electrical power hook-ups shall be provided for electric construction tools to eliminate the need for diesel-powered electronic generators.
- Maintain construction equipment engines in good order to reduce emissions. The developer shall have each contractor certify that all construction equipment is properly serviced and maintained in good operating condition.
- Install storm water control systems to prevent mud deposition onto paved areas.
- Contractors shall use low sulfur fuel for stationary construction equipment as required by AQMD Rules 431.1 and 431.2 to reduce the release of undesirable emissions.

**AQ – Dust Control Plan.** The developer shall submit to County Planning a Dust Control Plan (DCP) consistent with MDAQMD guidelines and a letter agreeing to include in any construction contracts and/or subcontracts a requirement that the contractors adhere to the requirements of the DCP. The DCP shall include these elements to reduce dust production:

- Exposed soil shall be kept continually moist through a minimum of twice daily waterings to reduce fugitive dust during all grading and construction activities
  - Street sweeping shall be conducted when visible soil accumulations occur along site access roadways to remove dirt dropped by construction vehicles.
  - Site access driveways and adjacent streets shall be washed daily, if there are visible signs of any dirt track-out at the conclusion of any workday.
  - Tires of vehicles will be washed before the vehicle leaves the project site and enters a paved road.
  - All trucks hauling dirt away from the site shall be covered
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- During high wind conditions (i.e., wind speeds exceeding 25 mph), areas with disturbed soil shall be watered hourly and activities on unpaved surfaces shall be terminated until wind speeds no longer exceed 25 mph.
  - Storage piles that are to be left in place for more than three working days shall either be:
    - Sprayed with a non-toxic soil binder, or
    - Covered with plastic, or
    - Re-vegetated until placed in use.

**AQ – Energy Conservation.** The developer shall incorporate the following design elements:

- Energy efficient lighting.
- Alternative energy resources such as active and passive solar energy features.
- California Energy Commission insulation standards.
- All new and modified stationary sources of emissions shall be subject to MDAQMD Regulation. New and modified stationary sources shall be required to install Best Available Control Technology and offset any new emissions such that there is no net gain in emissions within the air basin.

A 30-day pre-construction survey for burrowing owl is required. If found on site, as compensation for the direct loss of burrowing owl nesting and foraging habitat, the project proponent shall mitigate by acquiring and permanently protecting known burrowing owl nesting and foraging habitat at the following ratio:

- a. Replacement of occupied habitat with occupied habitat at 1.5 times 6.5 acres per pair or single bird;
- b. Replacement of occupied habitat with habitat contiguous with occupied habitat at 2 times 6.5 acres per pair or single bird; and/or
- c. Replacement of occupied habitat with suitable unoccupied habitat at 3 times 6.5 acres per pair or single bird.

All owls associated with occupied burrows that will be directly impacted (temporarily or permanently) by the project shall be relocated and the following measures shall be implemented to avoid take of owls:

- a. Occupied burrows shall not be disturbed during the nesting season of February 1 through August 31, unless a qualified biologist can verify through non-invasive methods that either the owls have not begun egg laying and incubation or that juveniles from the occupied burrows are foraging independently and are capable of independent flight.
  - b. Owls must be relocated by a qualified biologist from any occupied burrows that will be impacted by project activities. Suitable habitat must be available adjacent to or near the disturbance site or artificial burrows will need to be provided nearby. Once the biologist has confirmed that the owls have left the burrow, burrows should be
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excavated using hand tools and refilled to prevent reoccupation.

- c. All relocation shall be approved by the Department. The permitted biologist shall monitor the relocated owls a minimum of three days per week for a minimum of three weeks. A report summarizing the results of the relocation and monitoring shall be submitted to the Department within 30 days following completion of the relocation and monitoring of the owls.

A Burrowing Owl Mitigation and Monitoring Plan (Plan) shall be submitted to the CDFG for review and approval prior to relocation of owls. The Plan shall describe proposed relocation and monitoring plans. The Plan shall include the number and location of occupied burrow sites and details on adjacent or nearby suitable habitat available to owls for relocation. If no suitable habitat is available nearby for relocation, details regarding the creation of artificial burrows (numbers, location, and type of burrows) shall also be included in the Plan. The Plan shall also describe proposed offsite areas to preserve for compensation for impacts to burrowing owls/occupied burrows at the project site as required above.

The project proponent shall establish a non-wasting endowment account for the long-term management of the preservation site for burrowing owls. The site shall be managed for the benefit of burrowing owls. The preservation site, site management, and endowment shall be approved by the CDFG.

As precautionary measures, the following are required:

As an aesthetic enhancement, landscaping buffers between the solar panel field and the on-site residence will be installed.

If archaeological, paleontological and/or historical resources are uncovered during ground disturbing activities, all work in that area shall cease. A qualified expert (e.g. archaeologist or paleontologist), as determined by County Planning in consultation with the County Museum shall be hired to record the find and recommend any further mitigation. If human remains are uncovered during ground disturbing activities, the San Bernardino County Coroner shall be contacted within 24 hours of the find and all work shall halt until clearance is received. If the remains or cultural artifacts are determined to be of Native American origin, the local Native American representative shall be notified.

Warning signs that read “Trucks Entering Exiting” shall be installed along Joshua Road in both directions to alert drivers to potential delivery trucks and increased construction-related traffic.

