

2.1 Aesthetics

This section of the Environmental Impact Report (EIR) discusses potential impacts to aesthetic resources resulting from the implementation of the project. The analysis is based on the review of existing resources, technical data, and applicable laws, regulations, and guidelines, as well as the following technical studies prepared for the project, which were prepared in accordance with the *Guidelines for Determining Significance and Report Format and Content Requirements – Visual Resources* (County of San Diego 2007) and *Guidelines for Determining Significance and Report Format and Content Requirements – Dark Skies and Glare* (County of San Diego 2009):

- *Visual Resources Assessment for the Starlight Solar Project* (SWCA Environmental Consultants [SWCA] 2025) (Appendix C of this EIR)

Comments received in response to the Notice of Preparation (NOP) include concerns regarding the size and sprawl of the project, proximity to residents, potential glare impacts, effects to visual quality and views from scenic vistas, impacts to nearby state-designated scenic highways, light pollution, and effects to community character. These concerns are addressed in this section of the EIR where applicable, and within the visual resources assessment (see Appendix C). Copies of the NOP and comment letters received in response to the NOP are included in Appendix A, NOP, Initial Study, and Public Comments, of this EIR.

In addition, the Applicant coordinated with the Boulevard Community Planning Group and members of the Boulevard community to solicit input on the project design and identify special areas of concern for visual impacts from the project. After receiving feedback regarding the visibility of the solar arrays and associated equipment from both the public and the Boulevard Community Planning Group, the project design plans were prepared for submittal to the County of San Diego (County).

2.1.1 Existing Conditions

2.1.1.1 Regional Context

The project site is in unincorporated San Diego County, south of the community of Boulevard and approximately 0.9 mile north of the U.S.–Mexico border (Figure 1-1 in Chapter 1.0, Project Description, Location, and Environmental Setting). The community of Boulevard is approximately 65 square miles and includes the communities of Manzanita, Tierra del Sol, and Live Oak Springs. The community of Boulevard consists of several commercial buildings and residences approximately 1 mile northwest of the project site. Other human-made elements include the nearby San Diego Gas and Electric Company (SDG&E) Boulevard substation and related transmission line infrastructure, Interstate 8 (I-8), a California Department of Transportation (Caltrans) materials yard approximately 0.75 mile northeast of the project site, a U.S. Border Patrol station, and two commercial-scale wind turbine facilities located approximately 4 miles northwest of the project site on the Campo Indian Reservation and north of I-8. Jewel Valley Road crosses the project site diagonally, from northwest to southeast, connecting residences south of the project site to I-8.

The regional context is a product of both natural and built elements, including uses such as rural and agriculture uses, ranches, rural residential, limited commercial, and public infrastructure uses. The natural landscape includes rolling and varied topography, patterns of native vegetation, rock outcroppings, and open space, which all contribute to a moderate to high regional visual character and quality.

I-8 is a primary interstate travel route with approximately 8,000 average daily trips and is identified as an Eligible State Scenic Highway for the segment that is near the project site (Caltrans 2017). Old Highway 80 is a two-lane local travel route that passes approximately 0.65 mile north of the project site and is adjacent to the Boulevard substation. Old Highway 80 connects to the McCain Valley Recreation Area on

Bureau of Land Management (BLM)–administered lands approximately 3 miles north of the project site. Jewel Valley Road is a public community roadway that bisects the project site into north/south sections, connects to residences south of the project site, and to the community of Boulevard and I-8. Other non-paved private roads in the vicinity provide local access to nearby residences. South of the project site, Empire Ranch currently contains a ranch compound with residential buildings, structures for livestock, private roads, and an airstrip.

The region has abundant scenic views and landscapes. Many of these visual and scenic resources are somewhat unique and play a major role in the regional and community visual quality and character. The high visual quality of the region is due in part to scenic vistas which often include views of the rolling topography, patterns of native vegetation, distant mountains and ridgelines, rock outcroppings, and rural and open space land uses. The overall sparse and modestly scaled development supports the visual cohesiveness of the semi-rural character of the area. The Boulevard area’s confluence of high elevation, insolation, prevalent winds, and two high-voltage transmission lines has led to a high concentration of utility-scale renewable energy projects in San Diego County. Existing utilities and other infrastructure seen throughout the region are the type and frequency typical of visual character elements seen in this type of landscape.

2.1.1.2 Project Site and Surrounding Areas

The project site encompasses approximately 588 acres in unincorporated San Diego County, south of the community of Boulevard and approximately 0.9 mile north of the U.S.–Mexico border. The entire project site is undeveloped. It is located within the boundaries of the privately owned Empire Ranch, an approximately 3,795-acre ranch that stretches from south of Old Highway 80 to the U.S. border with Mexico. Adjacent to the project site boundaries, the Empire Ranch currently contains a ranch compound with residential buildings, structures for livestock, private roads, and an airstrip no longer in use. Empire Ranch also contains limited agricultural and ranching uses. A section of the abandoned San Diego and Arizona Eastern Railway runs east to west through the southern portion of the project site. Boundary Creek also flows in a southeast direction directly south of Jewel Valley Road.

The project site is surrounded by unpaved roads, rural residential development, the SDG&E Boulevard substation, and undeveloped land. The Boulevard substation is located on approximately 2 acres to the northeast of the project site, directly south of Old Highway 80. It includes a variety of visible equipment and infrastructure, including tall lattice steel towers, transformers, and fencing. Remnants of Boundary Creek flow southeast through the project site directly south of Jewel Valley Road.

Jewel Valley Road bisects the project site into somewhat north/south sections and connects to residences south of the project site and to the community of Boulevard and I-8 north of the project site. Non-paved roads in the project site provide local access to nearby residences. Primary access to the project site would be provided by Jewel Valley Road, which runs north to south and connects to Old Highway 80 in the town of Boulevard.

The project site is topographically diverse. The project site is in a geographic transitional zone of San Diego County between the desert region and Peninsular Ranges. The visually prominent Laguna Mountains are located north of the project site. In the northern portion of the project site (north of Jewel Valley Road), the east- and south- facing sloping hillsides are characteristic of the project site, and a prominent ridgeline known as the Tecate Divide is located in the southern portion of the site.

Most of the existing slopes and hillsides range in steepness from 0% to 24%. Of the 588-acre project site, approximately 567 acres are less than 25% slope, approximately 19.3 acres are from 25% to 50% slope,

and approximately 1.2 acres are steeper than 50% slope. Within the project site, no slopes steeper than 25% have a vertical rise of 50 feet or more.

The visual character of the project site is distinctly rural, and the landform and landcover of the project site is generally representative of the area. The landscape is characterized by rolling hills with scattered granite boulders and outcroppings and patterns of native vegetation. There are 14 natural vegetation communities and land cover types and three additional cover types within the category of disturbed or developed land. Transitional mountain chaparral vegetation such as mixed chaparral and chamise (*Adenostoma* spp.) is seen throughout the area. Vegetation for the project site itself is primarily chaparral, and native grasses and forbs with scattered juniper (*Juniperus* spp.). Larger trees and ornamental vegetation are associated with commercial areas and scattered residences and ranches. The site's rolling topography and hillsides, patterns of native vegetation, and rural use all contribute to a moderate to high existing visual quality.

2.1.1.3 Scenic Highways and Recreation Areas

Scenic Highways

There are no officially state-designated scenic highways in the vicinity of the project site. There are five Officially Designated Scenic Highways in San Diego County, and the nearest (State Route [SR] 78 from the west to east boundary of Anza-Borrego Desert State Park) is located over 30 miles from the project site. However, I-8 is an Eligible State Scenic Highway from SR 67 to the eastern San Diego County border and SR 94 is an Eligible State Scenic Highway from SR 125 to its connection with I-8 (Caltrans 2017). At its closest location, I-8 is located approximately 0.6 mile north of the northern project boundary and SR 94 is located approximately 1 mile north of the northern project boundary.

The Conservation and Open Space Element of the *San Diego County General Plan: A Plan for Growth, Conservation, and Sustainability* (General Plan) establishes a County Scenic Highway System consisting of scenic corridors that include county roads, state routes, and interstate freeways. Five scenic corridors identified in the Conservation and Open Space Element pass through the Mountain Empire Subregion Plan Area (County of San Diego 2011a). The County-designated scenic corridor nearest to the project site is Old Highway 80, through Boulevard and Jacumba. Old Highway 80 is a designated California State Historic Route. At its closest location, Old Highway 80 is approximately 0.1 mile north of the northern project boundary (Figure 2.1-1).

Recreation Areas

The project site is located on and surrounded by private land and is not used for public recreational purposes. The proposed project would be located in the Mountain Empire Subregion of southeastern San Diego County, an approximately 285,000-acre, largely rural, low-density population area. There are several parks and open space areas in this subregion, including the McCain Valley Resource Conservation Area and Land Cooperative, located approximately 3 miles north of the project site; Table Mountain, located approximately 8.1 miles east of the project site; the Carrizo Wilderness Area, located approximately 8.2 miles north of the project site; In-Ko-Pah Park, located approximately 10 miles east of the project site; and Mountain Springs County Park, located approximately 9.8 miles east of the project site. Despite an abundance of open space, the Boulevard Subregional Planning Area does not have any dedicated community parks (County of San Diego 2011b).

The Jewel Valley Road Pathway is proposed along Jewel Valley Road, which intersects the project site (County of San Diego 2007). The pathway is estimated to be 3.20 miles once completed and would primarily act as a north/south connector for other proposed and existing trails in the area. Jewel Valley Road Pathway is proposed as a part of the County's Community Trails Master Plan. Pathways are defined

as a non-motorized transportation facility located within a parkway or road right of way. Pathways are intended to serve both circulation and recreation purposes and are an integral part of a functional trail system (County of San Diego 2007). The project does not include the construction of this trail.

