

**CHAPTER 7.0 LIST OF MITIGATION MEASURES AND ENVIRONMENTAL DESIGN CONSIDERATIONS**

**7.1 Aesthetics**

**7.1.1 Mitigation Measures**

**M-AE-PP-1** The applicant shall install landscape screens as specified in Appendix 2.1-4, Landscape Screening Design for the Soitec Solar Development Program EIR. Features of the solar facility to be screened include the 50-foot-wide fire buffer with 6-foot-tall perimeter fence, concentrator photovoltaic (CPV) solar panels, and other associated features that exceed the height of the fencing installed around the perimeter of the solar facility.

The applicant shall also be responsible for continued maintenance of the landscape screens, including installation and maintenance of a drip irrigation system and implementation of and consistency with plant installation and maintenance standards identified in the Landscape Screening Design report. Periodic monitoring and reporting to observe and assess the maintenance regime and implementation of appropriate measures to promote plant survival, growth, overall health, and vigor shall also be required. If necessary, adaptive measures shall be implemented in the subsequent spring season to address project deficiencies as they relate to the desired landscape screening effect. Additional details regarding recommended plants and materials for landscape screens, project-specific designs, irrigation systems, water demand calculations, and maintenance and monitoring activities are included in the Landscape Screening Design Report.

**7.1.2 Project Design Features**

**PDF-AE-1** In the southernmost parcel of the Rugged site, pull back project grading and remove trackers from the natural saddle that occurs on the southern parcel and would likely be visible to westbound Interstate 8 motorists. In-place existing natural vegetation shall be protected to act as a low screen and provide topographic and vegetative continuity across the saddle area while complying with the Fire Protection Plan. Additional shrub plantings (fire resistant and a maximum height 6 feet) shall also be included in the area to reinforce vegetation line across the saddle.

**PDF-AE-2** Staging material and equipment storage areas, including storage sites for excavated materials, visible from nearby roads, residences, and recreational areas

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shall be visually screened using temporary screening fencing. Fencing shall be of an appropriate design and color for the Proposed Project location.

**PDF-AE-3** The O&M building shall be painted/finished with muted-earth toned colors. Materials, coatings, or paints having little or no reflectivity shall be used whenever possible. New overhead conductors shall be non-specular in design to reduce conductor visibility, glare, and visual contrast.

**PDF-AE-4** Weathered or cor-ten steel shall be used for gen-tie monopoles to reduce the potential for color contrast between structures and existing vegetation and terrain.

**PDF-AE-5** Outdoor lighting at each solar farm site shall conform to County of San Diego Light Pollution Code Zone A standards for lamp type and shielding requirements. More specifically, Zone A standards shall be applicable for all Class I (i.e., lighting for assembly areas where color rendition is important) and Class II (i.e., lighting for general illumination and security) lighting at the solar farm site and all outdoor lighting fixtures shall be fully shielded and directed downward. Further, fully shielded motion sensor lighting shall be installed at the on-site private substation yard, next to the entrance door to the substation control house, and mounted atop entrance gates and shall be turned off when no one is on site. When possible, tracker washing shall occur during evening and morning hours to reduce occurrences of dark sky illumination. Regarding operation of security measures, motion sensor infrared cameras shall be installed at the project site to avoid illumination of the site and surrounding area during nighttime hours.

**PDF-AE-6** A Glare Study utilizing project-level information shall be prepared and approved by the County Department of Planning and Development Services (PDS) for the LanEast and LanWest solar farms. The glare study shall consider potential effects to sensitive receptors in the area including residents, recreationists, and motorists on Interstate 8, Old Highway 80, and McCain Valley Road. If potential visual resource impacts associated with project-generated glare are identified, then measures such as landscape screening and/or increased setbacks shall be required to reduce impacts.

~~**PDF-ES-AE-1** Energy storage system containers shall be painted a color consistent in hue and intensity with CPV tracker. Materials, coatings, or paints having little or no reflectivity shall be used whenever possible.~~

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### **7.2 Air Quality**

#### **7.2.1 Mitigation Measures Proposed**

**M-AQ-LE-1** During site grading activities for the LanEast site, grading will be limited to no more than 5 acres per day.

**M-AQ-LW-1** During site grading activities for the LanWest site, grading will be limited to no more than 5 acres per day.

**M-AQ-LE-2** Prior to issuance of Major Use Permits for the LanEast solar farm, a site-specific air quality technical report shall be prepared and approved by the County, which will verify compliance with County and San Diego Air Pollution Control District standards during construction and operation of the solar farm. The site-specific technical report shall be prepared pursuant to the most current version of the County of San Diego Guidelines for Determining Significance and Report Format and Content Requirements: Air Quality. The report shall be completed and approved by PDS prior to certification of the project-level CEQA document.

Project design feature PDF-AQ-1 and conditions of approval for the Proposed Project related to dust control during operation as delineated in the Tierra del Sol solar farm and Rugged solar farm technical reports and as listed in Table 1-10 of Section 1.0, Project Description, shall be incorporated into the LanEast technical report, and shall be implemented during construction and operation of these projects. PDF-AQ-1 requires implementation of dust control measures during construction activities. Typical emission reduction measures that may be required under the project-specific technical report could include, but are not limited to, watering the project site during earthwork activities, reducing construction vehicle speeds on unpaved roads, applying a soil binding agent to site soils to reduce fugitive dust, covering exposed stockpiles, install trackout or carryout measures and erosion control measures to limit soil transfer from the site, and require Tier 2 or Tier 3 engines on all major construction equipment.

**M-AQ-LW-2** Prior to issuance of Major Use Permits for the LanWest solar farm, a site-specific air quality technical report shall be prepared and approved by the County, which will verify compliance with County and San Diego Air Pollution Control District standards during construction and operation of the solar farm. The site-specific technical report shall be prepared pursuant to the most current version of the County of San Diego Guidelines for Determining Significance and Report Format and Content Requirements: Air Quality. The report shall be completed and approved by PDS prior to certification of the project-level CEQA document.

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Project design features PDF-AQ-1 and conditions of approval for the Proposed Project related to dust control during operation as delineated in the Tierra del Sol solar farm and Rugged solar farm technical reports and as listed in Table 1-10 of Section 1.0, Project Description, shall be incorporated into the LanWest technical report, and shall be implemented during construction and operation of these projects. PDF-AQ-1 requires implementation of dust control measures during construction activities. Typical emission reduction measures that may be required under the project-specific technical report could include, but are not limited to, watering the project site during earthwork activities, reducing construction vehicle speeds on unpaved roads, applying a soil binding agent to site soils to reduce fugitive dust, covering exposed stockpiles, install trackout or carryout measures and erosion control measures to limit soil transfer from the site, and require Tier 2 or Tier 3 engines on all major construction equipment.

**M-AQ-PP-1** The Applicant shall implement the following measures to reduce NO<sub>x</sub> emissions during construction of the Proposed Project:

- All equipment with engines meeting the requirements above shall be properly maintained and the engines tuned to the engine manufacturer's specifications.
- Construction equipment will employ electric motors when feasible.
- No mobile or portable construction equipment over 50 horsepower shall use engines certified as meeting CARB or EPA Tier 1 standards. All engines shall comply preferably with Tier 3 standards, but no less than Tier 2 at a minimum.

**M-AQ-PP-2** To reduce NO<sub>x</sub> and PM<sub>10</sub> emissions associated with construction worker trips required during Proposed Project construction, the construction manager will implement a construction worker ridership program to encourage at least 30% of workers to carpool to and from the construction site to reduce single-occupancy vehicle trips. The construction manager will log all daily construction worker trips using the San Diego iCommute program (SANDAG 2013) (accessed at <http://www.icommutesd.com/>) or similar program. The construction manager will notify all construction personnel of the program prior to the start of construction activities and will notify construction personnel of the iCommute program RideMatcher feature, or similar communication method, to ensure personnel can identify potential carpooling program participants. Trip data will be made readily available to County inspectors at the construction trailer on site during construction.

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Implementation of PDF-AE-1 and M-AE-PP-1 would entail the removal of trackers from the Rugged and Tierra del Sol solar farms to reduce visibility of trackers from Interstate 8 and to incorporate landscape screens (see Chapter 2.1, Aesthetics). After accounting for tracker reductions per PDF-AE-1 and M-AE-PP-1 and reduced ground disturbance associated with these tracker reductions, Proposed Project construction-related emission would exceed the thresholds for NO<sub>x</sub> but not for PM<sub>10</sub>. Air quality impacts and details regarding emission calculations and assumptions associated with these trackers reductions and water demand increases (see Chapter 1.0, Project Description) are explained in Appendix 9.0-5.

### **7.2.2 Project Design Features**

**PDF-AQ-1** The following measures will be applied to the Proposed Project to minimize fugitive dust (PM<sub>10</sub>) and to comply with County Code Section 87.428 (Grading Ordinance), the following will be implemented:

- The applicants will apply water three times per day or as necessary depending on weather conditions to suppress fugitive dust during grubbing, clearing, grading, trenching, and soil compaction and/or apply a nontoxic soil binding agent to help with soil stabilization during construction. These measures will be applied to all active construction areas, unpaved access roads, parking areas, and staging areas as necessary.
- Sweepers and water trucks will be used to control dust and debris at public street access points.
- Internal fire access roadways will be stabilized by paving, application of an aggregate base material (such as disintegrated granite), or chip sealing after rough grading.
- Exposed stockpiles (e.g., dirt, sand) will be covered and/or watered or stabilized with nontoxic soil binders, tarps, fencing or other suppression methods as needed to control emissions.
- Traffic speeds on unpaved roads will be limited to 15 miles per hour (mph).
- All haul and dump trucks entering or leaving the site with soil or fill material will maintain at least 2 feet of freeboard, or cover loads of all haul and dump trucks securely.
- Disturbed areas will be covered with a nontoxic soil binding agent (Such as EP&A's Envirotac II and Rhinosnot Dust Control, Erosion Control and Soil Stabilization).

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### **7.3 Biological Resources**

#### **7.3.1 Mitigation Measures**

**M-BI-PP-1** The applicant will preserve in permanent open space an acreage of native habitats equivalent to or greater than the acreage of total project impacts; the native habitats shall be generally consistent with the assemblage of vegetation communities impacted by the project. This will mitigate for project impacts to upland scrub and chaparral communities (acreages to be preserved per County mitigation ratios as shown in Table 2.3-18) as well as habitat loss of special-status plant and wildlife species (additional acreage to be preserved to equal the total acreage of project impacts, at a minimum). The off-site open space conservation area shall be evaluated to determine if the off-site area provides similar or greater biological function and value when compared with the identified significant impacts. This assessment shall include vegetation community mapping and an assessment of associated flora and fauna to the extent necessary to determine if the off-site conservation area provides commensurate biological function and value for each significantly impacted biological resource (vegetation communities, special-status plant species, and special-status wildlife species). The off-site open space conservation area may be composed of more than one set of contiguous parcels. Mitigation for the loss of special-status plant species shall be a minimum of 2:1 mitigation to impact ratio for Jacumba milk-vetch and Tecate tarplant and 1:1 mitigation to impact ratio for sticky geraea and desert beauty unless otherwise negotiated to a different ratio with the Wildlife Agencies. The assessment of the number of individuals of these species supported within the impact and mitigation areas shall be conducted in comparable survey years to appropriately account for potential annual variation in the number of individuals.