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# **GENERAL BIOLOGICAL RESOURCES ASSESSMENT**

*including*

**Focused Surveys for Desert Tortoise and Burrowing Owl,  
and Habitat Assessment for Mohave Ground Squirrel**

**NUNN 8135 SITE  
APN 0439-281-35**

**Conditional Use Permit  
San Bernardino County, California**

**Prepared for:**

**Sunlight Partners, LLC  
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**Project No: RCA#2010-57**

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## 1.0 INTRODUCTION AND SUMMARY

At the request of Sunlight Partners, LLC, baseline biological surveys were conducted on a 20-acre parcel located at the northeast corner of Joshua Road and Esaws Avenue in San Bernardino County (Township 5 North, Range 3 West, Section 24) (Figures 1, 2, and 3). The proponent is proposing to construct a solar project on a portion of the site which would consist of a ground-mount 1.5 MW high-efficiency power plant powered by ~6k PV modules on single axis trackers (Sunlight Partners, LLC, 2010). The modules would be configured in arrays channeled into three inverters rated at 500kWac each (Sunlight Partners, LLC, 2010).

As part of the environmental process, California Department of Fish and Game (CDFG) and U.S. Fish and Wildlife Service (USFWS) data sources were reviewed. Following the data review, surveys were performed on the site on August 26, 2010 during which the biological resources on the site and in the surrounding areas were documented by a biologist from RCA Associates LLC (Randy Arnold). As part of the surveys, the project site and the adjoining lands were evaluated for the presence of native habitats which may support populations of sensitive wildlife species. Focused/protocol surveys were also conducted for the desert tortoise and burrowing owl, and a habitat assessment was performed for the Mohave ground squirrel by Ryan Young who holds an MOU for the species. The property was also evaluated for the presence of sensitive habitats including wetlands, vernal pools, riparian habitats, and jurisdictional areas.

Based on data from USFWS, CDFG, and a search of the California Natural Diversity Database (CNDDDB), there are four sensitive wildlife species that have been documented in the region within approximately five miles of the project site. These species include desert tortoise (*Gopherus agassizii*), burrowing owl (*Athene cunicularia*), Mohave ground squirrel (*Spermophilus mohavensis*), and Le Conte's thrasher (*Toxostoma lecontei*). The Desert bighorn sheep (*Ovis Canadensis nelsoni*) is also known to occur in the general region according to USFWS and CDFG and is discussed in this report as per County requirements. Scientific nomenclature for this report is based on the following references: Hickman (1993), Munz (1974), Stebbins (2003), Sibley (2000) and Whitaker (1980).

## 2.0 EXISTING CONDITIONS

The 20-acre site is located at the intersection of Joshua Road and Esaws Avenue and 0.5 miles north of State Route 18 in San Bernardino County (T5N, R3W, Section 24) (Figures 1, 2, and 3). The portion of the site that would be utilized for the solar facility has been cleared of virtually all native vegetation (Figure 4). An existing single-family dwelling and several other structures are also located in the eastern portion of the site. Only a few small saltbush (*Atriplex canescens*), yellow-green matchweed (*Sarothrae mexicana*), and Russian thistle (*Salsola tragus*) shrubs were present along the edge of the property (Figure 3). A few annuals were also noted such as erodium (*Erodium texanum*), schismus (*Schismus barbatus*), and brome grass (*Bromus* sp.). The site is bordered on the north and south by existing single-family dwellings, with some vacant lands to the east and west (Figure 4). The USGS Apple Valley South, California Quadrangle (1955) does not show any blueline channels on the site or in immediately adjacent areas, nor where any desert washes noted during the field investigations (Figure 2).

### 3.0 METHODOLOGIES

General biological surveys were conducted on August 26, 2010 during which a biologist from RCA Associates LLC initially walked meandering transects throughout the site. Following completion of the initial reconnaissance survey, protocol surveys were conducted for the desert tortoise and burrowing owl, and a habitat assessment was performed for the Mohave ground squirrel as summarized below.

**Desert Tortoise:** Survey methodology for the desert tortoise requires the use of parallel belt transects separated by approximately ten meters in order to provide total coverage of a site. However, given the absence of native vegetation throughout the site transects were separated by approximately 30 meter. Transects were walked in a north-south direction until the entire property was surveyed for the species. Zone of influence (ZOI) surveys are also required in the surrounding area at intervals of 200, 400, and 600 feet; however, no ZOI transects were conducted due to the presence of existing houses, fences, and posted property in the immediate surrounding area. The on-site tortoise survey was performed at a time of year when tortoises are relatively inactive, except during early morning and late evening hours, however, a survey of the site for the presence of tortoise sign and an evaluation of the habitat will provide evidence of the presence or absence of the species. Surveys were performed from about 0730 to 1000 hours.

**Burrowing Owl:** A focused burrowing owl survey (Phase II) was performed on the site on August 26, 2010 to determine the presence/absence of the species, as well as the presence/absence of suitable (i.e., occupiable) burrows. CDFG protocol requires surveys be performed from two hours before sunset to one hour after sunset, or from about one hour before sunrise to two hours after sunrise. Therefore, surveys were conducted at sunrise to evaluate the site for the presence of any owls and to evaluate any suitable fossial burrows since owls typically utilize burrows which have been dug by other animals (e.g., dogs, coyotes, fox, etc.) CDFG protocol also requires surveys be conducted in the surrounding area out to a distance of about 500 feet; therefore, surveys were performed beyond the boundaries of the site in conjunction with the tortoise surveys.