2.1.1.4 Project Viewshed

The visual environment can be vast; therefore, for purposes of analyzing impacts, boundaries must be placed on it. The area within those boundaries is commonly referred to as the viewshed. A viewshed is composed of all the surface areas visible from an observer's viewpoint. The limits of a viewshed are defined as the visual limits of the views located from the project. The viewshed also includes the locations of viewers likely to be affected by visual changes brought about by project features.

The project viewshed is part of San Diego County's geographic transitional zone between the desert region and the Peninsular Ranges. The Laguna Mountains are prominently located to the north of the project site. The viewshed is characterized by rolling hills covered by granite boulders and transitional mountain chaparral vegetation such as mixed chaparral and some chamise.

Because of the project's large expanse, extensive layout, and varied landform, the project viewshed extends over a wide area in the region and would have a potential effect on a number of public scenic vistas throughout the area. Viewing distances would range from as close as 60 feet along Jewel Valley Road to long-range views of more than approximately 2 miles from sections of I-8. Important public views that would be affected would include sections of I-8, SR 94, Jewel Valley Road, Tierra del Sol Road, and other local roadways.

Although the undulating topography of the region limits the viewshed from certain viewpoints, the topography also elevates much of the project site and can result in greater visual exposure to the surrounding area. As seen from many of the surrounding viewpoints, portions of the project would be seen on either a primary or secondary ridgeline, extending above the horizon line.

2.1.2 Regulatory Setting

2.1.2.1 Federal Regulations

Bureau of Land Management Eastern San Diego County Resource Management Plan and Record of Decision

The *Eastern San Diego County Resource Management Plan and Record of Decision* (Resource Management Plan) (BLM 2008) guides the development and management of the Eastern San Diego County Planning Area, an area spanning an eastern escarpment of Southern California's Peninsular Ranges and including more than 100,000 acres of public land administered by the BLM. The Resource Management Plan also addresses conflicts among various recreational users accessing BLM lands; provides direction for future site-specific development, including renewable energy projects; and provides for plan monitoring to determine the effectiveness of BLM land management strategies. The Resource Management Plan stresses that future policy decisions and land management strategies be compatible with the multiple-use mission of BLM that entails the management of recreational use and responsible development on public lands while also maintaining environmental quality (BLM 2008).

2.1.2.2 State Regulations

California Scenic Highway System

Created by the California State Legislature in 1963, the California Scenic Highway Program includes highways designated by Caltrans as scenic.

California State Historic Routes

Old Highway 80 is a designated California State Historic Route. In 2006, the state legislature granted this designation in recognition of the highway's "outstanding natural, cultural, historic, and scenic qualities." Despite this description, the designation does not influence the development of public and private properties adjacent to Old Highway 80 (California Legislative Information 2006).

2.1.2.3 Local Regulations

County of San Diego General Plan

The County's 2011 General Plan, through elements established to address the various issues accompanying planning and development, provides guidance for the protection of visual resources. Select policies within the Land Use, Mobility, and Conservation and Open Space Elements of the General Plan address the protection of existing visual character and quality of areas and contain general direction regarding the minimization of adverse impacts to visual resources. Policies from the remaining elements of the General Plan are not considered applicable since they do not concern the protection of visual resources. The following goals and policies of the Land Use, Mobility, and Conservation and Open Space Elements concern the preservation of visual and scenic resources. Although pertinent to protection of visual quality and quality, the County's visual resource guidelines (County of San Diego 2007) do not specifically require a consistency evaluation between General Plan goals and policies and developments proposed in San Diego County. Still, the goals and policies below apply to visual resources, and therefore are included for informational purposes (County of San Diego 2011a–2011d):

Land Use Element

- **GOAL LU-2: Maintenance of the County's Rural Character.** Conservation and enhancement of the unincorporated County's varied communities, rural setting, and character.
 - **LU-2.8: Mitigation of Development Impacts.** Require measures that minimize significant impacts to surrounding areas from uses or operations that cause excessive noise, vibrations, dust, odor, aesthetic impairment and/or are detrimental to human health and safety.
 - **LU-2.9: Maintaining Rural Character.** Consider level of service criteria, in accordance with Policy M-2.1, to determine whether adding lanes to a Mobility Element road would adversely impact the rural character of a community or cause significant environmental impacts. In those instances, consider other options to mitigate LOS [level of service] where appropriate.
- **GOAL LU-6: Development – Environmental Balance.** A built environment in balance with the natural environment, scarce resources, natural hazards, and the unique local character of individual communities.
 - **LU-6.6: Integration of Natural Features into Project Design.** Require incorporation of natural features (including mature oaks, indigenous trees, and rock formations) into proposed development and require avoidance of sensitive environmental resources.

- **LU-6.9: Development Conformance with Topography.** Require development to conform to the natural topography to limit grading; incorporate and not significantly alter the dominant physical characteristics of a site; and to utilize natural drainage and topography in conveying stormwater to the maximum extent practicable.
- **LU-10.2: Development – Environmental Resource Relationship.** Require development in Semi-Rural and Rural areas to respect and conserve the unique natural features and rural character and avoid sensitive or intact environmental resources and hazard areas.
- **LU-11.2: Compatibility with Community Character.** Require that commercial, office, and industrial development be located, scaled, and designed to be compatible with the unique character of the community.
- **LU-12.4: Planning for Compatibility.** Plan and site infrastructure for public utilities and public facilities in a manner compatible with community character, minimize visual and environmental impacts, and whenever feasible, locate any facilities and supporting infrastructure outside preserve areas. Require context sensitive Mobility Element road design that is compatible with community character and minimizes visual and environmental impacts; for Mobility Element roads identified in Table M-4, an LOS D or better may not be achieved.
- **M-4.5: Context Sensitive Road Design.** Design and construct roads that are compatible with the local terrain and the uses, scale and pattern of the surrounding development. Provide wildlife crossings in road design and construction where it would minimize impacts in wildlife corridors.

Conservation and Open Space Element

- **GOAL COS-11: Preservation of Scenic Resources.** Preservation of scenic resources, including vistas of important natural and unique features, where visual impacts of development are minimized.
 - **COS-11.1: Protection of Scenic Resources.** Require the protection of scenic highways, corridors, regionally significant scenic vistas, and natural features, including prominent ridgelines, dominant landforms, reservoirs, and scenic landscapes.
 - **COS-11.2: Scenic Resource Connections.** Promote the connection of regionally significant natural features, designated historic landmarks, and points of regional historic, visual, and cultural interest via designated scenic corridors, such as scenic highways and regional trails.
 - **COS-11.3: Development Siting and Design.** Require development within visually sensitive areas to minimize visual impacts and to preserve unique or special visual features, particularly in rural areas, through the following:
 - Creative site planning;
 - Integration of natural features into the project;
 - Appropriate scale, materials, and design to complement the surrounding natural landscape;
 - Minimal disturbance of topography;
 - Clustering of development so as to preserve a balance of open space vistas, natural features, and community character; and
 - Creation of contiguous open space networks.

- **COS-11.7: Underground Utilities.** Require new development to place utilities underground and encourage “undergrounding” in existing development to maintain viewsheds, reduce hazards associated with hanging lines and utility poles, and to keep pace with current and future technologies.
- **GOAL COS-12: Preservation of Ridgelines and Hillsides.** Ridgelines and steep hillsides that are preserved for their character and scenic value.
 - **COS-12.1: Hillside and Ridgeline Development Density.** Protect undeveloped ridgelines and steep hillsides by maintaining semi-rural or rural designations on these areas.
 - **COS-12.2: Development Location on Ridges.** Require development to preserve the physical features by being located down and away from ridgelines so that structures are not silhouetted against the sky.
- **GOAL COS-13: Dark Skies.** Preserved dark skies that contribute to rural character and are necessary for the local observatories.
 - **COS-13.1: Restrict Light and Glare.** Restrict outdoor light and glare from development projects in Semi-Rural and Rural Lands and designated rural communities to retain the quality of night skies by minimizing light pollution.
 - **COS-13.2: Palomar and Mount Laguna.** Minimize, to the maximum extent feasible, the impact of development on the dark skies surrounding Palomar and Mount Laguna observatories to maintain dark skies which are vital to these two world-class observatories by restricting exterior light sources within the impact areas of the observatories.

Mountain Empire Subregional Plan

The project site is located within the Mountain Empire Subregion of San Diego County. The *Mountain Empire Subregional Plan, San Diego County General Plan* (Mountain Empire Subregional Plan) (County of San Diego 2016) contains policies applicable to visual resources and thus applicable to the project. The following goals, policies, and recommendations established in the Mountain Empire Subregional Plan are relevant to the project:

- **Land Use Element Goal:** Provide a land use pattern consistent with the subregional population forecast.
 - **Policy and Recommendation 1:** The landforms of the Subregion are an important environmental resource that should be respected in new development. Hillside grading shall be minimized and designed to blend in with the existing natural contours.
- **Conservation - Environmental Resources Goal:** Ensure that there is careful management of environmental resources in the area in order to prevent wasteful exploitation or degradation of those resources and to maintain them for future needs.
 - **Policy and Recommendation 1:** All development shall demonstrate a diligent effort to retain as many native oak trees as possible.
 - **Policy and Recommendation 4:** The dark night sky is a significant resource for the Subregion and appropriate steps shall be taken to preserve it.
 - **Policy and Recommendation 5:** Development shall not adversely affect the habitat of sensitive plant and wildlife species or those areas of significant scenic value.
- **Scenic Highways Goal:** Establish a network of scenic highway corridors within which scenic, historical and recreational resources are protected and enhanced.