Preservation of off-site open space shall be provided through one of the following options:

Option 1: If purchasing Mitigation Credit from the mitigation bank, the evidence of purchase shall include the following information to be provided by the mitigation bank:

- a. A copy of the purchase contract referencing the project name and numbers for which the habitat credits were purchased.

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- b. If not stated explicitly in the purchase contract, a separate letter must be provided identifying the entity responsible for the long-term management and monitoring of the preserved land.
- c. To ensure the land will be protected in perpetuity, evidence must be provided that a dedicated conservation easement or similar land constraint has been placed over the mitigation land.
- d. An accounting of the status of the mitigation bank must be provided that shall include the total amount of credits available at the bank, the amount required by this project, and the amount remaining after utilization by this project.

Option 2: If mitigation credit is not purchased in a mitigation bank, then the applicant shall provide for the conservation of habitat of the same amount and type of land located in San Diego County indicated as follows:

- a. Prior to purchasing the land for the proposed mitigation, the location should be pre-approved by the County Department of Planning and Development Services (PDS).
- b. A Resource Management Plan (RMP) shall be prepared and approved pursuant to the County of San Diego *Guidelines for Determining Significance and Report Format and Content Requirements: Biological Resources* to the satisfaction of the director of PDS. If the off-site mitigation is proposed to be managed by Department of Parks and Recreation (DPR), the RMP shall also be prepared and approved to the satisfaction of the director of DPR.
- c. An open space easement over the land shall be dedicated to the County of San Diego or like agency to the satisfaction of the director of PDS. The land shall be protected in perpetuity.
- d. The purchase and dedication of the land and selection of the resource manager and establishment of an endowment to ensure funding of annual ongoing basic stewardship costs shall be complete prior to approval of the RMP.

In lieu of providing a private habitat manager, the applicant may contract with a federal, state, or local government agency with the primary mission of resource management to take fee title and manage the mitigation land). Evidence of satisfaction must include a copy of the contract with the agency, and a written statement from the agency that (1) the land contains the specified acreage and the specified habitat, or like functioning habitat, and (2) the land will be managed by

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the agency for conservation of natural resources in perpetuity. Documentation: The applicant shall purchase the off-site mitigation credits and provide evidence to PDS for review and approval. If the off-site mitigation is proposed to be owned or managed by DPR, the applicant must provide evidence to PDS that DPR agrees to this proposal. It is recommended that the applicant submit the mitigation proposal to PDS for a pre-approval. If an RMP is going to be submitted in lieu of purchasing credits, then the RMP shall be prepared, and an application for the RMP shall be submitted to PDS. Timing: Prior to issuance of a grading permit the mitigation shall occur.

Monitoring: PDS shall review the mitigation purchase for compliance with this condition. Upon request from the applicant, PDS can pre-approve the location and type of mitigation only. The credits shall be purchased before the requirement can be completed. If the applicant chooses option 2, then PDS shall accept an application for an RMP, and PDS and DPR shall review the RMP submittal for compliance with this condition and the RMP Guidelines.

The applicant is currently assessing 2,619 acres of open space located just west of the project area to mitigate for the loss of sensitive vegetation communities and habitat that will be impacted as a result of the Proposed Project. A description of the mitigation site, including a list of vegetation communities and the potential for sensitive plant and wildlife species to occur, is included in Appendix 2.3-6.

**M-BI-PP-2** To prevent inadvertent disturbance to areas outside the limits of grading, all grading shall be monitored by a biologist. A County-approved “Project Biologist” shall be contracted to perform biological monitoring during all grading, clearing, grubbing, trenching, and construction activities.

The following shall be completed:

1. The Project Biologist shall perform the monitoring duties before, occasionally during, and after construction pursuant to the most current version of the County of San Diego *Guidelines for Determining Significance and Report Format and Content Requirements: Biological Resources*, and this permit. The contract provided to the County shall include an agreement that this will be completed, and a Memorandum of Understanding (MOU) between the biological consulting company and the County of San Diego shall be executed. The contract shall include a cost estimate for the monitoring work and reporting. In addition to performing monitoring duties pursuant to the most current version of the County of San Diego Report Format and Content

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Requirements, Biological Resources, the Project Biologist also will perform the following duties:

- a. Attend the preconstruction meeting with the contractor and other key construction personnel prior to clearing, grubbing, or grading to reduce conflict between the timing and location of construction activities and other mitigation requirements (e.g., seasonal surveys for nesting birds);
- b. Conduct meetings with the contractor and other key construction personnel describing the importance of restricting work to designated areas prior to clearing, grubbing, or grading;
- c. Discuss procedures for minimizing harm to or harassment of wildlife encountered during construction with the contractor and other key construction personnel prior to clearing, grubbing, or grading;
- d. Review and/or designate the construction area in the field with the contractor in accordance with the final grading plan prior to clearing, grubbing, or grading;
- e. Conduct a field review of the staking to be set by the surveyor, designating the limits of all construction activity prior to clearing, grubbing, or grading;
- f. Be present during initial vegetation clearing, grubbing, and grading;
- g. Flush special-status species (i.e., avian or other mobile species) from occupied habitat areas immediately prior to brush-clearing and earth-moving activities. If brush-clearing and earth-moving activities take place within the bird breeding season, flushing shall not occur in an area identified as having an active nest and thus resulting in a potential take of a species (see M-BI-PP-10);
- h. To address hydrology impacts, the Project Biologist shall verify that grading plans include a Stormwater Pollution Prevention Plan (SWPPP; see M-BI-PP-3 for required best management practices (BMPs)).

The cost of the monitoring shall be added to the grading bonds that will be posted with the Department of Public Works (DPW), or bond separately with the PDS.

Documentation: The applicant shall provide a copy of the biological monitoring contract, cost estimate, and MOU to PDS. Additionally, the cost amount of the monitoring work shall be added to the grading bond cost estimate. Timing: Prior to approval of any grading and or improvement plans and issuance of any grading or construction permits. Monitoring: PDS shall review the contract, MOU, and

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cost estimate or separate bonds for compliance with this condition. The cost estimate should be forwarded to the project manager for inclusion in the grading bond cost estimate and grading bonds. DPW shall add the cost of the monitoring to the grading bond costs.

**M-BI-PP-3** Prior to issuance of a grading permit, the SWPPP that shall be prepared in compliance with the Construction General Storm Water Permit, State Water Resources Control Board Order No. 2009-0009-DWQ, as amended by Order No. 2010-0014-DWQ, shall include, at a minimum, the BMPs listed as follows. The combined implementation of these requirements shall protect adjacent habitats and special-status species during construction to the maximum extent practicable. At a minimum, the following measures and/or restrictions shall be incorporated into the SWPPP and noted on construction plans, where appropriate, to avoid impacts on special-status species and sensitive vegetation communities during construction. The Project Biologist shall verify implementation of the following design requirements:

1. No planting or seeding of invasive plant species on the most recent version of the California Invasive Plant Council (Cal-IPC) California Invasive Plant Inventory for the project region will be permitted.
2. When construction operations are completed, any excess materials or debris will be removed from the work area.
3. Fully covered trash receptacles that are animal-proof and weatherproof will be installed and used by the operator to contain all food, food scraps, food wrappers, beverage containers, and other miscellaneous trash. Prohibit littering and remove trash from construction areas daily. All food-related trash and garbage shall be removed from the construction sites on a daily basis.
4. Pets on or adjacent to construction sites will not be permitted by the operator.
5. Enforce speed limits in and around all construction areas. Vehicles shall not exceed 15 miles per hour on unpaved roads and the right-of-way accessing the construction site or 10 miles per hour during the night.

**M-BI-PP-4** To ensure that the biological monitoring occurred during the grading phase of the project, the Project Biologist shall prepare a final biological monitoring report. The report shall substantiate the supervision of the grading activities and confirm that grading or construction activities did not impact any areas outside of the designated construction zone or any other sensitive biological resources. The report shall conform to the County of San Diego *Guidelines for Determining*

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*Significance and Report Format and Content Requirements: Biological Resources*, and include the following items:

1. Photos of the temporary fencing that was installed during the trenching, grading, or clearing activities
2. Monitoring logs showing the date and time that the Project Biologist was on site
3. Photos of the site after the grading and clearing activities
4. Documentation: The Project Biologist shall prepare the final report and submit it to PDS for review and approval. Timing: Prior to any occupancy, final grading release, or use of the premises in reliance of this permit, the final report shall be approved. Monitoring: PDS shall review the final report for compliance with this condition and the report format guidelines. Upon approval of the report, PDS shall inform DPW that the requirement is complete and the bond amount can be relinquished. If the monitoring was bonded separately, then PDS shall inform DPW to release the bond back to the applicant.

**M-BI-PP-5** The applicant shall develop a Fugitive Dust Control Plan in compliance with San Diego County Air Pollution Control District Regulations to reduce particulate matter less than 10 microns (PM<sub>10</sub>) and fine particulate matter less than 2.5 microns (PM<sub>2.5</sub>) emissions during construction. The Fugitive Dust Control Plan shall include:

1. Name(s), address(es), and phone number(s) of person(s) responsible for the preparation, submission, and implementation of the plan.
2. Description and location of operation(s).
3. Listing of all fugitive dust emissions sources included in the operation.
4. The following dust control measures shall be implemented:
  - a. All on-site fire access roads shall be effectively stabilized using an aggregate base material, such as disintegrated granite (DG), as early as practical during construction.
  - b. All material excavated or graded shall be sufficiently watered to prevent excessive dust. Watering will occur as needed with complete coverage of disturbed areas. The excavated soil piles shall be watered hourly for the duration of construction or covered with temporary coverings.

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- c. Construction activities that occur on unpaved surfaces will be discontinued during windy conditions when winds exceed 25 miles per hour and when those activities cause visible dust plumes. All grading activities shall be suspended when wind speeds are greater than 30 miles per hour.
- d. Track-out shall not extend 25 feet or more from an active operation, and track-out shall be removed at the conclusion of each workday.
- e. All haul trucks hauling soil, sand, or other loose materials shall be covered (e.g., with tarps or other enclosures that would reduce fugitive dust emissions).
- f. Soil loads should be kept below 18 inches of the freeboard of the truck.
- g. Drop heights should be minimized when loaders dump soil into trucks.
- h. Traffic speeds on unpaved roads shall be limited to 25 miles per hour.
- i. Disturbed areas should be minimized.
- j. Disturbed areas should be stabilized using soil binders that can be determined to be as efficient, or more efficient, for fugitive dust control than California Air Resources Board–approved soil stabilizers, as soon as possible after disturbance and shall not increase any other environmental impacts including loss of vegetation.