**Mohave Ground Squirrel:** A habitat assessment was also performed for the Mohave ground squirrel as per CDFG protocol including an analysis of the on-site habitat, evaluation of local populations, and assessment of connectivity with habitats in the surrounding area. The assessment was performed by Mr. Ryan Young who holds a MOU with CDFG to conduct assessments as well as live-trapping surveys for the species. During the surveys, data was collected on the plant communities and the wildlife observed.

Weather conditions during the August 2010 survey consisted of winds of 0 to 5 mph, temperatures in the mid 80's (°F) (AM) with clear skies. All plants and animals detected were recorded and are provided in Tables 1 & 2 along with other species that are known to occur in the area (Appendix A).

#### 4.0 LITERATURE SEARCH

As part of the environmental process, a search of the California Natural Diversity Database (CNDDDB) search was performed. Based on this review, it was determined that four sensitive wildlife species have been documented within approximately five miles of the property. In addition, the desert bighorn sheep has been included in the report based on the location of the property within the known distribution of the desert bighorn sheep. The following table provides data on each species.

**Table 4-1: Federal and State Listed Species and State Species of Special Concern.**

T = Threatened; E = Endangered; SSC = Species of special concern; CNDDDB = California Natural Diversity Data Base

Name	Listing Status	Habitat Requirements	Presence/Absence	Comments
Desert tortoise ( <i>Gopherus agassizii</i> )	Fed: T State: T	Desert scrub	Site is located within the known distribution of the species; however, the site does not support suitable habitat.	Nearest observation is ~seven miles to northwest (T6N, R3W, Sec. 1) (CNDDDB, 2010)
Burrowing owl ( <i>Athene cunicularia</i> )	Fed: None State: SSC	Grasslands and desert habitats	Owls not observed on the site nor were any occupiable burrows present. Site has been heavily disturbed.	Nearest observation ~1 mile west of site (T5N, R3W, Sec. 23) (CNDDDB, 2010).
Mohave ground squirrel ( <i>Xerospermophilus mohavensis</i> )	Fed: None State: T	Desert scrub	Site does not support suitable habitat for the species. Native vegetation has been cleared from site.	Nearest observation is three miles southeast of site (T5N, R2W, Sec. 31) (CNDDDB, 2010).
LeConte's thrasher ( <i>Toxostoma lecontei</i> )	Fed: None State: SSC	Desert habitats	Suitable habitat absent from site. Native vegetation has been cleared from site.	Nearest observation ~two miles south of site (T5N, R3W, Sec. 11) (CNDDDB, 2010).
Desert Bighorn Sheep ( <i>Ovis canadensis nelsoni</i> )	Fed: E State: T	Desert Mountains	Site does not support suitable grazing habitat for the species and there are no known populations in the immediate area.	Site is located within known range of species but no observations in area (CNDDDB, 2010).

## 5.0 RESULTS

### 5.1 General Biological Resources

The portion of the site which would be utilized for the solar facility has been cleared of virtually all native vegetation (Figure 3). The only plants observed included a few small saltbush (*Atriplex canescens*), yellow-green matchweed (*Sarothrae mexicana*), and Russian thistle (*Salsola tragus*) along the property boundaries. A few deciduous trees were also present along the northern edge of the property. Annuals on the parcel consisted of erodium (*Erodium texanum*), schismus (*Schismus barbatus*), and brome grass (*Bromus* sp.). Areas to the east and west support a mixed desert shrub community typical of the area and is dominated primarily by saltbush, erodium, schismus, and brome grasses (Figure 4).

Few wildlife species were observed during the field investigations due in large part to the absence of native vegetation throughout most of the property. The only birds observed included ravens (*Corvus corax*), song sparrows (*Melospiza melodia*), sage sparrows (*Amphispiza belli*), morning doves (*Zenaida macroura*), and American robin (*Turdus migratorius*). No reptiles or mammals were identified and given the absence of native vegetation, few if any reptiles or mammal are expected to inhabit the site.

Various other wildlife species have been observed in the general area during other surveys performed by RCA Associates LLC including species such as cactus wrens (*Campylorhynchus brunneicapillus*), California ground squirrels (*Spermophilus beecheyi*), coyotes (*Canis latrans*), desert spiny lizard (*Sceloporus magister*), and western whiptail (*Cnemidophorus tigris*) (Appendix A, Table 2). No distinct wildlife corridors were identified on the site or in the immediate surrounding area.

### 5.2 Federal and State Listed Species

**Desert Tortoise:** The nearest documented observation of the tortoise is about seven miles northwest of the property (Occurrence #1, Apple Valley North, California Quad.; CNDDDB, 2010). The site does not support suitable habitat for the species and as previously indicated, the portion of the site where the solar facility would be located has been cleared of virtually all native vegetation (Figures 3 and 4). However, a protocol survey was performed and no tortoises or tortoise sign (burrows, scats, etc.) were observed on the site (Table 3). ZOI survey were not conducted due to the presence of houses, fences, and posted property in the immediate area. Tortoises are not expected to move onto the site in the future or utilize the property for foraging given the absence of suitable vegetation. The protocol survey results are valid for one year as per CDFG and USFWS requirements.

**Mohave Ground Squirrel:** Mohave ground squirrel populations have been observed about three miles southeast of the property (Occurrence #33, Apple Valley North, California Quad.; CNDDDB 2010); however, the site does not support habitat associated

with the species due to the absence of native vegetation (Figure 5). A habitat assessment, however, was performed by Mr. Ryan Young on August 25, 2010 as per CDFG requirements, including evaluation of existing vegetation communities on the site and in the surrounding area, and review of existing data sources regarding current distribution of the Mohave ground squirrel. Based on the results of the habitat assessment it has been determined that the site does not support suitable habitat for the Mohave ground squirrel based on the following criteria.