Additionally, both the General Plan Conservation and Open Space Element and Mountain Empire Subregional Plan identify five scenic corridors that pass through the Mountain Empire Subregion (County of San Diego 2011a: Figure C-5):

- Tecate Road (SR 188), from the Mexican border north to SR 94
- Potrero Valley Road, from SR 94 to Potrero County Park
- I-8, from SR 79 east to the Imperial County Line
- SR 94, through Tecate, Potrero, Boulevard, and Jacumba
- Old Highway 80 through Boulevard and Jacumba

Boulevard Subregional Plan

The project site lies within the boundaries of the Boulevard Subregional Planning Area, in the Mountain Empire Subregion (County of San Diego 2013). Policies of the *Boulevard Subregional Planning Area, Mountain Empire Subregional Plan* (Boulevard Subregional Plan) (County of San Diego 2013) that concern visual resources and are relevant to the project consist of the following:

Community Character

- **Issue LU 1.1.** The ability to experience open spaces, extensive views to local and distant horizons, abundant wildlife and unfragmented habitat, grazing livestock, and a sense of stepping back in time, is essential to preserving Boulevard's rural and rustic quality of life and community character and should not degrade and detract from the stunning visual resources, clutter free horizons, and the rural quality, character, and atmosphere that attracts residents, visitors, and outdoor enthusiasts to Boulevard and the backcountry.
 - **Goal LU 1.1.** The continued maintenance of a rural lifestyle and community character exemplified by a pattern of residential and agricultural uses on large lots outside the Rural Village, along with the protection and preservation of open landscapes, unique and geographically extensive views and vistas, dark skies, steep slopes, canyons, and floodplains, while accommodating moderate, responsible, and sustainable growth at a slower rural pace.
 - **Policy LU 1.1.2.** Encourage development to protect the quality and quantity of ground and surface water resources, air quality, dark skies, visual resources, and low ambient noise levels, as well as retain and protect the existing natural and historic features characteristic of the community's landscape and natural environment.
 - **Policy LU 1.1.3.** Encourage development to respectfully incorporate existing topography and landforms, watersheds, riparian areas, oaks, and other native vegetation and wildlife, ridgelines, historic and cultural resources, views, and sustainability design factors.
 - **Policy LU 1.1.4.** Require commercial and public development along scenic and historic routes to apply design standards that will blend the development in with the terrain and rustic southwestern nature of the community character, while keeping outdoor lighting to an absolute and well shielded minimum.
- **Issue LU 1.2.** Regional infrastructure, public facilities, and large scale energy generation and transmission projects are often proposed in rural and low-income areas. These large projects can degrade and fragment ranch lands, neighborhoods, highly valued visual resources, scenic viewsheds, ridgelines, and native habitat, including those on tribal, public, and protected lands.

- **Goal LU 1.2.** The protection of the integrity and value of the visual, historical, cultural, and natural resources along with agricultural, ranch, and public lands. All of which make Boulevard a nice place to live, work, and play.
- **Goal LU 3.1.** Protection as a Dark Sky Community through preservation of the dark skies in Boulevard to support the continued operation of the San Diego Astronomy Association and Tierra Del Sol Observatories and to continue to attract stargazers, photographers, scientists, and researchers from around the world.
 - **Policy LU 3.1.1.** Encourage development to preserve dark skies with reduced lighting and increased shielding requirements.

Community Conservation and Protection

- **Issue LU 6.1.** Commercial, industrial development and large scale energy generation projects in the rural community of Boulevard can negatively impact community character, natural resources, and the overall quality of rural lifestyle.
 - **Goal LU 6.1.** Boulevard retains its community character by limiting any commercial or industrial development that negatively impacts our community and its resources.
 - **Policy LU 6.1.1.** Require commercial, industrial development and large scale energy generation projects to mitigate adverse impacts to the rural community character, charm, quiet ambiance and lifestyle, or the natural resources, wildlife, and dark skies of Boulevard, if feasible, in accordance with the California Environmental Quality Act.
 - **Policy LU 6.1.2.** Encourage commercial, industrial development and large scale energy generation projects to create and maintain adequate buffers between residential areas and incompatible activities that create heavy traffic, noise, infrasonic vibrations, lighting, odors, dust and unsightly views and impacts to groundwater quality and quantity.
 - **Policy LU 6.1.3.** Encourage commercial, industrial development and large scale energy generation projects to provide buffers from public roads, adjacent and surrounding properties and residences, recreational areas, and trails.

Conservation and Open Space

- **Issue COS 1.3.** Boulevard and the surrounding area is blessed with unique stunning and geographically extensive scenic views and landscapes. These visual and scenic resources are highly valued and play a major role in Boulevard's community character, quality of life, appeal to visitors and tourists, and local property values. Residents willingly sacrifice the conveniences and amenities of urban living to enjoy and benefit from the rural and scenic resources that represent the backcountry way of life and quality of life. The Historic Route designation for Route 80 requires repairs to be implemented in a manner that reflects its original concrete slabs. Historic Route 80, SR-94, and Interstate 8 are part of the County Scenic Highway System and qualify for designation as State Scenic Highways.

County of San Diego Zoning Ordinance – Section 6322 and Section 6324

Sections 6322 (Outdoor Lighting) and 6324 (Lighting Permitted in Required Yards) of the County Zoning Ordinance establish regulations to control excessive or unnecessary outdoor light emissions that produce unwanted illumination of adjacent premises within the unincorporated areas of San Diego County. In addition to the prohibition of certain lighting sources, including searchlights, lighting for advertisements and lighting for recreational facilities (Section 6322), requirements for yard lighting are established in Section 6324.

County of San Diego Zoning Ordinance – Section 6954

Section 6954 (Solar Energy System) of the County Zoning Ordinance regulates solar energy systems. Section 6954(b)(2) specifies that a photovoltaic (PV) energy system for off-site uses with a project site greater than 10 acres is considered a Major Impact Service and Utility within all zones and requires a Major Use Permit. In addition, Section 6954(b)(3) specifically relates to visual resources and requires that the following measures be implemented to minimize the visual impacts of a project:

- **Setback.** A system or plant shall meet all of the setback requirements of the zone.
- **Height.** A system or plant of more than 200 feet in height is required to comply with Federal Aviation Administration safety height requirements.
- **Visual.** The following measures shall be followed in order to minimize the visual impact of the project:
 - Removal of existing vegetation shall be minimized.
 - Internal roads shall be graded for minimal size and disruption.
 - Any accessory buildings shall be painted or otherwise visually treated to blend with the surroundings.
 - A structure shall be non-reflective in all areas possible to blend with the surroundings.

County of San Diego Resource Protection Ordinance

Prior to approval of the project, a resource protection study must be completed, and the approving authority shall make a finding that the use or development permitted by the application is consistent with the provisions of the Resource Protection Ordinance (San Diego County Code of Regulatory Ordinances [County Code] Section 86.603).

The Resource Protection Ordinance limits development on steep slopes through density restrictions on “Steep Slope Lands” and through requirements for steep slope areas to be placed in easements. The requirements of this ordinance therefore often result in the protection of slopes in their natural state, which provides the added benefit of protecting a potential aesthetic resource. In terms of the preservation of aesthetic resources, this policy encourages the preservation of the existing natural terrain, established vegetation, and visually significant geologic displays.

The Resource Protection Ordinance is intended to protect sensitive lands and prevent their degradation and loss by requiring a slope analysis for certain discretionary projects. A function of the slope analysis is to identify Steep Slope Lands—lands that have slopes with a natural gradient of 25% or greater and a minimum rise of 50 feet. Based on the percentage of a parcel containing Steep Slope Lands, the Resource Protection Ordinance defines maximum percentage of allowable development encroachment. This encroachment may be further reduced due to environmental concerns or other design criteria.

Slope analysis indicates that no slopes within the project site are identified as Steep Slope Lands in accordance with the County Resource Protection Ordinance. The majority of the existing slopes range in steepness from 0% to 24%. Of the 581-acre project site, approximately 567 acres are less than 25%, approximately 19.3 acres are from 25% to 50%, and approximately 1.2 acres are steeper than 50%. Within the project site, no slopes steeper than 25% have a vertical rise of 50 feet or more.

County of San Diego Light Pollution Code

The Light Pollution Code (County Code Sections 51.201–51.209), also known as the Dark Sky Ordinance, was developed by the County’s Department of Planning and Development Services and Department of Public Works in cooperation with lighting engineers, astronomers, and land use planners from SDG&E, Palomar and Mount Laguna Observatories, and local planning and sponsor groups to address and minimize the impact of new sources of light pollution on nighttime views. For purposes of lighting requirements, the Light Pollution Code separates the unincorporated portion of San Diego County into three geographic lighting zones: Zone A, Zone B, and Zone C. Zone A includes the areas within a 15-mile radius of both the Palomar Observatory and the Mount Laguna Observatory. Zone B includes all areas not included in Zone A or Zone C, and Zone C includes the Julian Community Planning Area and Borrego Springs Community Planning Area. As the Mount Laguna Observatory is located greater than 15 miles from the project site boundary, the project is in Zone B. Section 51.204 includes lighting standards for Zone B.

2.1.3 Analysis of Project Effects and Determination as to Significance

2.1.3.1 Methodology

Guidelines for the Determination of Significance

The County’s *Guidelines for Determining Significance and Report Format and Content Requirements – Visual Resources* (County of San Diego 2007) was reviewed to determine the applicable significance thresholds for the project. According to the County guidelines for determining significance, a project would generally be considered to have a significant effect if it proposes any of the following, absent specific evidence to the contrary:

- The project would introduce features that would detract from or contrast with the existing visual character and/or quality of a neighborhood, community, or localized area by conflicting with important visual elements or the quality of the area (such as theme, style, setbacks, density, size, massing, coverage, scale, color, architecture, building materials, etc.) or by being inconsistent with applicable design guidelines.
- The project would result in the removal or substantial adverse change of one or more features that contribute to the valued visual character or image of the neighborhood, community, or localized area, including but not limited to landmarks (designated), historic resources, trees, and rock outcroppings.
- The project would substantially obstruct, interrupt, or detract from a valued focal and/or panoramic vista from:
 - a public road,
 - a trail within an adopted County or State trail system,
 - a scenic vista or highway, or
 - a recreational area.
- The project would not comply with applicable goals, policies or requirements of an applicable County Community Plan, Subregional Plan, or Historic District’s Zoning.