**M-BI-PP-6** Prior to installation of any landscaping, plant palettes shall be reviewed by the Project Biologist to minimize the effects that proposed landscape plants could have on biological resources outside of the project footprint due to potential naturalization of landscape plants in the undeveloped lands. Landscape plants will not include invasive plant species on the most recent version of the Cal-IPC California Invasive Plant Inventory for the project region. Landscape plans will include a plant palette composed of climate-appropriate, drought-tolerant species.

**M-BI-PP-7** Operation and maintenance personnel will be prohibited from:

1. Harming, harassing, or feeding wildlife and/or collecting special-status plant or wildlife species
2. Traveling (either on foot or in a vehicle) outside of the project footprint in undisturbed portions of the project area
3. Bringing pets on the project area
4. Littering on the project area.

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**M-BI-PP-8** To minimize the potential exposure of the project area to fire hazards, all features of the Project's Fire Protection Plan (see Appendices 3.1.4-5 and 3.1.4-6), which has been prepared in accordance with the most current version of the County of San Diego Guidelines for Determining Significance and Report Format and Content Requirements: Wildland Fire and Fire Protection, shall be implemented in conjunction with development of the project.

**M-BI-PP-9** Weed control treatments shall include any legally permitted chemical, manual, and mechanical methods applied with the authorization of the San Diego County agriculture commissioner. The application of herbicides shall be in compliance with all state and federal laws and regulations under the prescription of a pest control advisor (PCA) and implemented by a licensed applicator. Where manual and/or mechanical methods are used, disposal of the plant debris shall follow the regulations set by the San Diego County agriculture commissioner. The timing of the weed control treatment shall be determined for each plant species in consultation with the PCA, the San Diego County agriculture commissioner, and Cal-IPC with the goal of controlling populations before they start producing seeds.

**M-BI-PP-10** To avoid impacts to nesting birds the applicant shall:

1. Submit to the California Department of Fish and Wildlife (CDFW) and U.S. Fish and Wildlife Service (USFWS) a Nesting Bird Management, Monitoring, and Reporting Plan (NBMMRP) for review and approval prior to commencement project activities during the breeding season (February 1 to August 31, and as early as January 1 for some raptors). The NBMMRP should include the following:
  - a. Nest survey protocols describing the nest survey methodologies
  - b. A management plan describing the methods to be used to avoid nesting birds and their nests, eggs, and chicks
  - c. A monitoring and reporting plan detailing the information to be collected for incorporation into a regular Nest Monitoring Log (NML) with sufficient details to enable USFSW and CDFW to monitor the applicant's compliance with Fish and Game Code Sections 3503, 3503.5, 3511, and 3513
  - d. A schedule for the submittal (usually weekly) of the nesting monitoring logs (NML)

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- e. Standard buffer widths deemed adequate to avoid or minimize significant project-related edge effects (disturbance) on nesting birds and their nests, eggs, and chicks
- f. A detailed explanation of how the buffer widths were determined
- g. All measures the applicant will implement to preclude birds from utilizing project-related structures (i.e., construction equipment, facilities, or materials) for nesting.

and

2. Conduct preconstruction nesting bird surveys within 72 hours of construction-related activities; conduct preconstruction survey sweeps immediately prior to ground-disturbing activities; and implement appropriate avoidance measures for identified nesting birds.

To determine the presence of nesting birds that the project activities may affect, surveys should be conducted beyond the project area—300 feet for passerine birds and 500 feet for raptors. The survey protocols should include a detailed description of methodologies utilized by CDFW-approved avian biologists to search for nests and describe avian behaviors that indicate active nests. The protocols should include but are not limited to the size of the project area being surveyed, method of search, and behavior that indicates active nests.

Each nest identified in the project area should be included in the NML. The NMLs should be updated daily and submitted to the CDFW weekly. Since the purpose of the NMLs is to allow the CDFW to track compliance, the NMLs should include information necessary to allow comparison between nests protected by standard buffer widths recommended for the project (300 feet for passerine birds, 500 feet for raptors) and nests whose standard buffer width was reduced by encroachment of project-related activities. The NMLs should provide a summary of each nest identified, including the species, status of the nest, buffer information, and fledge or failure data. The NMLs will allow for tracking the success and failure of the buffers and will provide data on the adequacy of the buffers for certain species.

The applicant(s) will rely on its avian biologists to determine the appropriate standard buffer widths for nests within the project area to employ based on the sensitivity levels of specific species or guilds of avian species. The determination of the standard buffer widths should be site- and species-/guild-specific and data-

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driven and not based on generalized assumptions regarding all nesting birds. The determination of the buffer widths should consider the following factors:

1. Nesting chronologies
2. Geographic location
3. Existing ambient conditions (human activity within line of sight—cars, bikes, pedestrians, dogs, noise)
4. Type and extent of disturbance (e.g., noise levels and quality—punctuated, continual, ground vibrations—blasting-related vibrations proximate to tern colonies are known to make the ground-nesting birds flush the nests)
5. Visibility of disturbance
6. Duration and timing of disturbance
7. Influence of other environmental factors
8. Species' site-specific level of habituation to the disturbance.

Application of the standard buffer widths should avoid the potential for project-related nest abandonment and failure of fledging, and minimize any disturbance to the nesting behavior. If project activities cause or contribute to a bird being flushed from a nest, the buffer must be widened.

**M-BI-PP-11** Cover and/or provide escape routes for wildlife from excavated areas and monitor these areas daily. All steep trenches, holes, and excavations during construction shall be covered at night with backfill, plywood, metal plates, or other means, and the edges covered with soils and plastic sheeting such that small wildlife cannot access them. Soil piles will be covered at night to prevent wildlife from burrowing in. The edges of the sheeting will be weighed down by sandbags. These areas may also be fenced to prevent wildlife from gaining access. Exposed trenches, holes, and excavations shall be inspected twice daily (i.e., each morning and prior to sealing the exposed area) by a qualified biologist to monitor for wildlife entrapment. Excavations shall provide an earthen ramp to allow for a wildlife escape route.

**M-BI-PP-12** Minimize night construction lighting adjacent to native habitats. Lighting of construction areas at night shall be the minimum necessary for personnel safety and shall be low illumination, selectively placed, and directed/shielded appropriately to minimize lighting in adjacent native habitats.

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**M-BI-PP-13** Provide evidence to the Director of PDS that all transmission and distribution towers and lines are designed to conform to Avian Power Line Interaction Committee (APLIC) standards. Where applicable, the Proposed Project shall implement recommendations by the APLIC (2006), which will protect raptors and other birds from electrocution. These measures are sufficient to protect even the largest birds that may perch or roost on transmission lines or towers from electrocution. Specifically, these measures will include guidance on proper pole and cross member dimensions, phasing, and insulator design and dimensions to preclude wire-to-wire contact with a goal of providing 150 centimeters (59 inches) of separation between energized conductors and energized hardware and ground wire. In addition, bird diverters or other means to make lines more visible to birds will be installed to help avoid collisions.

**M-BI-PP-14** To comply with the state and federal regulations for impacts to “waters of the United States and state,” the following agency permits are required, or verification that they are not required shall be obtained.

1. The following permit and agreement shall be obtained, or provide evidence from the respective resource agency satisfactory to the director of PDS that such an agreement or permit is not required:
  - a. A Clean Water Act, Section 401/404 permit issued by the California Regional Water Quality Control Board (RWQCB) and the U.S. Army Corps of Engineers (ACOE) for all project-related disturbances of waters of the United States and/or associated wetlands.
  - b. A Section 1602 Streambed Alteration Agreement issued by the CDFW for all project-related disturbances of any streambed.
2. Documentation: The applicant shall consult each agency to determine if a permit or agreement is required. Upon completion of the agency review of this project, the applicant shall provide a copy of the permit(s)/agreement(s), or evidence from each agency that such an agreement or permit is not required to PDS for compliance.
3. Timing: Prior to approval of any grading and or improvement plans and issuance of any Grading or Construction Permits.
4. Monitoring: PDS shall review the permits/agreement for compliance with this condition. Copies of these permits should be implemented on the grading plans.

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**M-BI-PP-15** The Groundwater Monitoring and Mitigation Plans (GMMPs) that have been prepared for the Rugged Solar Project, the Tierra del Sol Solar Farm, and the off-site sources of groundwater (i.e., JCSD and PVMWC) will establish the current status and health of the existing oak woodland and document oak conditions up to a 5-year post-construction time frame. The goal is to determine if the projects' use of groundwater is impacting area oak trees/woodlands. A water level monitoring network has been identified for all groundwater sources which will include the proposed production wells, other on-site wells, and off-site wells. Monitored wells on the Rugged site will include well MW-SPB (southern property boundary), the McCain Conservation Camp Well, well MW-O1 (on-site oak woodland), and well MW-O2 (off-site oak woodland). MW-SPB will be the compliance point for well-interference whereas MW-O1 and MW-O2 will serve as the compliance monitoring wells for groundwater-dependent habitat. Monitored wells on the Tierra del Sol site will include Wells RM-1, RM-3 and RSD-1. JCSD Wells 6 and 4 and PVMWC Wells 5 will serve as the compliance monitoring wells for groundwater-dependent habitat. If water levels in Wells MW-O1, MW-O2, RM-1, or RM-3 do not drop more than 3 feet below baseline during the first year construction period, monitoring will cease at that time because impacts would be expected to be less than significant. Water level monitoring at JCSD and PVMWC would cease when construction imports are no longer required, but oak habitat monitoring will continue in accordance with the GMMP if monitoring reveals evidence that project-related impacts to groundwater-dependent habitat have occurred.

At both sites, baseline habitat monitoring data would be collected over the course of up to 1 year prior to project-related groundwater extraction. Pressure transducers would be installed in monitoring wells at least 1 month prior to project-related groundwater extraction to establish baseline water levels. Potentially affected native trees within the study area will be evaluated for overall physical condition and attributes. The trees shall be inventoried by an International Society of Arboriculture (ISA) Certified Arborist or Registered Professional Forester with specific experience evaluating native oak species, in particular coast live oaks. The baseline monitoring evaluations will include the following:

- Establishment of 28 and 72 pseudo-randomized 0.2-acre plots around oak groupings and scattered individual trees for the Rugged and Tierra del Sol sites, respectively. Sample plots would include the range of existing habitat

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conditions, including elevation, slope and aspect, proximity to roads, and other land uses. If an oak woodland monitoring site is less than 0.1 acre, the entire site will be evaluated.