1. Absence of native vegetation due to past clearing activities and grazing of livestock, and
2. Absence of any small mammal burrows.

**Desert Bighorn Sheep:** The site is located within the overall grazing territory for desert bighorn sheep as indicated by CDFG; however, the species is not expected to occur on the site in the future given the absence of suitable grazing habitat and the absence of any documented populations within the immediate area (CNDDDB, 2010).

### **5.3 Wildlife Species of Special Concern and Sensitive Plants**

**Burrowing Owl:** Owls have been observed about one mile to the west according to the CNDDDB (Occurrence #787, Apple Valley North, CA Quad.; CNDDDB 2010); although, the species is relatively mobile and could potentially move into the general area in the future. However, there is a very low probability that owls will move directly onto the site given the absence of any occupiable burrows and the level of disturbance which has previously occurred. Burrowing owls normally utilize burrows that have been excavated by dogs, coyotes, foxes, etc. since they are unable to dig the burrows themselves. If suitable burrows become available in the future, owls could potentially inhabit the site.

**LeConte's Thrasher:** The thrasher occurs in a variety of habitats including desert scrub, along desert washes, and Joshua tree woodland communities, and the species has been documented about two miles south of the property (Occurrence #20, Apple Valley South, CA Quad.; CNDDDB 2010). The site does not support habitat suitable for the species, and thrashers are not expected to occur on the property in the future.

### **5.4 Jurisdictional Waters and Riparian Habitat**

No riparian vegetation (e.g., cottonwoods, willows, etc.) was observed on the site or within the surrounding area. There are no blue-line channels depicted on the USGS Apple Valley North, California Quadrangle (1955) within the boundaries of the property or within approximately one mile of the site (Figure 2).

## **6.0 Impacts and Mitigation Measures**

### **6.1 General Biological Resources**

Installation of a solar facility on the site will have negligible impacts on the general biological resources on the site and in the area given the absence of native vegetation communities on the property (Figures 3 and 4). As previously discussed, the site has been cleared of virtually all native vegetation and little re-vegetation has occurred (Figure 3). The site is also utilized by livestock (i.e., horses) which has further reduced the amount of vegetation present. Based on the absence of native vegetation, few wildlife species are expected to utilize the site; therefore, installation of the proposed solar project will also have negligible impacts on wildlife species known to inhabit the general area.

### **6.2 Federal and State Listed and Species of Special Concern**

Development of the site will have no impact on any State or Federal listed species, nor will the proposed solar development impact any other sensitive wildlife species (e.g. species of special concern, etc.). No mitigations or additional biological surveys are recommended at the present time based on the results of the August 2010 surveys and existing site conditions.

## 7.0 CONCLUSIONS AND RECOMMENDATIONS

Installation of the proposed solar project is not expected to have a significant impact on the general biological resources on the property or in the surrounding region, nor will development of the site have any impact on any State or Federal listed or sensitive wildlife species. No mitigation measures or other biological studies (e.g., focused surveys, etc.) are recommended at the present time. Based on CDFG requirements, the County will require a 30-day pre-construction survey for the burrowing owl immediately prior to the start of on-site clearing/grubbing activities associated with the solar project. The 30-day pre-construction survey will be required to ensure that this relatively mobile species has not moved onto the site since the August 2010 survey. If the owl or any sensitive species are observed on the property during future activities, CDFG and USFWS (as applicable) should be contacted to discuss specific mitigation measures which may be required for the individual species. CDFG and USFWS are the only agencies which can grant authorization for the “take” of any sensitive species.

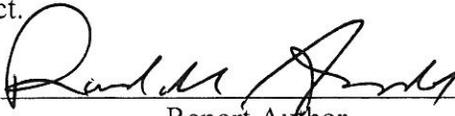
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## CERTIFICATION FOR DESERT TORTOISE SURVEY

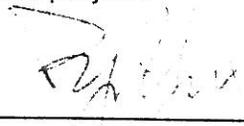
I hereby certify that the statements furnished above and in the attached exhibits, present the data and information required for this biological evaluation, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief. Field work conducted for this assessment was performed by me or under my direct supervision. I certify that I have not signed a non-disclosure or consultant confidentiality agreement with the project applicant or applicant's representative and that I have no financial interest in the project.

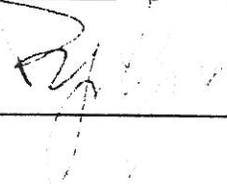
Date: 8/28/2010 Signed:   
Report Author

Field Work Performed By: Randall Arnold  
Senior Biologist

**Certification:**

I hereby certify that the statements furnished above and in the attached exhibits present the data and information presented are true and correct to the best of my knowledge and belief. Field work conducted for this assessment was performed by me or under my direct supervision. I certify that I have not signed a non-disclosure or consultant confidentiality agreement with the project applicant or applicant's representative and that I have no financial interest in the project.