Additionally, the County’s *Guidelines for Determining Significance and Report Format and Content Requirements – Dark Skies and Glare* (County of San Diego 2009) was reviewed to determine the applicable significance thresholds for the project. According to the County guidelines for determining

significance, a project would generally be considered to have a significant effect if it proposes any of the following, absent specific evidence to the contrary:

- The project will install outdoor light fixtures that do not conform to the lamp type and shielding requirements described in Section 51.105 (Requirements for Lamp Source and Shielding) and are not otherwise exempted pursuant Section 59.108 or Section 59.109 of the San Diego County Light Pollution Code.¹
- The project will operate Class I or Class III outdoor lighting between 11:00 p.m. and sunrise that is not otherwise exempted pursuant to Section 59.108 or Section 59.109 of the San Diego County Light Pollution Code.
- The project will generate light trespass that exceeds 0.2 foot-candles measured 5 feet onto the adjacent property.
- The project will install highly reflective building materials, including but not limited to reflective glass and high-gloss surface color, which will create daytime glare and be visible from roadways, pedestrian walkways or areas frequently used for outdoor activities on adjacent properties.
- The project does not conform to applicable federal, state, or local statute or regulation related to dark skies or glare, including but not limited to the San Diego County Light Pollution Code.

Site Observations

Two field visits to the project site were conducted on May 4 and 5, 2022. Additional data were collected via desktop in late August 2023 to document and gain an understanding of the existing landscape character to compare with the character of the project components (e.g., solar arrays, battery energy storage system (BESS) facility, substation, and generation-tie [gen-tie] line), as well as to collect the necessary photograph documentation from each key observation point (KOP) for analysis and computer simulations. Three landscape character units were defined to provide a more focused understanding of the specific characteristics and qualities that make up the existing visual environment in the project area.

An image series of two to three horizontal photographs were taken with a digital single-lens reflex camera at each KOP for use in producing a panorama “orientation” photograph with a single-frame simulation photograph to represent 50 millimeters, the approximate field of view a human eye would see looking toward the project from each KOP. The photo points were recorded using a GPS unit and photographs were collected under typical, sunny, and generally clear viewing conditions.

Key Observation Points

The project was viewed from potential viewer group locations in the surrounding area. Representative public viewpoints were identified for further analysis based on dominance of the project site within the view, the relationship to visual resources, duration of views, and expected sensitivity of the viewer group. Of those representative viewpoints, consistent with County requirements, the key view locations that were selected best illustrate the visual effects and changes that would occur as a result of the project. Figure 2.1-2 presents the locations of each KOP within the three identified landscape character units. The seven KOP locations (KOPs 2, 3, 4, 6, 7, 8, and 9) listed in Table 2.1-1 and discussed throughout this section are intended to be consistent with the original field data numbering and are therefore not numbered consecutively.

¹ The County guidelines specifically reference the Requirements for Lamp Source and Shielding as Section 59.105; however, the County zoning ordinances have been updated since the publication of the guidelines. Requirements for Lamp Source and Shielding is now numbered as Section 51.204 of the County Light Pollution Code.

Table 2.1-1. Key Observation Point Identification

KOP Number	Description	Sensitive Viewer Group	Approximate Distance to Nearest Project Boundary (miles) / Distance Zone
2	I-8 Westbound	Travelers (Eligible State Scenic Highway)	1.2 / Midground
3	I-8 Eastbound	Travelers (Eligible State Scenic Highway)	1.6 / Midground
4	Old Highway 80 Westbound	Travelers (California State Historic Route)	0.7 / Foreground
6	Jewel Valley Road Southbound	Travelers (local)	<0.1 / Foreground
7	Jewel Valley Road Northbound	Travelers (local)	0.7 / Midground
8	SR 94 (two viewing angles)	Travelers (Eligible State Scenic Highway)	1.8 / Midground
9	Tierra del Sol Road	Travelers (local)	1.6 / Midground

Although KOPs were not specifically identified on private property, the selected key views are representative of not only public viewpoints, but also provide a basis for assessing the viewing angles and distances available to residential and recreational viewer groups in surrounding areas. The primary transportation corridors and developed areas in the region are north of the project site. Accordingly, the majority (but not all) of public viewing opportunities to the project would also occur in the areas surrounding the northern area of the project site. These locations are shown in Figure 2.1-2 and listed in Table 2.1-1 above.

Visual Simulations

Photographs from public vantage points to the project site serve as the baseline image for visual simulations of the project within the existing environment. Visual simulations were prepared to quantify potential project visibility and to assess related visual effects. The simulations were developed by superimposing a three-dimensional computer model of the project components on a digital elevation model and then placing that onto the base photographs at the correct scale and distance. Date and time-of-day inputs determine shadows and reflected light, and the software accounts for distance and haze to increase accuracy of viewing conditions. The specifications of the project layout included (1) portrait PV panels, (2) solar array panels oriented at 60 degrees, and (3) solar array strings placed in rows 15 to 25 feet apart. Project modeling also included a 10-foot-high BESS, 230-kilovolt underground gen-tie line, substation, and 6-foot-high security fence.

Visual Assessment

This analysis and subsequent determination of impacts is based primarily on a comparison of the project with the visual character and quality of its setting and surrounding vistas. Visual character is qualitatively defined by four primary components: form, line, color, and texture. Projects that create a high level of contrast with the existing visual character of a project setting are more likely to generate adverse visual impacts due to visual incompatibility. Conversely, projects that create a low level of contrast with the existing visual character are less likely to generate adverse visual impacts due to inherent visual compatibility.

KOP 2

KOP 2 represents westbound travelers along I-8, an Eligible State Scenic Highway, north of the project site (see Figures 2.1-2 and 2.1-3).² An average of approximately 17,000 vehicles per day pass along this section of I-8 (Caltrans 2017). Viewers along this east-west-oriented roadway would be traveling at a high rate of speed and would be looking south-southwest to view the project at a distance of approximately 1.2 miles. Portions of the project including PV panels, access roads, cleared vegetation, and other elements would be seen along an approximately 3.5-mile section of I-8, with a potential viewing duration of approximately 3 minutes, 15 seconds traveling at the posted speed limit. Travelers along a portion of this route would have slightly elevated views of the northern edge of the project, with views of the PV arrays, substation, BESS, and portions of the gen-tie line. Viewers from this KOP would have open, panoramic views of the rolling landscape dotted with rock outcroppings and shrub-sized vegetation. From this viewpoint, viewers would see the entire width of the north side of the project, east to west.

Views from KOP 2 (Figure 2.1-3) include expansive panoramas of gently undulating terrain in the foreground, with moderately sloped hills in the midground, and large mountains defining the horizon in the background. The site appears naturalistic with dense low-growing, dark green shrubs such as manzanita (*Arctostaphylos* sp.) and low-growing native trees. Development in this area consists of single-family residential housing dispersed throughout the landscape. An existing electrical substation can be seen in the foreground along with associated transmission lines.

Although development can be seen from KOP 2, the visual character maintains that of a rural community. The existing visual attributes such as built form, density, and style support this moderately high visual quality and scenic character.

KOP 3

KOP 3 represents the view of a traveler in a vehicle traveling east on I-8 northwest of the project site (see Figures 2.1-2 and 2.1-4) with the traveler looking to the south and southeast. This KOP represents travelers along an Eligible State Scenic Highway. Viewers along this roadway would be traveling at a high rate of speed and would be looking south-southeast to view the project approximately 1.6 miles from this vantage point. Portions of the project would be seen along an approximately 3.5-mile section of I-8, with a potential viewing duration of approximately 3 minutes, 15 seconds traveling at the posted speed limit. Approximately 17,000 vehicles per day pass along I-8 through the Boulevard area (Caltrans 2017).

The view from this KOP (Figure 2.1-4) is characterized by broad, panoramic views of the gently rolling landscape composing the project site with moderately sized dark green vegetation, dense in some areas and patchy in others, and taller trees surrounding residences in the foreground. Light green, shorter vegetation and dispersed tan boulders are clustered in areas as seen from this vantage point but are more dispersed in the project site.

Views from this vantage point are of expansive panoramas of gently undulating terrain in the foreground, with moderately sloped hills in the midground and large mountains in the background. The site appears naturalistic with dense low-growing, dark green shrubs such as manzanita and low-growing native trees such as juniper. Development in this area consists of single-family residential housing dispersed throughout the landscape. Commercial structures associated with the community are located near the highway and can be seen in the immediate foreground.

² KOP 1 was not included as the number identifications of the seven KOP locations (KOPs 2, 3, 4, 6, 7, 8, and 9) are intended to be consistent with the original field data numbering and are therefore not in direct numerical sequence.

KOP 4

KOP 4 is from Old Highway 80 westbound and represents the wide range of travelers using this important local roadway (see Figures 2.1-2 and 2.1-5). Viewers along Old Highway 80 would be traveling at low to moderate rates of speed and would be looking west to southwest toward the project site at a distance of approximately 0.7 mile. From this vantage point visual access to the project would be substantially limited due to intervening landform, vegetation, and occasional development. Portions of the project such as the substation, aboveground gen-tie line, and to a lesser extent the BESS and solar arrays would be seen intermittently along an approximately 0.4-mile section of Old Highway 80, with a potential viewing duration of approximately 30 seconds traveling at the posted speed limit. It is estimated that approximately 500 vehicles per day use Old Highway 80 through the Boulevard area (Kittelsohn & Associates [Kittelsohn] 2024).