- Tagging of trees and recording species, tag number, trunk diameter at breast height (dbh) (inches), height (feet) and dominance (i.e., whether the tree is under the canopy of another tree or forms the uppermost canopy). Slope, aspect, and elevation of each tree location, existing understory species (including proportion of natives to exotics), presence of debris and litter, and soil type, depth, and parent material will be noted for each tree or plot.
- Placement of tensiometers (or similar) to measure soil moisture levels
  - Soil moisture levels will be recorded quarterly at depths up to 48 inches.
- Assessment of tree status, including documentation of:
  - Trunk diameter at breast height (dbh), measured at 4.5 feet above ground (according to standard practices)
  - Number of stems
  - Overall tree height (based on ocular estimates)
  - Tree crown spread (measurement in each cardinal direction, based on ocular estimate)
  - Overall tree health condition (Good, Fair, Poor, Dead)
  - Overall tree structural condition (Good, Fair, Poor, Dead)
  - Pest presence (Type, Extent – minimal, moderate, high)
  - Disease presence (Type, Extent – minimal, moderate, high)
  - Other specific comments.
- Assessment of acorn production, seedling establishment, and sapling tree densities and conditions
- The data collection procedure will include full data collection at each plot so that consistency is maintained among sampling plots.
- Creation of oak tree database using GIS or similar application.

Ongoing monitoring will be carried out quarterly during the 1-year project construction period. If the Certified Arborist or Registered Professional Forester observes an impact to the oak woodland after this period, or if a drawdown threshold is reached at the groundwater-dependent habitat monitoring wells at any

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time during the construction phase, monitoring will continue in years 2 through 5 following initiation of project-related groundwater extraction. Monitoring will include the following components:

- Monitoring inspections will include re-evaluation of the baseline data as well as collection of soil moisture data from pre-placed tensiometers.
- Monitoring will include re-evaluating the trees to determine if changes are occurring that may indicate ground water drawdown is having a deleterious effect on oak woodlands or individual trees. The following information will be recorded during each monitoring visit and the data will be compared to previous monitoring results:
  - Trunk diameter at breast height (dbh), measured at 4.5 feet above ground (according to standard practices)
  - Number of stems
  - Overall tree height (based on ocular estimates)
  - Tree crown spread (measurement in each cardinal direction, based on ocular estimate)
  - Overall tree health condition (Good, Fair, Poor, Dead)
  - Overall tree structural condition (Good, Fair, Poor, Dead)
  - Pest presence (Type, Extent – minimal, moderate, high)
  - Disease presence (Type, Extent – minimal, moderate, high)
  - Other specific comments.

In particular, monitoring evaluations will focus on examining crowns for discoloration, loss of vigor, foliage curling, and/or pest presence; and trunks and root crowns for beetle/borer symptoms, bleeding cankers, or seeping areas (indicative of fungal infections). These and similar signs may indicate that a tree or a grouping of trees is experiencing stress, which can be corroborated by tensiometer readings. Trees under stress are more susceptible to disease and insect attacks.

The following mitigation criteria will be established to protect groundwater resources and groundwater-dependent habitat in the project area:

### Tierra del Sol Solar Farm:

- If the groundwater levels at off-site wells located within 0.5 mile of Well B (RM-1, RM-3, or RSD-1) drops 10 feet below the baseline water levels,

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groundwater pumping at Well B will cease until the water level at the well that experienced the threshold exceedance has increased above the threshold and remained there for at least 30 continuous days. Additionally, written permission from the County PDS must be obtained before production may be resumed.

- At least 90 days prior to project-related extraction, additional residential well owners within a one-mile radius of pumping Well B shall be given the opportunity to have their well added to the monitoring well network provided by the applicant at no cost to the well owner.
- If the groundwater levels in the vicinity of the groundwater dependent habitat (RM-1 or RM-3) drops below 10 feet of the pre-pumping static water level and there is evidence of deteriorating oak tree health as determined by the Certified Arborist or Registered Professional Forester, there may be a temporary or permanent cessation of pumping at Well B. If evidence of deterioration persists after the 5-year period, mitigation will consist of off-site wetland/oak woodland credits at a 3:1 ratio.
- If an impact to the oak woodland habitat is observed by the monitoring Certified Arborist or Registered Professional Forester over the duration of the project construction period, routine monitoring of the oak woodland will continue for a maximum up to 5 years following initiation of project-related groundwater extraction. The monitoring Certified Arborist or Registered Professional Forester will base mitigation recommendations on the type and extent of tree issues observed. If groundwater drawdown is determined to be the cause of tree stress, resulting in the presence of secondary pests (insects and/or disease), halting groundwater extraction may be recommended.
- If less than 3 feet of drawdown is observed at monitoring wells RM-1 and RM-3 at the end of project construction and no deleterious health effects are observed in the oak woodland habitat, monitoring can cease at the end of the first year of project operation as long as the wells operate only as intended under the project's conditions of approval.
- For the 1-year construction period, 18 acre-feet (AF) of water is proposed to be pumped from on-site supply Well B. For subsequent years, 6 acre-feet per year (AFY) will be pumped from Well B for operation and maintenance of the project. The groundwater storage within 0.5-mile radius study area surrounding Well B is estimated at 387 AF. The average annual recharge for the study area within 0.5-mile radius of Well B is estimated at 27 AFY. Thus, average annual recharge within the 0.5-mile radius study area is sufficient to meet project construction and operational water demands.

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### *Rugged Solar Farm:*

- If the groundwater level at well MW-SPB reaches or drops below 15 feet of the baseline level, groundwater pumping at Wells 6a and 6b will cease until the water level at MW-SPB has increased above the threshold and remained there for at least 30 continuous days. This threshold will prevent water levels at the closest property with a residential groundwater well from dropping below 10 feet of the pre-pumping baseline, as described in section 2.1.1. Additionally, written permission from the County PDS must be obtained before production may be resumed.
- At least 90 days prior to project-related extraction, additional residential wells within a one mile radius of pumping Well 8, Well 6a and Well 6b shall be given the opportunity to have their wells added to the monitoring well network by the applicant at no cost to the well owner.
- If the groundwater level at the McCain Conservation Camp Well reaches or drops below 10 feet of the baseline pumping water level trend, groundwater pumping at Well 8 will cease until the water level at McCain Conservation Camp Well has increased above the threshold and remained there for at least 30 continuous days. Additionally, written permission from the County PDS must be obtained before production may be resumed.
- If the groundwater level at well MW-O1 drops more than 10 feet below the pre-pumping level and there is evidence of deteriorating oak tree health by the Arborist or Forester, there may be a temporary or permanent cessation of pumping at Well 6a/6b. If the evidence of deterioration persists after the 5 year period, mitigation will consist of off-site wetland/oak woodland credits at a 3:1 ratio.
- If the groundwater level at MW-O2 drops more than 10 feet below the pre-pumping level and there is evidence of deteriorating oak tree health by the Arborist or Forester, there may be a temporary or permanent cessation of pumping at Well 8. If the evidence of deterioration persists after the 5 year period, mitigation will consist of off-site wetland/oak woodland credits at a 3:1 ratio.
- If an impact to the oak woodland habitat is observed by the monitoring ISA Certified Arborist or Registered Professional Forester over the duration of the Project construction period, routine monitoring of the oak woodland will continue for a maximum up to 5 years following initiation of Project-related groundwater extraction. The monitoring Certified Arborist or Registered Professional Forester will base mitigation recommendations on the type and extent of tree issues

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observed. If groundwater drawdown is determined to be the cause of tree stress, resulting in the presence of secondary pests (insects and/or disease), halting groundwater extraction may be recommended.

- If less than 3 feet of drawdown is observed at monitoring wells MW-O1 and MW-O2 at the end of Project construction or no deleterious health effects are observed in the oak woodland habitat, monitoring can cease at the end of the first year of project operation as long as the wells operate only as intended under the Project's conditions of approval.

### *Jacumba Community Services District:*

- If the groundwater levels at JCSD Wells 7 or 8 drops 10 feet below the baseline water levels, or if the groundwater level at Well 4 drops 5 feet below the baseline water level, groundwater pumping at Well 6 will cease until the water level at the well that experienced the threshold exceedance has increased above the threshold and remained there for at least 30 continuous days. Additionally, written permission from the County Planning and Development Services (PDS) must be obtained before production may be resumed.
- If groundwater levels at JCSD Well 6 drops more than 20 feet or at Well 4 drops more than 10 feet below baseline water levels, then monitoring of the groundwater dependent habitat would be triggered.
- If the groundwater levels exceed historical low water levels in JCSD Well 4 (lowest recorded static water level in Well 4 is 23 bgs) and there is evidence of deteriorating riparian habitat health by the Arborist or Forester, there may be a temporary or permanent cessation of pumping at Well 6. If evidence of deterioration persists after a 5 year period, mitigation will consist of offsite wetland/oak woodland credits at a 3:1 ratio.

### *Pine Valley Mutual Water Company :*

- During pumping at PVMWC Well No. 5, a maximum drawdown of 10 feet below the water level baseline at Wells No. 3 and 7 will be allowed. If the groundwater levels at Wells No. 3 and 7 drops 10 feet below the baseline water levels, groundwater pumping at Well No. 5 will cease until the water level at the well that experienced the threshold exceedance has increased above the threshold and remained there for at least 30 continuous days. Additionally, written permission from the County PDS must be obtained before production may be resumed.

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- If the groundwater levels exceed historical low water levels in PVMWC Well No. 5 from baseline conditions of pumping (lowest recorded static water level in Well No. 5 was 50 feet below ground surface (bgs) in September 2004) and there is evidence of deteriorating riparian habitat health by the Arborist or Forester, there may be a temporary or permanent cessation of pumping at Well B. If evidence of deterioration persists after the 5 year period, mitigation will consist of offsite wetland/oak woodland credits at a 3:1 ratio.
- If an impact to the riparian habitat is observed by the monitoring Certified Arborist or Registered Professional Forester over the Project period, routine monitoring of the oak woodland will continue for a maximum up to 5 years following initiation of Project-related groundwater extraction. The monitoring Certified Arborist or Registered Professional Forester will base mitigation recommendations on the type and extent of tree issues observed. If groundwater drawdown is determined to be the cause of tree stress, resulting in the presence of secondary pests (insects and/or disease), halting groundwater extraction may be recommended.

Under all GMMPs, a groundwater monitoring report will be completed by a Certified Hydrogeologist registered in the State of California and submitted to the County PDS each month, no later than 28 days following the end of the monitoring month for the on-site production wells, and no later than 28 days following the end of the pumping period for the off-site wells (JCSD and PVMWC). The report will include the following information:

- Water level hydrographs and tabulated water level data for each monitoring well
- Tabulated groundwater production volumes from each production well
- Documentation of groundwater drawdown at off-site monitoring wells  
Documentation of any threshold-included curtailment of groundwater production
- Appendix documenting groundwater dependent habitat monitoring as described above.

In addition to the monthly groundwater monitoring reports, for the on-site production wells annual reports will also be submitted to the County PDS summarizing groundwater-dependent habitat monitoring efforts and any mitigation recommendations implemented in the field during the monitoring year. The monitoring year will coincide with the calendar year. The annual reports will document tree health and mortality, tensiometer readings, water

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level readings, well production, and success of mitigation efforts (if any were necessary). Annual reports will be completed prior to the end of January in the next calendar year.