Date: August 25, 2010 Signed:   
Report Author

Field Work Performed By: 

## **Appendix A**

### **Tables and Figures**

**Table 1 - Plants observed on the site and know to occur in the immediate surrounding area.**

<b>Common Name</b>	<b>Scientific Name</b>	<b>Location</b>
Erodium	<i>Erodium texanum</i>	On-site & Off-site
Ricegrass	<i>Oryzopsis hymenoides</i>	Off-site
Brome grass	<i>Bromus ps.</i>	On-site & Off-site
Schismus	<i>Schismus barbatus</i>	“
Saltbush	<i>Atriplex canescens</i>	“
Creosote bush	<i>Larrea tridentata</i>	Off-site
Joshua tree	<i>Yucca brevifolia</i>	“
Yellow-green matchweed	<i>Gutierrezia sarothrae</i>	On-site & Off-site
Lycium	<i>Lycium cooperi</i>	Off-site
Burrobush	<i>Franseria dumosa</i>	Off-site

**Table 2 - Wildlife observed on the site and those species expected to occur in surrounding area.**

<b>Common Name</b>	<b>Scientific Name</b>	<b>Location</b>
Common raven	<i>Corvus corax</i>	On-site and in the surrounding area
Sage sparrow	<i>Amphispiza belli</i>	“
Song sparrow	<i>Melospiza melodia</i>	“
Side-blotched lizard	<i>Uta stansburiana</i>	Off-site
Morning dove	<i>Zenaida macroura</i>	On-site & Off-site
Western whiptail lizard	<i>Cnemidophorus tigris</i>	Known to occur in area.
Desert spiny lizard	<i>Sceloporus magister</i>	“
Cactus wren	<i>Campylorhynchus brunneicapillus</i>	“
California ground squirrel	<i>Spermophilus beecheyi</i>	“
Coyotes	<i>Canis latrans</i>	“

Note: The above Tables are not comprehensive lists of every plant or animal species which may occur in the area, but are a list of those common species which have been identified on the site or in the region by biologists from RCA Associates, LLC.

TABLE 3

USFWS 2010 DESERT TORTOISE CLEARANCE SURVEY REPORTING DATA SHEET

Date of survey: 26/8/2010 Survey biologist(s): R. Arnold BO#: \_\_\_\_\_  
 (day, month, year) (name, email, and phone number)  
 Project Name: Nunn 8135 Site description: 20 Acres, NE Corner of Fishers & Evans  
 County: SAN BERN. Quad: Apple Vc. (107) Zone: --- Location: TSN.R3W.Sec 24 Clearance: 10  
 (UTM coordinates, lat-long, and/or TRS; datum) (general location size) (square intersect part of the 1<sup>st</sup>, 2<sup>nd</sup>, etc. clearance of project area?)

Live Tortoises

Detection number	Date	GPS location		MCL (mm)	Existing tag # and color, if present	Transmitter #	Animal visually healthy (Y/N)	Disposition (<5km or >5km move)	If <5km move, Release site location		If >5km move, blood sample #
		Easting	Northing						Easting	Northing	
1		No	DESERT Tortoises								
2		OR	Tortoise Sign								
3		Observed									
4											
5											
6											
7											
8											
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10											
11											
12											
13											
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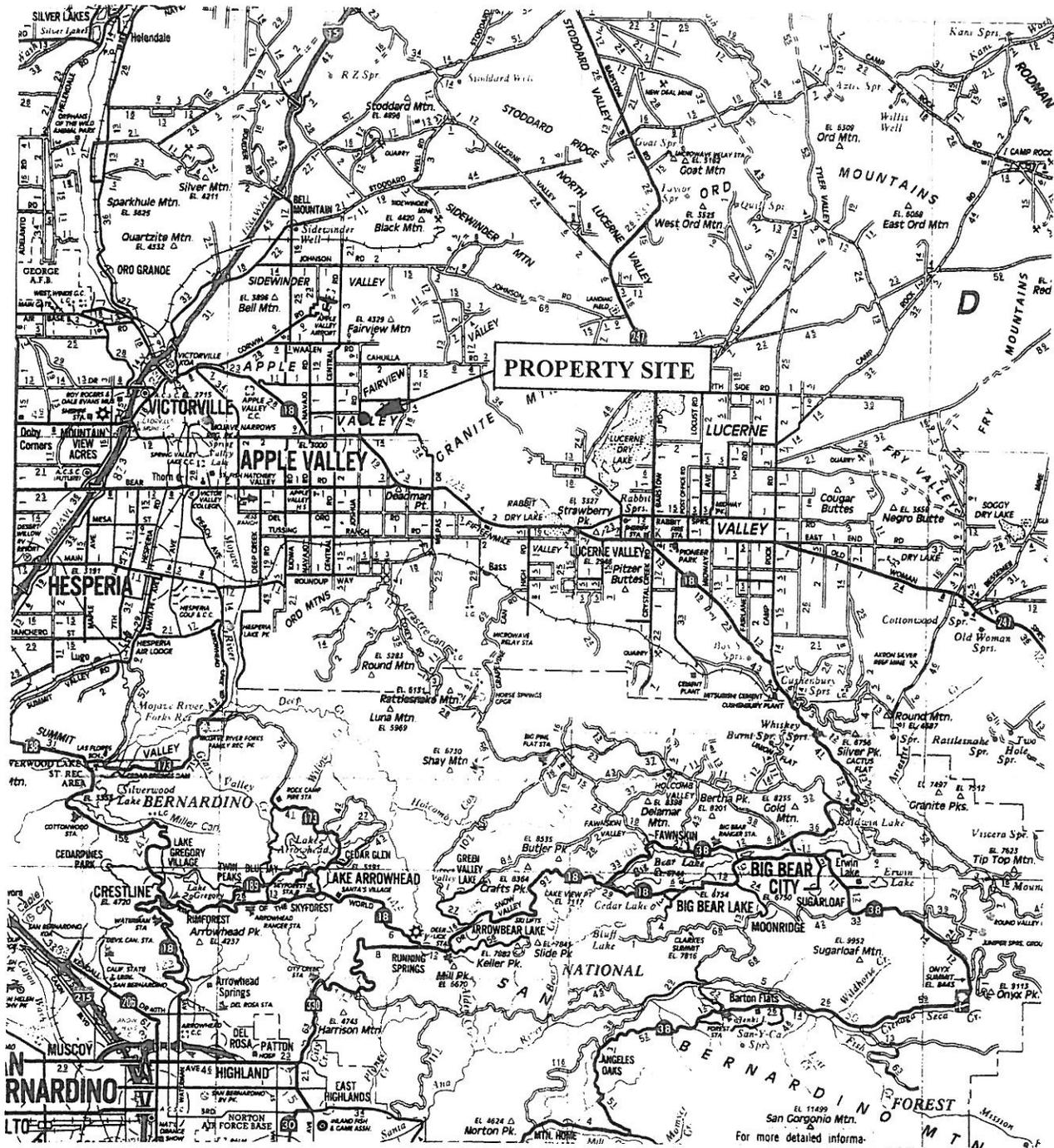