The visual character as seen from KOP 4 (Figure 2.1-5) is that of a rural community, with visual attributes such as built form, density, and style that support its moderately high visual quality and scenic character. The combinations and patterns of natural and built elements contribute to the quality visual context. From this viewpoint the generally sparse and modestly scaled development supports the visual cohesiveness of the semi-rural character of the view. From Old Highway 80, many long-range views of the surrounding landscape are blocked or substantially limited by the proximity of existing development.

Existing utilities and other infrastructure can be readily seen from KOP 4. Development in this area includes the SDG&E Boulevard substation and associated power lines as well as scattered residential housing. Although the relatively close viewing proximity of these built elements increases their noticeability, the underlying visual character from KOP 4 and Old Highway 80 is mostly defined by the overall natural landform and vegetation and rural development land use.

KOP 6

KOP 6 is from Jewel Valley Road southbound and represents local travelers (see Figures 2.1-2 and 2.1-6).³ Viewers along this roadway would be traveling at low rates of speed and would be looking primarily south with unobstructed views of the project as close as 60 feet from the roadway. Travelers along Jewel Valley Road are often making local trips and are typically driving at slow to moderate rates of speed. Portions of the project including close-up views of the PV panels and support structures, fencing, and access roads, as well as distant arrays would be seen intermittently along an approximately 1-mile section of Jewel Valley Road, with a potential viewing duration of approximately 1 minute, 15 seconds traveling at the posted speed limit. It is estimated that approximately 310 vehicles per day use Jewel Valley Road through the Jewel Valley area (Kittelsohn 2024).

The view from KOP 6 (see Figure 2.1-6) and elsewhere along Jewel Valley Road is predominantly rangeland, scattered rural residential development, and open space. The landform and landcover of this view are typical of the region, with rolling topography dotted with rock outcroppings, scattered juniper, chaparral, and native grasses and forbs. The visual character of KOP 6 is rural, supported by its land use, ranch and rural residential buildings and architecture, and sparse development. As seen from KOP 6, distant mountains define the horizon, contributing to the high visual quality and character of this viewpoint.

³ KOP 5 was not included as the number identifications of the seven KOP locations (KOPs 2, 3, 4, 6, 7, 8, and 9) are intended to be consistent with the original field data numbering and are therefore not in direct numerical sequence.

KOP 7

KOP 7 represents primarily local and recreational users traveling northbound along the southern segment of Jewel Valley Road (see Figures 2.1-2 and 2.1-7). Similar to KOP 6, viewers along this roadway are typically traveling at moderate rates of speed, with views oriented primarily to the north uphill toward the project, depending on direction of travel. The viewing distance from KOP 7 to the project boundary is approximately 0.7 mile. Based on the project layout, size, and undulating landform, the array system would generally not be seen in its entirety, but rather as smaller sub-units, or along the horizon. Portions of the project would be seen intermittently along an approximately 1-mile section of Jewel Valley Road, with a potential viewing duration of approximately 1 minute, 15 seconds traveling at the posted speed limit.

The view from KOP 7 (Figure 2.1-7) and Jewel Valley Road is predominantly ranchland, scattered rural residential development, and open space. The landform and landcover is typical of the region, with rolling topography dotted with rock outcroppings, scattered juniper, chaparral, and native grasses and forbs. The visual character of KOP 7 is distinctly rural, supported by its land use, ranch and rural residential buildings and architecture, and sparse development. As seen from KOP 7, distant mountains define the horizon, contributing to the high visual quality and character of this viewpoint.

KOP 8

KOP 8 is from SR 94 eastbound and represents travel route viewers from an Eligible State Scenic Highway (see Figure 2.1-2 and 2.1-8). Viewers along this roadway would be traveling at low to moderate rates of speed and would be looking primarily east as they crest the hill with panoramic views of the project site, as represented by this KOP. From this viewpoint the project would be seen at approximately 1.8 miles to the southeast. Portions of the project such as the panel arrays and removed vegetation would be seen along an approximately 0.5-mile section of SR 94, with a potential viewing duration of approximately 45 seconds traveling at the posted speed limit. Approximately 1,850 vehicles per day use SR 94 through the Boulevard/Manzanita Landscape Character Unit (Caltrans 2017).

The visual character seen from KOP 8 (Figure 2.1-8) is mostly defined by panoramic views of the varied and undulating topography and series of intermediate and distant ridgelines and mountainous backdrop. Exposed rock outcroppings provide visual interest and add to the natural character of the landscape. The visual character observed from KOP 8 is distinctly rural, supported by its land use, ranch and rural residential buildings and architecture, and sparse development. Scattered ranches, rural residential development, and open space contribute to a high visual quality. Vegetative patterns of native juniper, chaparral, and grasses are the predominant vegetative landcover seen throughout the area and are an important character-defining element. The elevated vantage point of this KOP affords scenic vistas with high compositional value, resulting in a high visual character and quality.

KOP 9

KOP 9 represents viewers traveling along Tierra del Sol Road, an important north-south corridor in the region (Figures 2.1-2 and 2.1-9). Views from this local roadway are considered high quality and representative of the region's rural and scenic character. Viewers passing by this KOP would be traveling at moderate rates of speed as they crest the hill with panoramic views of the project site. From this viewpoint the project would be seen at a distance of approximately 1.6 miles to the east. Portions of the project such as the PV arrays along the western project site would be seen intermittently along an approximately 1-mile section of Tierra del Sol Road, with a potential viewing duration of approximately 1 minute traveling at the posted speed limit. Although no traffic volume data are available for Tierra del Sol Road, its importance is identified in the Mountain Empire Subregional Plan as a local road with views that are "breathtaking in the sheer amount of territory that can be seen in virtually all directions with virtually no obstructions." From

much of Tierra del Sol Road, views to the project would be blocked by intervening landform and vegetation. However, from certain areas such as KOP 9, portions of the project would be easily seen in the distance. Travelers viewing eastward from Tierra del Sol Road would see the arrays to the east, where the intervening foreground landforms drop in elevation and the arrays come into the midground view.

KOP 9 shows the visual character and quality of the landscape from a somewhat elevated public vantage point (Figure 2.1-9). These more expansive views result in a high visual quality which includes scenic vistas of the Laguna Mountains to the north. Similar to KOP 8, the character and visual quality of this KOP are typical of the region. The visual character observed from KOP 9 is distinctly rural, supported by its land use, ranch and rural residential buildings and architecture, and sparse development, which contribute to a high visual quality. Vegetative patterns of native juniper, chaparral, and grasses are the predominant vegetative landcover seen throughout the area and are an important character-defining element. The elevated vantage point of this KOP affords scenic vistas with high compositional value, resulting in a high visual character and quality.

Contrast Analysis

The visual contrast analysis is a qualitative discussion of anticipated contrast between the existing landscape character and the proposed activities and/or facilities. Factors taken into consideration for such an analysis include distance of the project elements from the viewer and the level of perceived contrast between the project elements and the existing landscape. These factors are further defined below. The contrast analysis rating sheets are shown in Appendix C.

The following distance zones were used for evaluating impacts to scenery from each KOP:

- Foreground: up to 0.5 mile
- Midground: 0.5 to 3 miles
- Background: 3 to 5 miles

The level of perceived contrast between the project elements and the existing landscape from each KOP was classified using the following terms:

- None: The element contrast is not visible or perceived.
- Weak: The element contrast can be seen but does not attract attention.
- Moderate: The element contrast begins to attract attention and begins to dominate the characteristic landscape.
- Strong: The element contrast demands attention, would not be overlooked, and is dominant in the landscape.

Glare Analysis

To determine the potential for significant glint or glare from solar panels and other built project components that may affect residents and motorists traveling on I-8, SR 94, Old Highway 80, Tierra del Sol Road, and Jewel Valley Road, SWCA used the Sandia National Laboratories' online Solar Glare Hazard Analysis Tools by ForgeSolar (see Appendix C). The glare tool and associated report illustrate via Google Earth imagery where the project is located relative to sensitive viewing locations such as airports, KOPs, roads/highways, and other transportation routes. The glare analysis methodology is consistent with County dark sky guidelines and ordinances. Using simple parameters provided by the Applicant, the glare analysis provides a quantitative assessment of when and where glare from the project components would occur throughout the year and shows potential effects on the human eye at locations where glare occurs. The glare

analysis also assesses the project's energy production so that the Applicant can compare alternative designs to maximize energy production while mitigating the impacts of glare. Additional information regarding the orientation and tilt of the PV panels, reflectance of project components, local environmental conditions, and ocular factors (e.g., flash blindness) are considered in the analysis (ForgeSolar 2020). The PV panels used in this analysis are fixed-frame racks with a tilt of 30 degrees resting angle and 60-degree maximum tracking and a maximum height of 12 feet above the ground, facing south. Existing vegetation and structures are considered when analyzing the results of the glare analysis.

Analysis for the project used the GlareGauge (also known as Solar Glare Hazard Analysis Tool [SGHAT]) model developed by ForgeSolar and the U.S. Department of Energy's Sandia National Laboratories to evaluate potential glare (see Appendix C). The analysis focused on potential glare effects on observation points and linear travel routes. Aircraft landing and approach were considered. The proposed project site is approximately 6.5 miles west of the County-owned and publicly used Jacumba Airport. Although the project is not located on airport property and therefore not subject to Federal Aviation Administration (FAA) jurisdiction under 14 Code of Federal Regulations 77 to protect airspace safety and is located beyond the 2-mile final approach as defined in the Interim Solar Policy, the Applicant has sought to voluntarily apply FAA ocular hazard standards (*Federal Register* 78:63276). The glare analysis results comply with the FAA standards described in the Interim Solar Policy.