**M-BI-R-1** Option 1: A Revegetation Plan for 0.30 acre of mitigation is required for impacts to alkali meadow and disturbed alkali meadow (ACOE/RWQCB/ CDFW/County jurisdictional wetland). ACOE, RWQCB, and/or CDFW staff may require additional mitigation for non-Resource Protection Ordinance (RPO) jurisdictional waters/riparian habitat impacted by the project.

The Revegetation Plan shall conform to the most current version of the County of San Diego Report Format and Content Requirements for Revegetation Plans. In order to ensure project completion and success of the Revegetation Plan, a surety shall be provided and an agreement shall be executed with the County of San Diego consisting of a letter of credit, bond, or cash for 100% of the estimated costs associated with the implementation of the Revegetation Plan and a 10% cash deposit of the cost of all improvements (no less than \$3,000; no more than \$30,000). The surety shall be released upon completion of the Revegetation Plan provided the installed vegetation is in a healthy condition and meets the plan's success criteria. An RMP shall be prepared and approved pursuant to the County of San Diego *Guidelines for Determining Significance and Report Format and Content Requirements: Biological Resources* to the satisfaction of the Director of PDS. If the off-site mitigation is proposed to be owned and/or managed by DPR, the RMP shall also be approved by the Director of DPR.

Option 2: If purchasing Mitigation Credit, the mitigation bank shall be approved by the CDFW. The following evidence of purchase shall include the following information to be provided by the mitigation bank:

1. A copy of the purchase contract referencing the project name and numbers for which the habitat credits were purchased.
2. If not stated explicitly in the purchase contract, a separate letter must be provided identifying the entity responsible for the long-term management and monitoring of the preserved land.
3. To ensure the land will be protected in perpetuity, evidence must be provided that a dedicated conservation easement or similar land constraint has been placed over the mitigation land.

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4. An accounting of the status of the mitigation bank. This shall include the total amount of credits available at the bank, the amount required by this project, and the amount remaining after utilization by this project.

Documentation: The applicant shall purchase the off-site mitigation credits and provide the evidence to PDS for review and approval. If the off-site mitigation is proposed to be owned or managed by DPR, the applicant must provide evidence to PDS that DPR agrees to this proposal. It is recommended that the applicant submit the mitigation proposal to PDS for a pre-approval. If an RMP is going to be submitted in-lieu of purchasing credits, then the RMP shall be prepared, and an application for the RMP shall be submitted to PDS.

Timing: Prior to the approval of the map and prior to the approval of any plan and issuance of any permit, the mitigation shall be completed.

Monitoring: PDS shall review the mitigation purchase for compliance with this condition. Upon request from the applicant, PDS can preapprove the location and type of mitigation only. The credits shall be purchased before the requirement can be completed. If the applicant chooses option 2, then PDS shall accept an application for an RMP, and PDS shall review the RMP submittal for compliance with this condition and the RMP Guidelines.

**M-BI-LE-1** A wildlife movement corridor shall be established along Walker Creek to allow for continued movement across the LanEast solar farm site. The corridor shall be established consistent with County standards (minimum 1,000 feet wide with a 400-foot wide pinch point for no more than 500 feet in length), and shall include an appropriate Resource Protection Ordinance (RPO) wetland buffer.

**M-BI-LW-1** A wildlife movement corridor shall be established along Walker Creek to allow for continued movement across the LanWest solar farm site. The corridor shall be established consistent with County standards (minimum 1,000 feet wide with a 400-foot wide pinch point for no more than 500 feet in length), and shall include an appropriate Resource Protection Ordinance (RPO) wetland buffer.

### **7.3.2 Project Design Features**

No project design features are proposed in this section.

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### **7.4 Cultural Resources**

#### **7.4.1 Mitigation Measures**

**M-CR-PP-1** ARCHAEOLOGICAL GRADING MONITORING: [PDS, PCC] [DPW, ESU] [GP, IP, UO] [PDS, FEE X 2]

INTENT: In order to mitigate for potential impacts to undiscovered buried archaeological resources on the project site, a grading monitoring program and potential data recovery program shall be implemented pursuant to the County of San Diego Guidelines for Determining Significance and Report Format and Requirements for Cultural Resources: Archaeological and Historic Resources and California Environmental Quality Act (CEQA).

DESCRIPTION OF REQUIREMENT: A County Approved Principal Investigator (PI) known as the “Project Archaeologist,” shall be contracted to perform cultural resource grading monitoring and a potential data recovery program during all grading, clearing, grubbing, trenching, and construction activities. The Grading Monitoring Program shall include the following:

- a. The Project Archaeologist shall perform the monitoring duties before, during and after construction pursuant to the most current version of the County of San Diego Guidelines for Determining Significance and Report Format and Requirements for Cultural Resources: Archaeological and Historic Resources, and this permit. The contract or Letter of Acceptance provided to the County shall include an agreement that the grading monitoring will be completed, and a Memorandum of Understanding (MOU) between the Project Archaeologist and the County of San Diego shall be executed. The contract or Letter of Acceptance shall include a cost estimate for the monitoring work and reporting.
- b. The Project Archeologist shall provide evidence that a Kumeyaay Native American has also been contracted to perform Native American Grading Monitoring for the project.
- c. The cost of the monitoring shall be added to the grading bonds or bonded separately.

DOCUMENTATION: The applicant shall provide a copy of the Grading Monitoring Contract or Letter of Acceptance from the Project Archaeologist, cost estimate, and MOU to the [PDS, PCC]. Additionally, the cost amount of the monitoring work shall be added to the grading bond cost estimate.

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**TIMING:** Prior to approval of any grading and or improvement plans and issuance of any Grading or Construction Permits.

**MONITORING:** The [PDS, PCC] shall review the contract or Letter of Acceptance, MOU and cost estimate or separate bonds for compliance with this condition. The cost estimate should be forwarded to [PDS, LDR], for inclusion in the grading bond cost estimate, and grading bonds and the grading monitoring requirement shall be made a condition of the issuance of the grading or construction permit.

**OCCUPANCY:** (Prior to any occupancy, final grading release, or use of the premises in reliance of this permit).

### CULTURAL RESOURCES REPORT [PDS, FEE X2]

**INTENT:** In order to ensure that the Grading Monitoring occurred during the grading phase of the project, a final report shall be prepared.

**DESCRIPTION OF REQUIREMENT:** A final Grading Monitoring and Data Recovery Report that documents the results, analysis, and conclusions of all phases of the Archaeological Monitoring Program shall be prepared. The report shall include the following items:

- a. DPR Primary and Archaeological Site forms.
- b. Daily Monitoring Logs
- c. Evidence that all cultural materials have been curated that includes but is not limited to the following:

(1) The applicant shall provide evidence that all prehistoric archaeological materials collected during the survey, testing, and grading monitoring program have been submitted to a San Diego curation facility or a culturally affiliated Native American Tribal curation facility that meets federal standards per 36 CFR Part 79, and, therefore, would be professionally curated and made available to other archaeologists/ researchers for further study. The collections and associated records, including title, shall be transferred to the San Diego curation facility or culturally affiliated Native American Tribal curation facility and shall be accompanied by payment of the fees necessary for permanent curation. Evidence shall be in the form of a letter from the curation

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facility stating that the prehistoric archaeological materials have been received and that all fees have been paid.

or

Evidence that all prehistoric materials collected during the survey, testing, demolition monitoring and controlled excavations, and grading monitoring program have been repatriated to a Native American group of appropriate tribal affinity. Evidence shall be in the form of a letter from the Native American tribe to whom the cultural resources have been repatriated identifying that the archaeological materials have been received.

(2) Historic materials shall be curated at a San Diego curation facility and shall not be repatriated. The collections and associated records, including title, shall be transferred to the San Diego curation facility and shall be accompanied by payment of the fees necessary for permanent curation. Evidence shall be in the form of a letter from the curation facility stating that the historic materials have been received and that all fees have been paid.

d. If no cultural resources are discovered, a Negative Monitoring Report must be submitted stating that the grading monitoring activities have been completed. Grading Monitoring Logs must be submitted with the negative monitoring report.

**DOCUMENTATION:** The Archaeologist shall prepare the final report and submit it to the [PDS, PCC] for approval. Once approved, a final copy of the report shall be submitted to the South Coastal Information Center (SCIC).

**TIMING:** Prior to any occupancy, final grading release, or use of the premises in reliance of this permit, the final report shall be prepared.

**MONITORING:** The [PDS, PCC] shall review the final report for compliance this condition and the report format guidelines. Upon acceptance of the report, [PDS, PCC] shall inform [PDS, LDR] and [DPW, PDCI], that the requirement is complete and the bond amount can be relinquished. If the monitoring was bonded separately, then [PDS, PCC] shall inform [PDS or DPW FISCAL] to release the bond back to the applicant.

**Grading Plan Notes**

PRE-CONSTRUCTION MEETING: (Prior to Preconstruction Meeting, and prior to any clearing, grubbing, trenching, grading, or any land disturbances.)

**CULT#GR-X ARCHAEOLOGICAL MONITORING [PDS, FEE X2]**

INTENT: In order to comply with the County of San Diego Guidelines for Significance for Cultural Resources: Archaeological and Historic Resources, a Cultural Resource Grading Monitoring Program shall be implemented.

DESCRIPTION OF REQUIREMENT: The County approved Project Archaeologist, Native American Monitor, and [PDS, PCC], shall attend the pre-construction meeting with the contractors to explain and coordinate the requirements of the grading monitoring program. The Project Archaeologist and Native American Monitor shall monitor original cutting of previously undisturbed deposits in all areas identified for development including off-site improvements. The grading monitoring program shall comply with the County of San Diego Guidelines for Determining Significance and Report Format and Content Requirements for Cultural Resources: Archaeological and Historic Resources.

DOCUMENTATION: The applicant shall have the contracted Project Archeologist and Native American attend the preconstruction meeting to explain the monitoring requirements.

TIMING: Prior to the Pre-construction Meeting, and prior to any clearing, grubbing, trenching, grading, or any land disturbances this condition shall be completed. MONITORING: The [DPW, PDCI] shall invite the [PDS, PCC] to the preconstruction conference to coordinate the Cultural Resource Monitoring requirements of this condition. The [PDS, PCC] shall attend the preconstruction conference and confirm the attendance of the approved Project Archaeologist.

DURING CONTRUCTION: (The following actions shall occur throughout the duration of the grading construction).

**CULT#GR-X ARCHAEOLOGICAL MONITORING [PDS, FEE X2]**

INTENT: In order to comply with the County of San Diego Guidelines for Determining Significance and Report Format and Content Requirements for Cultural Resources: Archaeological and Historic Resources, a Cultural Resource Grading Monitoring Program shall be implemented.