FIGURE 1  
 VICINITY MAP  
 (Conditional Use Permit; Nunn 8135 Site; APN 0439-281-35)  
 (Source: ACSC Map Source, 2010)

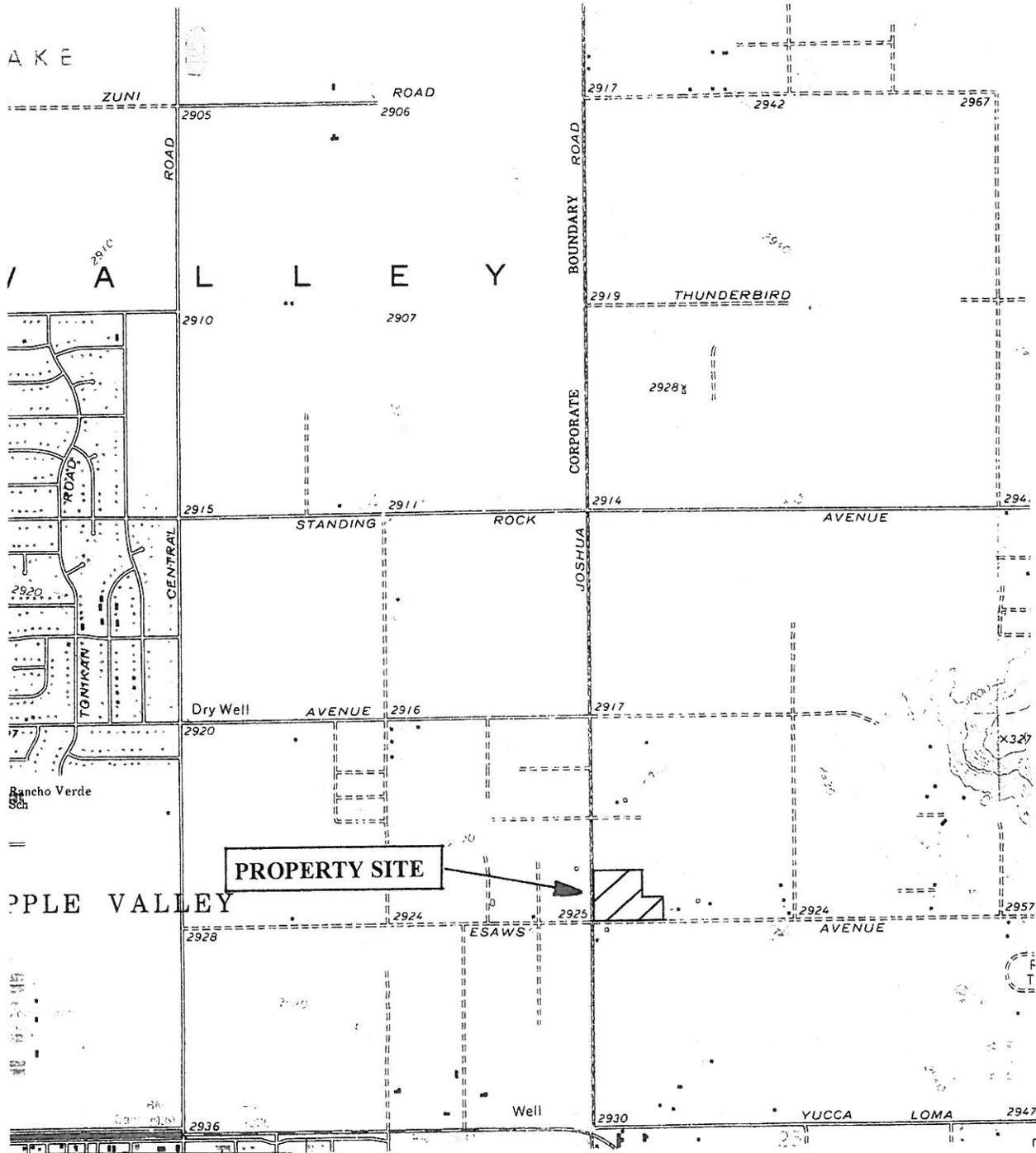


FIGURE 2

PROPERTY LOCATION  
 (Conditional Use Permit; Nunn 8135 Site; APN 0439-281-35)  
 (Source: USGS Apple Nalley North, CA Quad., 1970)