Military operating areas occur throughout eastern San Diego County. Review of the solar glare analysis and the project site lighting description indicates that proposed lighting, implemented in compliance with the County lighting ordinance and policies, would not result in substantial light to military operating area day-to-day operations. The minimal glare modeled from the sensitive receptors does not create hazards such as flash blindness or continuous glare, nor adversely affect daytime or nighttime views in the area.

2.1.3.2 Visual Character and Quality

Guidelines for the Determination of Significance

For the purpose of this EIR, the County's *Guidelines for Determining Significance, Report Format and Content Requirements – Visual Resources* (County of San Diego 2007) was used to establish significance thresholds. As stated in the County guidelines, a significant impact would result if:

- The project would introduce features that would detract from or contrast with the existing visual character and/or quality of a neighborhood, community, or localized area by conflicting with important visual elements or the quality of the area (such as theme, style, setbacks, density, size, massing, coverage, scale, color, architecture, building materials, etc.) or by being inconsistent with applicable design guidelines.

Analysis

Construction

The project would be constructed in two separate phases. Construction of Phase I would occur over approximately 12 months, and Phase II would occur over approximately 18 months. It is anticipated there would be approximately a 1-year gap between construction of Phase I and Phase II. During the construction period, earthmoving activities and construction materials, heavy and light equipment, trucks, and parked vehicles would be visible on the project site. Throughout construction, numerous activities would take place on-site, including large-scale vegetation removal, earthwork, and installation of all project elements. These construction activities would result in a high degree of visual contrast. Because of the relatively close time frame between construction phases, it is expected that the casual observer and the surrounding community could perceive project construction as occurring in a single, overlapping phase.

Although the visual contrast and effect on character during the construction phase would be significant, the overall adverse effect on visual character would be moderate due to the temporary nature of the construction activities.

Operation

As described below, visual simulations of the project are included for the postconstruction (operational) period in Figures 2.1-3 through 2.1-9. Due to its large expanse, extensive layout, and varied landform, portions of the project would be seen over a wide area in the region and would have a potential effect on several scenic vistas throughout the region. Important public views that would be affected include sections of I-8, SR 94, Jewel Valley Road, and Tierra del Sol Road.

Intervening topography and the somewhat random visual pattern elements of vegetation, rock, and scattered development on the site and surroundings would reduce project noticeability to some degree. Depending on the viewpoint, the project would have weak to moderate visual contrast to the surrounding natural colors. Despite some rock outcroppings remaining in place along the project ridgeline, the arrays would attract attention and would have strong visual contrast with the terrain.

Although intervening topography, vegetation, and distance would somewhat reduce visibility of the project from certain mid- and long-range public views, the project would result in a noticeable contrast with the high visual quality of the natural and rural setting where visible. The dark panels would appear somewhat similar in shade to the existing vegetation. As seen from closer viewpoints, the project would be readily visible and substantially alter the visual quality due to the differences in line, form, color, and texture compared to surrounding setting. The project would remove substantial amounts of mature native vegetation. Large swaths of PV arrays and other supporting project elements constructed throughout the project site would introduce a new, visually contrasting use into the viewshed as seen from many surrounding public viewpoints.

Although the undulating topography of the region blocks views of the project from certain viewpoints, the topography also elevates the project site and can result in greater visual exposure to the surrounding area. As seen from many of the surrounding viewpoints, portions of the project would be seen on either a primary or secondary ridgeline, extending above the horizon line. This alteration of the surrounding ridgelines and visual backdrop would adversely affect the existing scenic vistas throughout the area. As seen from certain closer public viewpoints surrounding the project, such as Jewel Valley Road, the project would dominate the foreground views and would distract from the larger scenic context of the viewshed.

The project proposes to reseed all disturbed areas with a native plant hydroseed mix as soon as possible after disturbance. In addition, at least 70% vegetation cover is proposed to be maintained during project operation on the portions of the solar facility development footprint within the perimeter fencing not overlain by vehicle access driveways and internal access, inverter/transformer platforms, battery storage containers, and the on-site substation. Due to the uncertainty of revegetation success, combined with the required fuel modification zones and permanently disturbed areas, the proposed revegetation seeding would provide only partial visual benefit of reducing the visual contrast of light-colored exposed soils in comparison with the surrounding, dark green vegetation and mitigation of loss of visual character to the project site and the surroundings. As a result of these factors, the project would have a substantial effect on the existing scenic vistas and visual quality.

KOP 2

The viewing distance from KOP 2 to the project would be approximately 1.2 miles.⁴ This KOP represents westbound travelers along I-8 north of the project site (see Figures 2.1-2 and 2.1-3). Travelers looking south along this route would have slightly elevated views of the northern portions of the project with views of the substation, BESS, and portions of the aboveground gen-tie line. Viewers from this KOP would have open, panoramic views of the rolling landscape dotted with rock outcroppings and shrub-sized vegetation. With the introduction of new forms and lines not found in the existing landscape, the scale of the project would potentially detract from and/or contrast with the existing visual character.

KOP 3

The viewing distance from KOP 3 to the project would be approximately 1.6 miles. This KOP represents the view from a vehicle traveling east on I-8 northwest of the project site (see Figures 2.1-2 and 2.1-4) with the traveler looking to the south and southeast. Due to the somewhat elevated viewer perspective, the project would be easily visible from this KOP resulting from the contrasting angular, geometric patterns of the arrays with the generally organic edges and forms of the surrounding vegetation and landform. Intervening topography and the generally random visual patterns of vegetation, rock, and scattered development on the site and the surrounding areas would reduce project noticeability to some extent. Vegetation removal would be noticeable and would increase the perception of the project's visual character. The large swaths of PV panels would generally follow the existing topography; however, they would also be seen extending above a mid-distance ridgeline to the southeast, resulting in a reduction in the quality of the scenic vista and an alteration of existing rural character.

Although the majority of the proposed gen-tie line would be underground, an approximately 50-foot section near the connection to the substation would be visible, and although similar in form, line, color, and texture to the existing transmission lines in the area, would add to the project's overall visual contrast with the surrounding natural landscape. The visible contrast with the natural surroundings would also increase the developed visual character of the area.

KOP 4

The viewing distance from KOP 4 to the project would be approximately 0.7 mile from Old Highway 80 (see Figures 2.1-2 and 2.1-5). Viewers from KOP 4 would have foreground, level views of the substation and portions of the aboveground gen-tie line, but views of the solar panel arrays would be partially or entirely screened due to intervening topography and vegetation. Similarly, the BESS would be somewhat obscured by topography and would have limited views for travelers along Old Highway 80. Due to this limited visibility, many casual observers would be generally unaware of the changes implemented by the project. Accordingly, as seen from KOP 4 the project would result in only a minor reduction in the existing visual quality.

KOP 6

KOP 6 is from Jewel Valley Road southbound and represents local travelers (see Figures 2.1-2 and 2.1-6).⁵ Viewers along this roadway would be traveling at low rates of speed and would be looking primarily south with unobstructed views of the project as close as 60 feet from the roadway. Views from this vantage point are panoramas of a rural and natural landscape. The introduction of solar panels would screen or partially

⁴ KOP 1 was not included as the number identifications of the seven KOP locations (KOPs 2, 3, 4, 6, 7, 8, and 9) are intended to be consistent with the original field data numbering and are therefore not in direct numerical sequence.

⁵ KOP 5 was not included as the number identifications of the seven KOP locations (KOPs 2, 3, 4, 6, 7, 8, and 9) are intended to be consistent with the original field data numbering and are therefore not in direct numerical sequence.

screen panoramic views from this vantage point along an approximately 0.5-mile segment of this roadway. The solar arrays would introduce new form, line, color, and texture to the site. The geometric and angular forms of the arrays, support structures, fencing, and roads would be noticeable compared to the otherwise mostly natural and rural surrounding landscape. Views would have contrast due to the proximity to the panels. From some locations the proximity and heights of the panels would partially block views of the surrounding mountains. These changes would alter the visual quality and character from rural to semi-industrial by adding development to the viewshed.

As seen from KOP 6 and much of Jewel Valley Road, proximity to the roadway and viewing orientation would result in direct, close-range views of the project. Proposed removal of substantial amounts of mature native vegetation would also be noticeable from this KOP. From these viewpoints, the project would be readily visible and substantially redefine the visual character of the site and the project vicinity from rural to semi-industrial. The project would result in a noticeable contrast with the visual character and quality of the natural and rural setting due to the introduction of angular, repetitive elements and forms. In addition, from segments of Jewel Valley Road, the viewing proximity and heights of the adjacent panel arrays would block views of the distant hillsides. As a result of these factors, the project would result in a substantial adverse effect on the existing visual quality and character of the site and surroundings as seen from this KOP.

KOP 7

The viewing distance from KOP 7 to the project boundary is approximately 0.7 mile (see Figures 2.1-2 and 2.1-7). From KOP 7 the solar arrays primarily along the eastern portion of the project would be seen on a hillside approximately 0.5 mile to the north. The dark panels would appear somewhat similar in shade to the existing dark green vegetation and would have weak to moderate contrast relative for color. The form and line of the arrays would vary from those seen in the surrounding area and contrast with the natural landscape, due to the repetitive lines and geometric forms of the arrays. Although existing rock outcroppings would remain in place along the ridgeline, the arrays would attract attention. The scale of the project as seen from this vantage point covers a large area. Although broken up by small segments of open vegetation, the project would be noticeable and have moderately strong visual contrast with the surrounding landscape context. The arrays of PV panels would generally follow the existing topography. The repetitive angled edges and geometric forms of the panels and the arrays would be seen silhouetting above the primary ridgeline to the north, resulting in a reduction in existing rural character and quality.

The view from KOP 7 is characterized by high-quality views of the gently rolling landscape covered with rock outcroppings, dark green native vegetation, with taller trees scattered throughout. Although ranches and residences can be seen in the area, those built features are visually subordinate to the underlying scenic quality defined by the topography, native vegetative patterns, and rock outcroppings.