DESCRIPTION OF REQUIREMENT: The Project Archaeologist and Native American Monitor shall monitor original cutting of previously undisturbed deposits in all areas identified for development including off-site improvements. The grading monitoring program shall comply with the following requirements during earth-disturbing activities:

- a. During the original cutting of previously undisturbed deposits, the Project Archaeologist and Native American Monitor shall be onsite as determined necessary by the Project Archaeologist. Inspections will vary based on the rate of excavation, the materials excavated, and the presence and abundance of artifacts and features. The frequency and location of inspections will be determined by the Project Archaeologist in consultation with the Native American Monitor. Monitoring of cutting of previously disturbed deposits will be determined by the Project.
- b. In the event that previously unidentified potentially significant cultural resources are discovered, the Project Archaeologist, in consultation with the Native American monitor, shall have the authority to divert or temporarily halt ground disturbance operations in the area of discovery to allow evaluation of potentially significant cultural resources. At the time of discovery, the Project Archaeologist shall contact the PDS Staff Archaeologist. The Project Archaeologist, in consultation with the PDS Staff Archaeologist and the Native American monitor, shall determine the significance of the discovered resources. Construction activities will be allowed to resume in the affected area only after the PDS Staff Archaeologist has concurred with the evaluation. For significant cultural resources, a Research Design and Data Recovery Program to mitigate impacts shall be prepared by the Project Archaeologist and approved by the Staff Archaeologist, then carried out using professional archaeological methods. The Research Design and Data Recovery Program shall include (1) avoidance of Traditional Cultural Properties, (2) reasonable efforts to preserve (avoidance) “unique” cultural resources pursuant to CEQA Section 21083.2(g) or for Sacred Sites as the preferred option (3) the capping of identified Sacred Sites or unique cultural resources and placement of development over the cap, if avoidance is infeasible, and (4) data recovery for non-unique cultural resources. Traditional Cultural Properties shall be avoided.
- c. If any human remains are discovered, the property owner or their representative shall contact the County Coroner and the PDS Staff Archaeologist. Upon identification of human remains, no further disturbance shall occur in the area of the find until the County Coroner has

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made the necessary findings as to origin. If the remains are determined to be of Native American origin, the Most Likely Descendant (MLD), as identified by the Native American Heritage Commission, shall be contacted by the property owner or their representative in order to determine proper treatment and disposition of the remains. The immediate vicinity where the Native American human remains are located is not to be damaged or disturbed by further development activity until consultation with the MLD regarding their recommendations as required by Public Resources Code Section 5097.98 has been conducted. Public Resources Code Section 5097.98, CEQA Section 15064.5 and Health & Safety Code Section 7050.5 shall be followed.

**DOCUMENTATION:** The applicant shall implement the grading monitoring program pursuant to this condition.

**TIMING:** The following actions shall occur throughout the duration of the grading construction.

**MONITORING:** The [DPW, PDCI] shall make sure that the Project Archeologist is on-site performing the Monitoring duties of this condition. The [DPW, PDCI] shall contact the [PDS, PCC] if the Project Archeologist or applicant fails to comply with this condition.

**ROUGH GRADING:** (Prior to rough grading approval and issuance of any building permit).

### **CULT#GR-X ARCHAEOLOGICAL MONITORING [PDS, FEE]**

**INTENT:** In order to comply with the County of San Diego Guidelines for Determining Significance and Report Format and Content Requirements for Cultural Resources: Archaeological and Historic Resources, a Grading Monitoring Program shall be implemented.

**DESCRIPTION OF REQUIREMENT:** The Project Archaeologist shall prepare one of the following reports upon completion of the grading activities that require monitoring:

- a. If no archaeological resources are encountered during grading, then submit a final Negative Monitoring Report substantiating that grading activities are completed and no cultural resources were encountered. Grading monitoring

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logs showing the date and time that the monitor was on site must be included in the Negative Monitoring Report.

- b. If archaeological resources were encountered during grading, the Project Archaeologist shall provide a Grading Monitoring Report stating that the field grading monitoring activities have been completed, and that resources have been encountered. The report shall detail all cultural artifacts and deposits discovered during monitoring and the anticipated time schedule for completion of the curation phase of the monitoring.

**DOCUMENTATION:** The applicant shall submit the Grading Monitoring Report to the [PDS, PCC] for review and approval. Once approved, a final copy of the report shall be submitted to the South Coastal Information Center.

**TIMING:** Upon completion of all grading activities, and prior to Rough Grading final Inspection (Grading Ordinance SEC 87.421.a.2), the report shall be completed.

**MONITORING:** The [PDS, PCC] shall review the report or field monitoring memo for compliance with the project MMRP, and inform [DPW, PDCI] that the requirement is completed.

**FINAL GRADING RELEASE:** (Prior to any occupancy, final grading release, or use of the premises in reliance of this permit).

### **CULT#GR-X ARCHAEOLOGICAL MONITORING [PDS, FEE]**

**INTENT:** In order to comply with the County of San Diego Guidelines for Determining Significance and Report Format and Content Requirements for Cultural Resources: Archaeological and Historic Resources, a Grading Monitoring Program shall be implemented.

**DESCRIPTION OF REQUIREMENT:** The Project Archaeologist shall prepare a final report that documents the results, analysis, and conclusions of all phases of the Grading Monitoring Program if cultural resources were encountered during grading. The report shall include the following, if applicable:

- a. Department of Parks and Recreation Primary and Archaeological Site forms.
- b. Daily Monitoring Logs
- c. Evidence that all cultural materials have been curated that includes but is not limited to the following:

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- i. Evidence that all prehistoric archaeological materials collected during the survey, testing, and grading monitoring program have been submitted to a San Diego curation facility or a culturally affiliated Native American Tribal curation facility that meets federal standards per 36 CFR Part 79, and, therefore, would be professionally curated and made available to other archaeologists/researchers for further study. The collections and associated records, including title, shall be transferred to the San Diego curation facility or culturally affiliated Native American Tribal curation facility and shall be accompanied by payment of the fees necessary for permanent curation. Evidence shall be in the form of a letter from the curation facility stating that the prehistoric archaeological materials have been received and that all fees have been paid.

or

Evidence that all prehistoric materials collected during the survey, testing, and grading monitoring program have been repatriated to a Native American group of appropriate tribal affinity. Evidence shall be in the form of a letter from the Native American tribe to whom the cultural resources have been repatriated identifying that the archaeological materials have been received.

- ii. Historic materials shall be curated at a San Diego curation facility and shall not be repatriated. The collections and associated records, including title, shall be transferred to the San Diego curation facility and shall be accompanied by payment of the fees necessary for permanent curation. Evidence shall be in the form of a letter from the curation facility stating that the historic materials have been received and that all fees have been paid.
- d. If no cultural resources are discovered, a Negative Monitoring Report must be submitted stating that the grading monitoring activities have been completed. Grading Monitoring Logs must be submitted with the negative monitoring report.

**DOCUMENTATION:** The applicant's archaeologist shall prepare the final report and submit it to the [PDS, PCC] for approval. Once approved, a final copy of the report shall be submitted to the South Coastal Information Center (SCIC).

**TIMING:** Prior to any occupancy, final grading release, or use of the premises in reliance of this permit, the final report shall be prepared.

## **7.0 List of Mitigation Measures and Environmental Design Considerations**

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**MONITORING:** The [PDS, PCC] shall review the final report for compliance this condition and the report format guidelines. Upon acceptance of the report, [PDS, PCC] shall inform [PDS, LDR] and [DPW, PDCI], that the requirement is complete and the bond amount can be relinquished. If the monitoring was bonded separately, then [PDS, PCC] shall inform [PDS or DPW FISCAL] to release the bond back to the applicant.

### **M-CR-PP-2 TEMPORARY FENCING: [PDS, PCC] [DPW, PDCI] [PC] [PDS, FEE].**

**INTENT:** In order to prevent inadvertent disturbance to archaeological sites within the avoidance areas and to the unimpacted portions of sites outside of the Major Use Permit boundaries, temporary construction fencing shall be installed.

**DESCRIPTION OF REQUIREMENT:** Prior to the commencement of any grading and or clearing in association with this grading plan, temporary orange construction fencing shall be placed to protect from inadvertent disturbance archaeological sites within the avoidance areas and to the unimpacted portions of sites outside of the Major Use Permit boundaries during all earth disturbing activities. Temporary fencing shall include but is not limited to the following:

- a. Temporary fencing is required in all locations of the project where proposed grading or clearing is within 100 feet of any archaeological site within avoidance areas or the unimpacted portions of sites outside of the Major Use Permit boundaries.
- b. The placement of such fencing shall be approved by the PDS, Permit Compliance Section. Upon approval, the fencing shall remain in place until the conclusion of grading activities after which the fencing shall be removed.

**DOCUMENTATION:** The applicant shall have a California licensed surveyor install and certify the installation of the temporary fencing in consultation with the Project Archaeologist. The applicant shall submit photos of the fencing along with the certification letter to the [PDS, PCC] for approval.

**TIMING:** Prior to Preconstruction Meeting, and prior to any clearing, grubbing, trenching, grading, or any land disturbances the fencing shall be installed, and shall remain for the duration of the grading and clearing.

**MONITORING:** The [PDS, PCC] shall either attend the Preconstruction Meeting and approve the installation of the temporary fencing, or review the certification and pictures provided by the applicant's surveyor."

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### **M-CR-PP-3** ARCHAEOLOGICAL TREATMENT PLAN: [PDS, PCC] [BP, GP, CP, UO] [DPLU, FEE]

**INTENT:** In order to mitigate impacts to significant cultural resources pursuant to CEQA and the County of San Diego Resource Protection Ordinance, a Cultural Treatment Plan for cultural sites CA-SDI-5933/6892/6903, CA-SDI-6893/16823, CA-SDI-6900/16827, CA-SDI-6901, CA-SDI-6902/16785, CA-SDI-6904/19881, CA-SDI-16786, CA-SDI-16824, CA-SDI-16826, CA-SDI-18921, CA-SDI-19278, CA-SDI-19901, CA-SDI-19902, CA-SDI-20370, CA-SDI-20461, CA-SDI-20462, CA-SDI-20576, CA-SDI-20577, CA-SDI-20578, CA-SDI-20579, CA-SDI-20580, CA-SDI-20581, P-37-032131, P-37-031313, P-37-032433, and LW-03 shall be prepared.

**DESCRIPTION OF REQUIREMENT:** A Cultural Treatment Plan shall be prepared and submitted for approval to the satisfaction of the Director of Planning & Development Services. The Cultural Treatment Plan shall include the testing of sites not previously tested. Based on the results of the Testing Program, a Data Recovery Program pursuant to the County Guidelines for Determining Significance for Cultural Resources: Archaeological and Historic Resources may be required. Any resources determined to be RPO significant shall be avoided. All artifacts shall be under the control of the Project Archaeologist until curation.