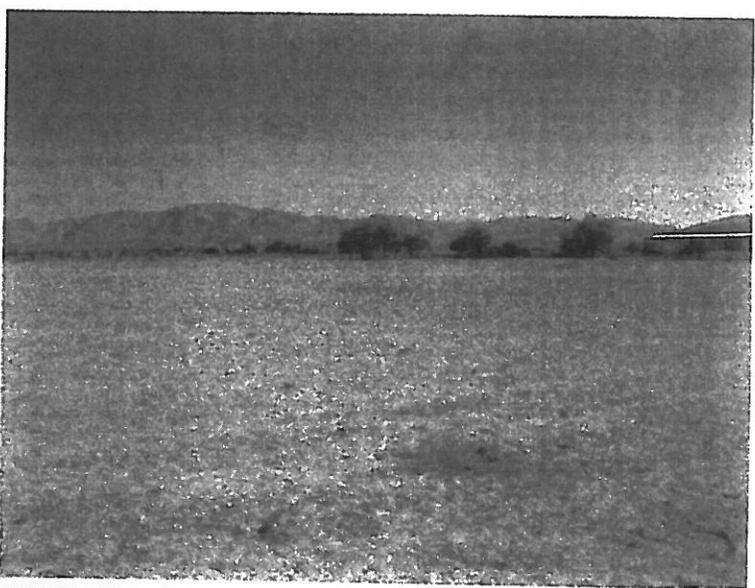
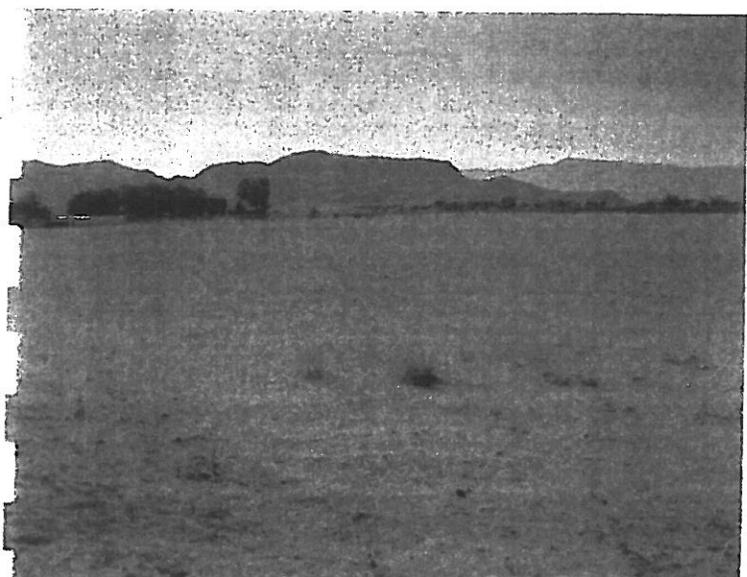


PHOTO PT. A: VIEW FROM NW CORNER LOOKING SE PHOTO PT. B: VIEW FROM SW CORNER LOOKING NE

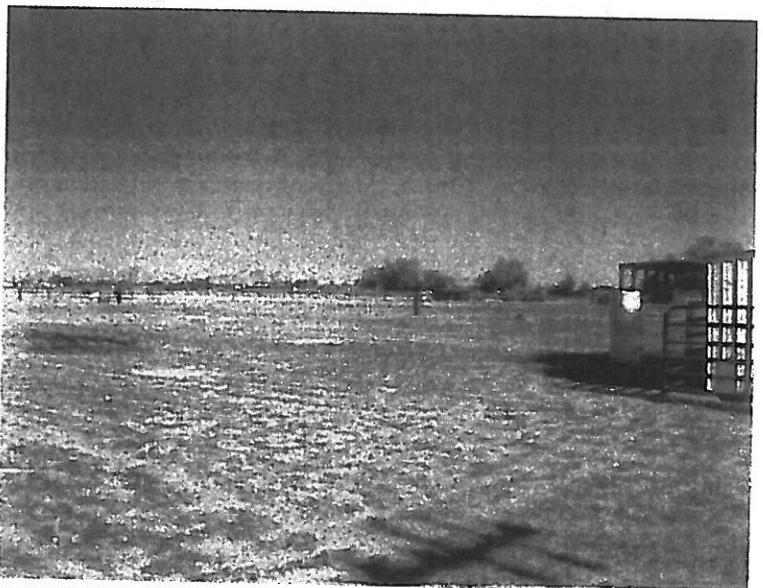
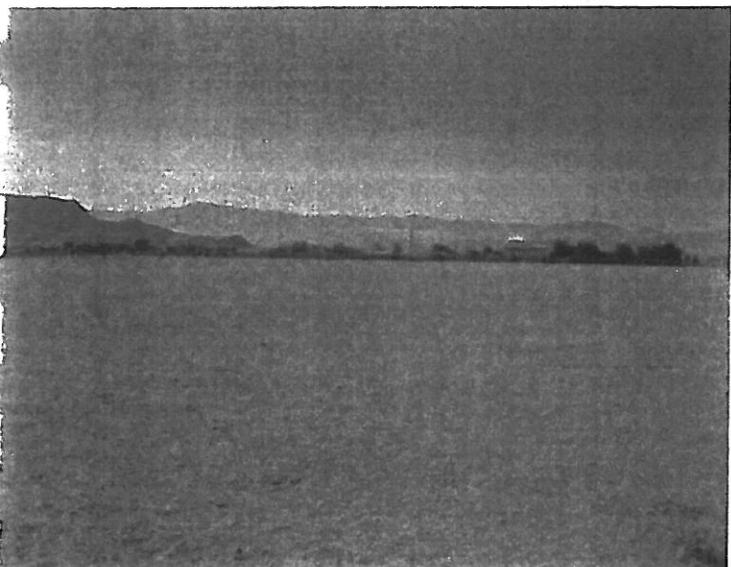