Although intervening topography and roadside vegetation would reduce project noticeability to some degree, the prominent location of the solar arrays on the ridgeline would allow the project to be readily seen from this KOP and the surrounding area. The solar arrays would generally follow the existing topography; however, they would noticeability extend above a mid-distance ridgeline valued in County policy would result in a reduction in the quality of the scenic vista and an alteration of existing rural character due to the repetitive elements of the angled arrays. In addition, vegetation removal would be apparent and would change the perception of the project site's visual character.

KOP 8

KOP 8 is from SR 94 eastbound and represents travel route viewers from an Eligible State Scenic Highway (see Figures 2.1-2 and 2.1-8). From this viewpoint the project would be seen at a distance of approximately

1.8 miles to the southeast. The dark panels would appear somewhat similar in shade to the existing dark green vegetation seen in the surrounding landscape. Despite the color similarity, the massing of geometric forms and repetitive lines of the solar array fields would contrast with the natural patterns of the viewshed. As seen from KOP 8, the project would follow the existing topography; however, the solar array fields would be seen occupying an intermediate ridgeline to the southeast, resulting in a reduction in existing rural character and quality due to the angular, and repetitive geometric forms in contrast to the surrounding soft, natural vegetative forms. Although the viewing distance from KOP 8 and along SR 94 would somewhat reduce project noticeability, the distance would also make the scale of the project more apparent, increasing the perception of the visual character change from rural and open space to a utility infrastructure use.

Viewers would notice changes such as the contrast between the linear form of the arrays and the natural landscape, as well as the large scale of the project. Other project elements, such as the aboveground portion of the gen-tie line or BESS facility would not be seen from this vantage point. Large fields of solar arrays constructed throughout the project site would introduce a new, visually contrasting use into the rural viewshed as seen from KOP 8. As a result of these factors, the project would result in a moderately adverse effect on the existing visual quality and character of the site and surroundings.

KOP 9

KOP 9 represents viewers traveling along Tierra del Sol Road, a local north-south corridor in the region (see Figure 2.1-2 and 2.1-9). From this viewpoint the project would be seen at a distance of approximately 1.6 miles to the east.

This view from KOP 9 is considered high quality and representative of the region's valued rural and scenic character. From much of Tierra del Sol Road, views to the project would be blocked by intervening landform and vegetation. However, from certain areas, such as the vicinity of the California Department of Forestry and Fire Protection (CAL FIRE) White Star Fire Station, portions of the project could be seen in the distance. Travelers viewing eastward from Tierra del Sol Road may see the arrays to the east, where the intervening foreground landforms drop in elevation and the arrays come into the midground view, appearing as modular, darker, and contrasting forms on the hillsides. The views of the project from Tierra del Sol Road diminish from visible to partially obscured and not visible the farther south a traveler is from the project.

The visibility of the solar arrays would introduce a new, visually contrasting use into the viewshed as seen from KOP 9. As a result of these factors, the project would result in a moderately adverse effect on the existing visual quality and rural character of the site and surroundings.

Conclusion for Visual Character and Quality

The proposed project would introduce a solar facility into an otherwise mostly rural and natural setting. Due to the extensive layout, viewshed angles, topography, and size, the project would be visible throughout a portion of the surrounding region. Recent renewable energy projects have resulted in a change to the physical setting that includes major infrastructure elements, such as wind turbines, transmission towers, and other related components. Past renewable energy projects within a five-mile radius that have already been constructed include the 500 kV Sunrise Powerlink, the Tule Wind Phase I project, the Kumeyaay Wind project, and the SDG&E Battery Microgrid project. Renewable energy projects within the same area that are approved but not yet constructed include the Campo Wind project and the Rugged Solar project.

Although other renewable energy projects, utility infrastructure (e.g., Boulevard substation), and transmission lines exist in the region, public views of the project site would include project features that in places would potentially detract from and/or contrast with the existing rural and open space land-use density, architecture, vegetative patterns, and natural forms that currently define the landscape quality and

character within the site and surroundings. The proposed removal of native vegetation would be noticeable with the natural landscape patterns. Although the surrounding topography and viewing distance would limit visibility from some viewpoints, the scale and overall visual exposure of the project would be evident from certain public viewpoints and would alter the scenic quality of the landscape. Due to high winds and arid conditions of the area, it would be infeasible to install and maintain landscaping at a large enough scale to screen the project from nearby views. The visual contrast and effect on character during the construction phase would be significant, however the overall adverse effect on visual character would be limited due to the temporary nature of the construction activities. The visual contrast and effect on character during the operation of the project would be significant. Although impacts to private views are not considered significant under the California Environmental Quality Act (CEQA) and mitigations for private views are not required, the project will include project design feature **PDF-AE-1**, which would help screen views of the project from nearby private residences. Although existing renewable energy projects in the area have already impacted the visual quality of the landscape, this project would further detract from the existing visual quality and significantly contrast with the predominantly rural and natural character of the surrounding community, resulting in a **significant** impact (**Impact AE-1**)

2.1.3.3 Valued Visual Character and Image of Neighborhood or Community

Guidelines for the Determination of Significance

For the purpose of this EIR, the County's *Guidelines for Determining Significance, Report Format and Content Requirements – Visual Resources* (County of San Diego 2007) was used to establish significance thresholds. As stated in the County guidelines, a significant impact would result if:

- The project would result in the removal or substantial adverse change of one or more features that contribute to the valued visual character or image of the neighborhood, community, or localized area, including but not limited to landmarks (designated), trees, and rock outcroppings.

Analysis

The existing visual character of the project site and the surrounding area is a product of both natural and built elements, including uses such as rural and agriculture uses, residential, commercial, renewable energy, public infrastructure, and open space. The project site is spread over a large and somewhat varied area; however, its rolling topography and hillsides and patterns of native vegetation and contribute to a moderately high to high existing visual quality. However, due to the inclusion of existing, approved and proposed energy facilities, the Boulevard Subregional Plan Area has and continues to experience changes in its neighborhood character. The area that originally was predominantly rural in nature with large homesteads is becoming increasingly developed with private facilities, civic uses and energy infrastructure and facilities. The subregional plan area supports a range of development including large lot rural residential structures, private use equestrian facilities, small-scale rural commercial businesses, undeveloped open space, communication facilities and electrical infrastructure, and existing and approved wind energy facilities.

The project would remove substantial amounts of mature native vegetation. The PV arrays and other supporting project elements constructed throughout the project site would introduce a new, visually detracting use onto the project site as seen from certain surrounding public viewpoints. The project would interrupt primary and secondary ridgelines as seen from important travel corridors.

Although visibility of the project would be somewhat blocked from certain mid- and long-range public views, the project would result in a noticeable contrast with the visual character and quality of the natural and rural setting where visible. As seen from closer viewpoints, the project would be visible and would alter the visual character of the site and vicinity, contributing to ongoing changes initiated by existing renewable energy infrastructure in the area. Such changes are typical when transitioning open space and rural land to utility developments of this nature. As a result of these factors, the project would result in an adverse change to aesthetic features that contribute to the valued visual character and image of the community and surrounding area. While the project will comply with the County's Resource Protection Ordinance (RPO) and the County's General Plan (County of San Diego 2011b), the project would result in a **significant** impact (**Impact AE-2**).

2.1.3.4 Focal and Panoramic Vistas

Guidelines for the Determination of Significance

For the purpose of this EIR, the County's *Guidelines for Determining Significance, Report Format and Content Requirements – Visual Resources* (County of San Diego 2007) was utilized to establish significance thresholds. As stated in the County guidelines, a significant scenic vista impact would occur if:

- The project would substantially obstruct, interrupt, or detract from a valued focal and/or panoramic vista from:
 - a public road,
 - a trail within an adopted County or State trail system
 - a scenic vista or highway, or
 - a recreational area.

Analysis

Public Roads

Due to the somewhat elevated viewer perspective, construction and operation of the project would be easily visible from KOPs 2 and 3, resulting from the contrasting angular, geometric patterns of the arrays with the generally organic edges and forms of the surrounding vegetation and landform. Intervening topography and the generally random visual patterns of vegetation, rock, and scattered development on the site and the surrounding areas would reduce project noticeability to some extent. Vegetation removal would be noticeable and would increase the perception of the project's visual character. Although the majority of the proposed gen-tie line would be underground, the approximately 50-foot section crossing Tule Jim Lane near the connection to the substation would be visible, and although similar in form, line, color, and texture to the existing transmission lines in the area, would add to the project's overall visual contrast with the surrounding natural landscape. The visible contrast with the natural surroundings would also increase the developed visual character of the area. The large swaths of PV panels would generally follow the existing topography; however, they would also be seen extending above a mid-distance ridgeline to the southeast, resulting in a reduction in the quality of the scenic vista and an alteration of existing rural character.

Viewers from KOP 4 would have foreground, level views of the substation and portions of the aboveground gen-tie, but views of the solar panel arrays would be partially or entirely screened due to intervening topography and existing vegetation (Figure 2.1-5). Similarly, the BESS would be somewhat obscured by topography and would have limited views for travelers along Old Highway 80. Due to this limited visibility, many casual observers would be generally unaware of the changes implemented by the project. Accordingly, as seen from KOP 4 the project would result in only a minor reduction in the existing visual quality.

KOP 8 represents travel route viewers along SR 94, an Eligible State Scenic Highway section of the highway with slightly raised views of the northernmost portion of the project site. Views from KOP 8 are characterized by broad, panoramic, high-quality views of the valley in which the project is sited (see Appendix C, Figure 9). Viewers would notice changes such as the contrast between the linear form of the arrays and the natural landscape, as well as the large scale of the project. Other project elements, such as the aboveground portion of the gen-tie line or BESS facility would not be seen from this vantage point. Large fields of solar arrays constructed throughout the project site would introduce a new, visually contrasting use into the rural viewshed as seen from KOP 8. As a result of these factors, the project would result in a moderately adverse effect on the existing visual quality and character of the site and surroundings.