**DOCUMENTATION:** The applicant shall submit an Archaeological Treatment Plan that meets the County's guidelines in the view of the Director of Planning and Development Services for cultural sites CA-SDI-5933/6892/6903, CA-SDI-6893/16823, CA-SDI-6900/16827, CA-SDI-6901, CA-SDI-6902/16785, CA-SDI-6904/19881, CA-SDI-16786, CA-SDI-16824, CA-SDI-16826, CA-SDI-18921, CA-SDI-19278, CA-SDI-19901, CA-SDI-19902, CA-SDI-20370, CA-SDI-20461, CA-SDI-20462, CA-SDI-20576, CA-SDI-20577, CA-SDI-20578, CA-SDI-20579, CA-SDI-20580, CA-SDI-20581, P-37-032131, P-37-031313, P-37-032433, LW-03, CA-SDI-6897, CA-SDI-16786, CA-SDI-16827, CA-SDI-19278, CA-SDI-16856, CA-SDI-19872, CA-SDI-20116 and CA-SDI-20392. The Cultural Treatment Plan shall be prepared by the Project Archaeologist.

**TIMING:** Prior to approval of any plan or issuance of any permit, and prior to use of the premises in reliance on this permit, the archaeological Treatment Plan shall be prepared and submitted to the County of San Diego for review and approval.

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MONITORING: The [PDS, PCC] shall review the Archaeological Treatment Plan for compliance with this condition. Upon acceptance of the documentation, [PDS, PCC] shall inform [PDS, LDR] that the requirement is complete.

### **7.4.2 Project Design Features**

No project design features are proposed in this section.

## **7.5 Land Use and Planning**

### **7.5.1 Mitigation Measures**

See mitigation measure MM-AQ-PP-2.

### **7.5.2 Project Design Features**

See project design features **PDF-AQ-1**, and **PDF-TR-1**.

## **7.6 Noise**

### **7.6.1 Mitigation Measures**

**M-N-TDS-1** Enclose Inverters in Noise Attenuating Structures: To ensure noise from inverters would comply with the County Noise Ordinance, the following would be implemented:

- Locate non-enclosed inverters a minimum of 800 feet or greater from the nearest property line, or enclose inverters within 800 feet of property lines in cement blocks or other type of structure capable of achieving a minimum 10 dB attenuation. Inverters located within 130 feet of a residential property line require an enclosure capable of achieving a minimum of 15 dB attenuation.
- Direct all switch station doorways and exterior ventilation ducts away from adjacent property lines.
- Prior to the approval of building plans, a noise analysis shall be prepared that demonstrates that the inverters comply with the County Noise Ordinance.

**M-N-TDS-2** Tierra del Sol Gen-Tie Line Maintenance Protocol: To ensure noise from maintenance activities along the gen-tie line will comply with the County noise standards, the following shall be implemented throughout the use of the gen-tie line:

- Brush clearance along the gen-tie route shall be accomplished using non-motorized equipment and hand tools when performing work within 1,125 feet

## 7.0 List of Mitigation Measures and Environmental Design Considerations

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of a noise sensitive land use.

- For equipment maintenance or replacement associated with the gen-tie facilities, the number of simultaneously operating trucks or other support equipment shall be limited to the minimum practicable number to accomplish the task, with a maximum of two trucks to be operating simultaneously once in position.
- As part of an operations and maintenance program, prepare a Helicopter Noise Control Plan that addresses the use of helicopters for annual line inspection, and for delivery of repair parts or materials to limited access portions of the gen-tie line. The plan shall demonstrate compliance with the County Noise Ordinance for the impacts caused by helicopter noise on properties with an occupied residence, and with property lines within 3,000 feet of proposed helicopter use locations. Components of the plan shall include the following.
  - Affected property owners shall be notified prior to the use of helicopters for repair/maintenance activity within 3,000 feet of their property boundaries.
  - Helicopter operations for line inspection and repair materials delivery shall be restricted to an altitude not less than 400 feet above ground level within 1,125 feet of a noise sensitive land use, unless a helicopter quieter than a Bell 407 or Kaman K-Max is proposed to be used.
  - The area for take-off and landing of helicopters associated with line inspection or repair operations shall not be located within 3,000 feet of a property line with an occupied residence.

**M-N-TDS-3** Construction Management Plan: Prior to construction, the applicant shall prepare a construction management plan which establishes construction restrictions in order to achieve compliance with the County's 8-hour average 75 dB standard at the property lines, or edge of construction easement, for occupied residences along the gen-tie route. The Plan shall demonstrate compliance with the County Noise ordinance for the impacts caused by gen-tie construction activities within 100 feet of the affected property boundary. Components of the plan shall include the following.

- Affected property owners shall be notified prior to construction activity within 100 feet of their property boundaries.
- In order to comply with the County Noise Ordinance (Section 36.409 –

## 7.0 List of Mitigation Measures and Environmental Design Considerations

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Construction Equipment), the duration of heavy equipment for construction shall comply with the following limitations, for the specified distance between heavy equipment operations and property line of (or edge of construction easement within the) occupied parcel:

- Within 50 feet – no more than 4 hours per 8-hour period
  - Within 75 feet – no more than 6 hours per 8-hour period
  - Within 100 feet or greater - no use restriction
- All construction equipment operations associated with the gen-tie route shall incorporate all recommended noise reducing measures; such as, but not limited to; limiting construction equipment operations, installation of temporary noise barriers, etc.; and implementation of these recommendations within the Construction Management Plan shall demonstrate compliance with County Code Noise Ordinance, Sections 36.408 and 36.409.

**M-N-TDS-4** Blasting Plan: If blasting is required during construction of the gen-tie line, the applicant shall obtain a blasting permit from the County and shall prepare a blasting plan prior to start of construction that will reduce impacts associated with construction-related noise and vibrations related to blasting. The blasting plan will be site-specific, based on general and exact locations of required blasting and the results of a project-specific geotechnical investigation. The blasting plan will include a description of the planned blasting methods, an inventory of receptors potentially affected by the planned blasting, and calculations to determine the area affected by the planned blasting. Noise calculations in the blasting plan will account for blasting activities and all supplemental construction equipment. The final blasting plan and pre-blast survey shall meet the requirements provided below.

- Blasting associated with gen-tie transmission line construction shall be prohibited within 430 feet of the boundary of any occupied parcels zoned for agricultural use. Alternate non-impulsive methods (i.e., chemical fracturing of the rock) shall be used, as necessary, to facilitate pole installation when bedrock is encountered within this blast prohibition radius.
- Blasting associated with gen-tie transmission line construction shall be prohibited within 1,700 feet of existing structures. Alternate non-explosive methods (i.e., chemical fracturing of the rock) shall be used, as necessary, to facilitate pole installation when bedrock is encountered within this blast prohibition radius.

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- The blasting plan will include a schedule to demonstrate, where feasible, construction blasting to occur infrequently enough that it will not exceed the County's impulsive noise standard because blasting would not occur for more than 25% (15 minutes) during a 1-hour period due to the short time duration of a blast. Where this is not possible, other construction blasting would be coordinated with impacted building occupants to occur in their absence, or at other acceptable times, to avoid nuisance or annoyance complaints.
- To ensure that potentially impacted residents are informed, the applicant will provide notice by mail to all property owners within 1,700 feet of the project at least 1 week prior to the start of construction activities.
- Blasting would be completed between 7 a.m. and 7 p.m. to be compliant with County Noise Ordinance.
- All blasting associated activities (specifically drilling operations) shall incorporate all recommended noise reducing measures such as; but not limited to; limiting drilling operations, installation of temporary noise barriers, etc. that demonstrate compliance with the County Code Noise Ordinance, Sections 36.408, 36.409, and 36.410.

**M-N-TDS-5** Construction Helicopter Noise Control Plan: Prior to construction, the applicant will prepare a Helicopter Noise Control Plan that indicates where helicopters would be used and the frequency and duration for such use during construction. The plan shall demonstrate compliance with the County Noise ordinance for the impacts caused by helicopter noise on properties with an occupied residence, and with property lines within 1,600 feet of proposed helicopter use locations. Components of the plan shall include the following.

- Affected property owners shall be notified prior to the use of helicopters for construction activity within 1,600 feet of their property boundaries.
- In order to comply with the County Noise Ordinance (Section 36.409, Construction Equipment), the duration of helicopter use for construction shall comply with the following limitations, for the specified distance between helicopter operations and property line of occupied parcel:
  - Within 400 feet – no more than 1 hour per 8-hour period
  - Within 600 feet – no more than 5 hours per 8-hour period
  - Within 800 feet or greater – no use restriction

## 7.0 List of Mitigation Measures and Environmental Design Considerations

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**M-N-R-1** Enclose Inverters in Noise Attenuating Structures: To ensure noise from inverters would comply with the County Noise Ordinance, the following would be implemented:

- Locate non-enclosed inverters a minimum of 800 feet or greater from the nearest property line, or enclose inverters within 800 feet of property lines in cement blocks or other type of structure capable of achieving a minimum 10 dB attenuation.
- Direct all switch station doorways and exterior ventilation ducts away from adjacent property lines.
- Prior to the approval of building plans, a noise analysis shall be prepared that demonstrates that the inverters comply with the County Noise Ordinance.
- The O&M building at the Rugged solar farm shall be located no closer than 1,250 feet from the property line.

**M-N-LE-1** Site-Specific Noise Technical Report: To ensure compliance with all applicable County laws, regulations, and policies, each solar farm will prepare a site-specific noise technical report in accordance with the most current version of the *County of San Diego Guidelines for Determining Significance and Report Format and Content Requirements: Noise* to the satisfaction of the Director of PDS. The report will include project specifications, applicable noise calculations, project design features and mitigation measures applicable to the LanEast solar farm. The Noise Technical Report will address both operational and construction related noise sources, as well as noise from the use of generators during an emergency. The technical report will calculate specific anticipated noise and vibration levels from operations and construction-related activities in accordance with County standards and provide specific mitigation, such as increasing setbacks between noise generators and noise sensitive uses and using sound-attenuating enclosures, to reduce expected noise levels to below County standards.

**M-N-LW-1** Site-Specific Noise Technical Report: To ensure compliance with all applicable County laws, regulations, and policies, each solar farm will prepare a site-specific noise technical report in accordance with the most current version of the *County of San Diego Guidelines for Determining Significance and Report Format and Content Requirements: Noise* to the satisfaction of the Director of PDS. The report will include project specifications, applicable noise calculations, project design features and mitigation measures applicable to the LanWest solar farm. The Noise Technical Report will address both operational

## 7.0 List of Mitigation Measures and Environmental Design Considerations

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and construction related noise sources, as well as noise from the use of generators during an emergency. The technical report will calculate specific anticipated noise and vibration levels from operations and construction-related activities in accordance with County standards and provide specific mitigation, such as increasing setbacks between noise generators and noise sensitive uses and using sound-attenuating enclosures, to reduce expected noise levels to below County standards.