PHOTO PT. C: VIEW FROM NORTH BOUN. LOOKING S PHOTO PT. D: VIEW FROM SE CORNER LOOKING NW

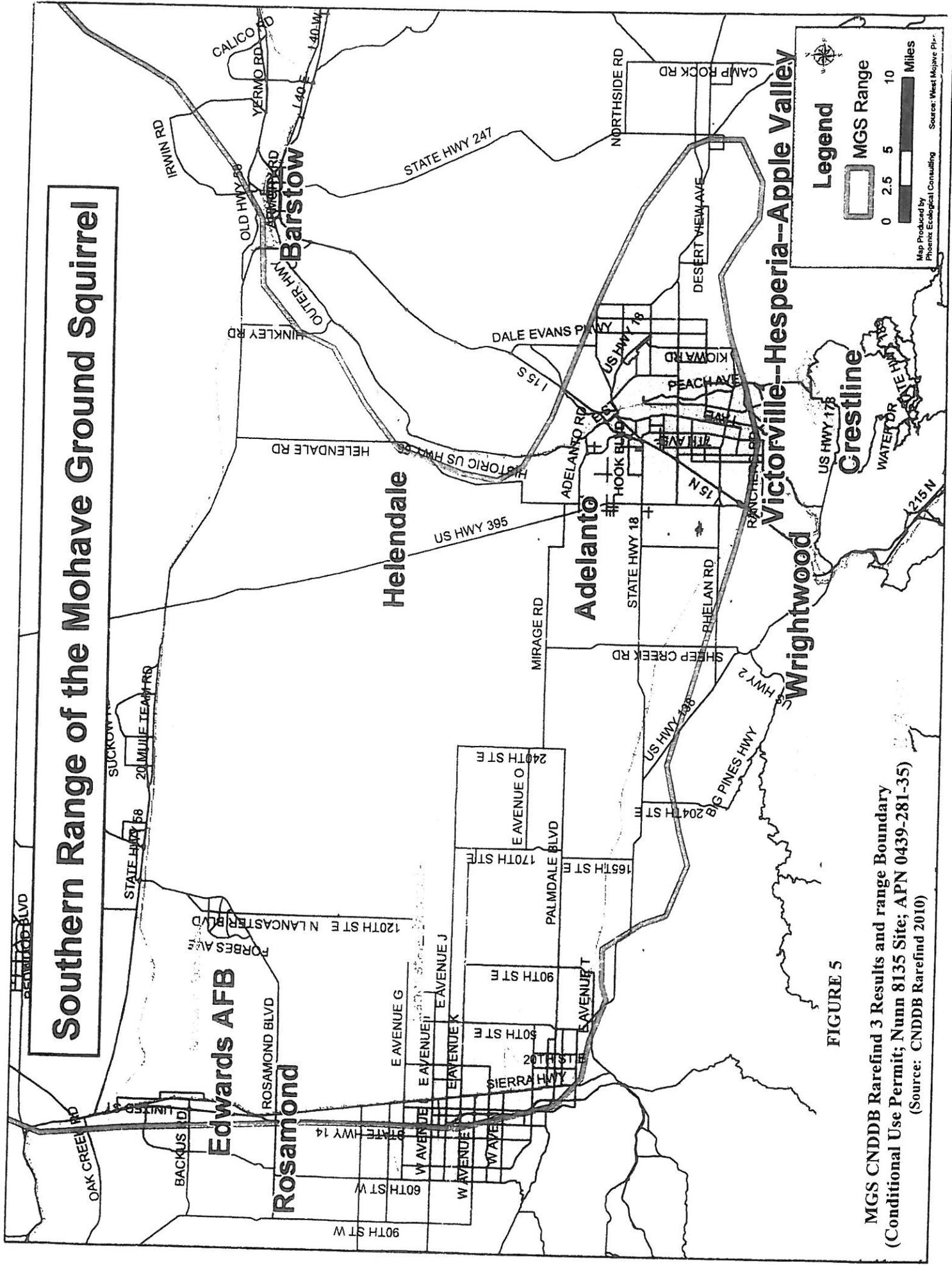
FIGURE 3  
PHOTOGRAPHS OF SITE  
(Conditional Use Permit; Nunn 8135 Site; APN 0439-281-35)



**FIGURE 4**

**BIOLOGICAL RESOURCES MAP**  
(Conditional Use Permit; Nunn 8135 Site; APN 0439-281-35)  
(Source: Google Maps, 2010)

# Southern Range of the Mohave Ground Squirrel



**Legend**

MGS Range

0 2.5 5 10 Miles

Map Produced by  
Phoenix Ecological Consulting  
Source: West Mojave Plan

FIGURE 5

MGS CNDDDB Rarefind 3 Results and range Boundary  
(Conditional Use Permit; Nunn 8135 Site; APN 0439-281-35)  
(Source: CNDDDB Rarefind 2010)