### 7.6.2 Project Design Features

**PDF-N- 1** To ensure noise from tracker washing activities will comply with the County Noise Ordinance, the following operational procedures and equipment will be implemented as part of the project design:

**Wash Station Gasoline Engine Enclosure:** The proposed IPC Eagle Wash Station has a reference noise level of 99 dBA, at 9 feet from the engine. The wash station incorporates a new generation Honda GX-160 gasoline powered engine. In the factory configuration, this engine is mounted to an open frame on the wash station. A number of manufacturers produce acoustic panels suitable for exterior use, fabricated with steel casing and foam insulation, which have a sound transmission class (STC) rating up to 40. Acoustic-rated louvers are also available to permit air circulation while dampening sound propagation; such louvers can achieve an STC rating up to approximately 25. A cubic enclosure constructed with solid panels on 5 sides, and an acoustic louver on the remaining face, would achieve a composite STC of 32. Such an enclosure would reduce the operational sound level of the wash station to 67 dBA at 9 feet. As a design feature, the applicant is proposing to employ a sound enclosure for the wash station engine to achieve a sound level of not greater than 67 dBA at 9 feet; as long as this maximum noise level is respected, other equipment may be substituted.

**North/South Panel Washing Operations:** Because of the orientation of the trackers (long axis north–south), tracker washing would take place in a north–south direction, using the service roads oriented in this direction. Along the northern and southern property lines, washing of the closest tracker to the property line would require 10 minutes, after which the adjacent tracker (at the end of the next row over) would be washed for another 10 minutes, and then then equipment would be moved down the row, away from the property line. The maximum amount of time within a critical 130 foot distance from the property line would therefore be 20 minutes in an hour.

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**Wash Station Operations Setback Distance:** Using simple distance attenuation formulas, it was determined that continuous operation of the wash station within 130 feet of a property line with adjacent residential use would exceed the applicable portion of the San Diego County Noise ordinance (Section 36.404 Sound Level Limits). For eastern and western property lines, the distance from tracker washing activity would remain constant, as the equipment moves parallel to the property line; therefore a design feature is to place the IPC Eagle Wash Station a minimum of 130 feet from the eastern and western property lines. This would equate to following the center-line of the service road on the interior side of the solar tracker row closest to the east and west property lines. The noise produced by the water spray nozzle itself was not calculated because the noise level is anticipated to be at least 10 dBA less than the enclosed engine, which would not affect the composite noise level from the wash station.

**PDF-N-2** As part of the project design and to ensure noise from pile driving activities will comply with the County Noise Ordinance, the project's construction schedule shall be phased so that geologic testing and any pre-drilling for tracker mast installation will be completed before any pile driving to install tracker masts occurs. This will be added as a condition to the MUP.

~~**PDF-ES-N-1** To ensure noise from energy storage system HVAC units, transformers, and inverters will comply with the County Noise Ordinance, one of the following measures shall be implemented:~~

- ~~a) If the battery storage container units are equipped with the standard HVAC unit (NACO Model 30RB120, or equivalent), each HVAC unit shall be surrounded by a solid perimeter screen wall with elevation one foot higher than the top elevation of the HVAC unit. In addition, each step-up transformer and related pair (2) of power inverters shall be enclosed with an 8 foot high solid perimeter wall.~~
- ~~b) If the battery storage container units are equipped with a quieter HVAC unit (Daikin McQuay 025D, or equivalent), each HVAC unit shall be surrounded by a solid perimeter screen wall with elevation one foot higher than the top elevation of the chiller unit. No transformer or inverter screen walls are necessary if the Daikin McQuay 025D, or sound equivalent HVAC model is used.~~

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### **7.7 Agriculture and Forest Resources**

#### **7.7.1 Mitigation Measures Proposed**

No mitigation measures are proposed in this section.

#### **7.7.2 Project Design Features**

No project design features are proposed in this section.

### **7.8 Geology and Soils**

#### **7.8.1 Mitigation Measures Proposed**

No mitigation measures are proposed in this section.

#### **7.8.2 Project Design Features**

**PDF-GE-1** Prior to the approval of any building plan and the issuance of any building permit, a geotechnical study must be prepared by a Registered Civil or Geotechnical Engineer, and submitted for approval by the PDS, Building Division. The report must specify foundation designs, which are adequate to preclude substantial damage to the proposed structures due to liquefaction. The applicant must prepare the report and submit it along with the submittal for the building plans. The PDS, Building Division shall review the geotechnical study for compliance with all applicable building codes and engineering standards, and shall ensure that liquefaction evaluation is adequate and that any recommendations to minimize effects of liquefaction, if any, are incorporated into the project design.

### **7.9 Greenhouse Gas Emissions**

#### **7.9.1 Mitigation Measures**

No mitigation measures are proposed in this section.

#### **7.9.2 Project Design Features**

**PDF-GHG -1** **Prepare Site-Specific GHG Report for the LanEast and LanWest solar farms.** Prior to issuance of Major Use Permits for the solar farm, a site-specific greenhouse gas technical report will be prepared in accordance with the most current version of the *County of San Diego Guidelines for Determining Significance and Report Format and Content Requirements: Greenhouse Gas*

## **7.0 List of Mitigation Measures and Environmental Design Considerations**

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*Analyses and Reporting* and approved by the County. The site-specific technical report will be completed and approved by the County prior to certification of the project-level CEQA document. The GHG Technical Report will address both operational and construction related GHG emissions sources. The technical report will calculate specific GHG emissions in accordance with County standards and provide specific mitigation, such as increasing setbacks between noise generators and noise sensitive uses and using sound-attenuating enclosures, to reduce expected noise levels to below County standards.

### **7.10 Hazards and Hazardous Materials**

#### **7.10.1 Mitigation Measures**

No mitigation measures are proposed in this section.

#### **7.10.2 Project Design Features**

- PDF-HZ-1** The project shall be designed to ensure that surface soils within the railroad ROW and on APN 658-051-07-00 where burn ash was observed will not be disturbed during construction of the gen-tie.
- PDF-HZ-2** Pursuant to the San Diego County Consolidated Fire Code Section 4903 and OSHA Regulation 1926.24, Fire Protection and Prevention, the Proposed Project applicants shall prepare a Construction Fire Prevention Plan (CFPP), and have the CFPP reviewed and approved by SDCFA and CalFire a minimum of 45 days prior to issuance of the first construction permit, such as a grading permit. The CFPP will identify potential sources of ignition and fuel during construction and decommissioning, and will detail the specific fire-prevention measures that will be employed during construction and decommissioning. Appendix 3.1.4-7 provides a conceptual outline for preparation of the CFPP.
- PDF-HZ-3** Prior to approval of a Major Use Permit, a site-specific fire protection plan shall be prepared and approved by the SDCFA. The plan shall be prepared in accordance with San Diego County Consolidated Fire Code Section 4903 and the most current version of the County of San Diego Guidelines for Determining Significance and Report Format and Content Requirements for Wildland Fire and Fire Protection, and shall address Code requirements for access, fencing/gates/signs, defensible space, adequate water supply and emergency response.

## **7.0 List of Mitigation Measures and Environmental Design Considerations**

### **7.11 Hydrology and Water Quality**

#### **7.11.1 Mitigation Measures**

No mitigation measures are proposed in this section.

#### **7.11.2 Project Design Features**

No project design features are proposed in this section

### **7.12 Paleontological Resources**

#### **7.12.1 Mitigation Measures**

No mitigation measures are proposed in this section.

#### **7.12.2 Project Design Features**

No project design features are proposed in this section.

### **7.13 Public Services**

#### **7.13.1 Mitigation Measures**

No mitigation measures are proposed in this section.

#### **7.13.2 Project Design Features**

**PDF-PS-1** As a condition to providing service and pursuant to the Safety Element of the General Plan, the applicant(s) shall enter into a fire and emergency protection services agreement with the San Diego County Fire Authority prior to approval of a Major Use Permit, which includes but is not limited to:

- An initial Paramedic staff and startup equipment kit, total cost of \$60,000; and
- Annual funding for one Paramedic staff firefighter, total annual cost of \$73,000, with an annual 5% escalator.

### **7.14 Transportation and Traffic**

#### **7.14.1 Mitigation Measures**

No mitigation measures are proposed in this section.

### 7.14.2 Project Design Features

**PDF-TR-1 Prepare Traffic Control Plan.** Pursuant to the County of San Diego Code of Regulatory Ordinances, Sections 71.602, 71.603 and 71.605, the project applicant or construction contractor shall obtain a traffic control permit and prepare a traffic control plan for each project to ensure safe and efficient traffic flow in the area and on the project sites during construction activities. The traffic control plan shall specifically address construction traffic within the County's public rights-of-way satisfactory to the Department of Public Works at least forty-five days prior to construction. The traffic control plan shall contain project-specific measures to be implemented during construction for noticing, signage, policy guidelines, and the limitation of lane closures to off-peak hours (although it is noted that no requirement for roadway or lane closures has been identified). The traffic control plan shall include provisions for construction times, and control plans for allowance of bicyclists, pedestrians, and bus access throughout construction. The traffic control plan shall also include provisions to ensure emergency vehicle passage at all times.

The traffic control plan shall include a construction notification plan, which shall identify the procedures that would be used to inform property owners of the location and duration of construction, identify approvals that would be needed prior to posting or publication of construction notices, and include text of proposed public notices and advertisements. The construction notification plan would address at a minimum the two of the following components:

- **Public notice mailer.** A public notice mailer would be prepared and mailed no fewer than 15 days prior to construction. The notice would identify construction activities that would restrict, block, remove parking, or require a detour to access existing residential properties, and would provide alternative access, if required. The notice would state the type of construction activities that would be conducted and the location and duration of construction, including all helicopter activities. The project applicant or construction contractor would mail the notice to all residents or property owners within 1,000 feet of project components. If construction delays of more than 7 days occur, an additional notice would be prepared and distributed.
- **Public liaison person and toll-free information hotline.** The project applicant or construction contractor would identify and provide a public liaison person before and during construction to respond to concerns of neighboring property owners about noise, dust, and other construction

## **7.0 List of Mitigation Measures and Environmental Design Considerations**

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disturbance. Procedures for reaching the public liaison officer via telephone or in person would be included in notices distributed to the public. The project applicants would also establish a toll-free telephone number for receiving questions or complaints during construction and shall develop procedures for responding to callers. Procedures for handling and responding to calls would be addressed in the construction notification plan.

To facilitate access to properties that might be obstructed by construction activities, the project applicant or construction contractor would notify property owners and tenants at least 24 hours in advance of construction activities and would provide alternative access if required.

### **7.15 Utilities and Service Systems**

#### **7.15.1 Mitigation Measures**

No mitigation measures are proposed in this section.

#### **7.15.2 Project Design Features**

No project design features are proposed in this section.

### **7.16 Parks and Recreation**

#### **7.16.1 Mitigation Measures**

No mitigation measures are proposed in this section.

#### **7.16.2 Project Design Features**

No project design features are proposed in this section.

### **7.17 Mineral Resources**

#### **7.17.1 Mitigation Measures**

No mitigation measures are proposed in this section.

#### **7.17.2 Project Design Features**

No project design features are proposed in this section.

## **7.0 List of Mitigation Measures and Environmental Design Considerations**

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### **7.18 Population and Housing**

#### **7.18.1 Mitigation Measures**

No mitigation measures are proposed in this section.

#### **7.18.2 Project Design Features**

No project design features are proposed in this section.