Views from KOP 9 are characterized by broad, panoramic, high-quality views of the valley in which the project is sited. Viewers could notice changes such as the contrast between the linear form of the arrays and the natural landscape, as well as the large scale of the project. Other project elements, such as the aboveground portion of the gen-tie line or BESS facility would not be seen from this vantage point. The views from KOP 9 are considered high quality and representative of the region's valued rural and scenic character. From much of Tierra del Sol Road, views to the project would be blocked by intervening landform and vegetation. However, from certain areas, such as the vicinity of the CAL FIRE White Star Fire Station, portions of the project would be easily seen in the distance. Travelers viewing eastward from Tierra del Sol Road may see the arrays to the east, where the intervening foreground landforms drop in elevation and the arrays come into the midground view, appearing as modular, darker, and contrasting forms on the hillsides. The views of the project from Tierra del Sol Road diminish from visible to partially obscured and not visible the farther south a traveler is from the project. The visibility of large swaths of solar arrays would introduce a new, visually contrasting use into the viewshed as seen from KOP 9. As a result of these factors, the project would result in a moderately adverse effect on the existing visual quality and rural character of the site and surroundings.

County or State Trail System

Although transportation corridors through the Boulevard area provide access to many recreational areas in eastern San Diego County, no official public parks or recreational trails are located within the immediate vicinity of the project site. McCain Valley Recreation Area is located approximately 3 miles north of the project site and provides little to no visibility of the project site.

Scenic Vistas or Highways

Scenic vistas are generally defined as high-quality views displaying good aesthetic and compositional value that can be seen from public viewpoints. If the project substantially degrades the scenic landscape as viewed from public roads or from other public or recreation areas, this would be considered a significant impact to the scenic vista. The degree of potential impact on scenic vistas also varies with factors such as viewing distance, duration, viewer sensitivity, and the visual context.

Scenic vistas in the region that are either identified in County planning policy or otherwise meet the quality definition of a scenic vista typically include views of the rolling topography, patterns of native vegetation, surrounding mountains and ridgelines, rock outcroppings, and rural and open space land uses. Because of its large expanse, extensive layout, and varied landform, portions of the project would be seen over a wide area in the region and would have a potential effect on a number of scenic vistas throughout the area. Important public views that would be affected would include sections of I-8 and SR 94 (both Eligible State Scenic Highways), Jewel Valley Road, Tierra del Sol Road, and other local roadways.

Although the undulating topography of the region blocks views of the project from certain viewpoints, the topography also elevates the project site and can result in greater visual exposure to the surrounding area. As seen from many of the surrounding viewpoints, portions of the project would be seen on either a primary or secondary ridgeline, extending above the horizon line. This alteration of the surrounding ridgelines and visual backdrop would adversely affect the existing scenic vistas throughout the area. As seen from closer public viewpoints surrounding the project, such as Jewel Valley Road, the project would dominate the foreground views and would distract from the larger scenic context of the viewshed.

Recreation Areas

As mentioned previously, transportation corridors through the Boulevard area provide access to many recreational areas in eastern San Diego County. However, no official public parks, recreational areas, or trails are located within the immediate vicinity of the project site. The Jewel Valley Road Pathway is planned as part of the County's Community Trails Master Plan; however, it would not be included in the proposed project. If completed, the pathway would be constructed along the section of Jewel Valley Road that intersects the project site, and close-range, unobscured views of the project would be visible along a portion of the pathway.

McCain Valley Recreation Area is located approximately 3 miles north of the project site and provides little to no visibility of the project site.

Conclusion for Focal and Panoramic Views

The visible contrast with the natural surroundings would increase the developed visual character of the area. The PV panels would generally follow the existing topography; however, they would also be seen extending above a mid-distance ridgeline to the southeast, resulting in a reduction in the quality of the scenic vista and an alteration of existing rural character. As seen from closer public viewpoints surrounding the project, such as Jewel Valley Road, the project would dominate the foreground views and would distract from the larger scenic context of the viewshed. Therefore, construction and operation of the project would obstruct, interrupt, or detract from a valued focal and/or panoramic vista from a public road, scenic vista or highway. As such, the project would have a substantial effect on the existing scenic vistas, resulting in a **significant** impact (**Impact AE-3**).

2.1.3.5 Plan Compliance

Guidelines for the Determination of Significance

For the purpose of this EIR, the County's *Guidelines for Determining Significance, Report Format and Content Requirements – Visual Resources* (County of San Diego 2007) was used to establish significance thresholds. According to the guidelines, a significant impact would result if:

- The project would not comply with applicable goals, policies, or requirements of an applicable County community plan, subregional plan, or historic district zoning.

Analysis

The project site lies within the Boulevard Subregional Planning Area, in the Mountain Empire Subregion. The project site is not located within a historic district. Table 2.1-2 presents an analysis of the project's consistency with applicable visual policies and requirements of the Mountain Empire Subregional Plan and Boulevard Subregional Plan.

Although implementation of the project was determined to result in significant and unmitigable impacts to focal or panoramic vistas from several locations including I-8 and Old Highway 80, the project would comply with applicable visual and aesthetic goals as listed in the Boulevard Subregional Plan.

The project would comply with the County’s Light Pollution Code during construction, operation, and decommissioning. During construction and decommissioning, the project would be compliant with the lamp type and shielding requirements as established by the County Light Pollution Code and would be fully shielded and directed downward to minimize opportunities for unnecessary sky glow and light trespass. During operation, all lighting for the solar facility would be shielded, directed downward, and would comply with the County’s Light Pollution Code, also known as the Dark Sky Ordinance, Section 59.101 et seq. In addition, the project would comply with the County Zoning Ordinance, Sections 6320, 6322, and 6324, which guide performance standards for glare, and control excessive or unnecessary outdoor light emissions.

Although implementation of the project was determined to result in significant and unmitigable impacts to focal or panoramic vistas from several locations including I-8 and Old Highway 80, the project would not conflict with this policy. Neither the project site nor the surrounding area has been designated by local, state or federal agencies or organizations as containing or being of “significant” scenic value. Still, the areas identified for solar development encompass flatter terrain and unique or particularly vivid terrain including ridgelines and slopes would not be substantially disturbed by the project development.

Due to the inclusion of existing energy infrastructure in the I-8, SR 94, and Old Highway 80 viewsheds and because the project does not inhibit the County from establishing regulations and/or development standards geared toward the protection and enhancement of scenic highways, the project would not be inconsistent with the Scenic Highways Goal of the Mountain Empire Subregional Plan.

Hillside grading would be minimized and designed to conform to the existing contours to the extent feasible. Buffers would be incorporated into the project design to minimize visual incompatibility with nearby residential areas, roads, and recreational areas

Implementation of the project would be consistent with the local visual policies and goals presented in Table 2.1-2, resulting in a **less than significant** impact.

Table 2.1-2. Policy Consistency Evaluation

Goals, Policies, and Requirements	Consistency Determination
Mountain Empire Subregional Plan, San Diego County General Plan (County of San Diego 2016)	
<i>Land Use</i>	
<p>Policy and Recommendation 1: The landforms of the Subregion are an important environmental resource that should be respected in new development. Hillside grading shall be minimized and designed to blend in with the existing natural contours.</p>	<p>Consistent. The project (i.e., all components of the solar facility) would be consistent with this policy. The general topography within the project site consists of flat land and rolling hills. Grading would be necessary for the construction of access and service roads and the installation of solar arrays; trenching for the underground electrical direct current (DC) and alternating current (AC) collection system, including the telecommunication lines; and construction of the project substation. Hillside grading would be minimized and designed to conform to the existing contours to the extent feasible.</p>

Goals, Policies, and Requirements	Consistency Determination
<i>Conservation</i>	
<p>Policy and Recommendation 1: All development shall demonstrate a diligent effort to retain as many native oak trees as possible.</p>	<p>Consistent. According to the oak tree inventory included in the biological resources technical report (Appendix D.1, Biological Resources Report), 200 oak trees were identified within 100 feet of the project site. However, only 38 oak trees would be removed as a result of the project. Additionally, an off-site biological open space easement would be granted over 448 acres of sensitive vegetation communities, special-status plant species, and habitat for special-status species to protect sensitive biological resources. This easement is for the protection of biological resources and prohibits all of the following on any portion of the land subject to said easement: grading; excavation; placement of soil, sand, rock, gravel, or other material; clearing of vegetation; construction, erection, or placement of any building or structure; vehicular activities; trash dumping; or use for any purpose other than as open space. The biological open space easement would be unfenced. As such, implementation of the biological open space easement proposed by the project would increase tree preservation in San Diego County.</p>
<p>Policy and Recommendation 4. The dark night sky is a significant resource for the Subregion and appropriate steps shall be taken to preserve it.</p>	<p>Consistent. The solar facility would be consistent with this policy and would comply with the County's Light Pollution Code (also known as the Dark Sky Ordinance, Section 59.101 et seq.) during construction and operations. More specifically, during construction, portable night lighting used during construction would be fully compliant with the lamp type and shielding requirements for Class II lighting as established by Section 51.204 of the County Light Pollution Code and would be fully shielded and directed downward to minimize opportunities for unnecessary sky glow and light trespass. During operations, all lighting for the solar facility would be shielded, directed downward, and would comply with the County Light Pollution Code. Lastly, the proposed project would comply with the County Zoning Ordinance, Sections 6320, 6322, and 6324, which guide performance standards for glare and control excessive or unnecessary outdoor light emissions.</p>
<p>Policy and Recommendation 5. Development shall not adversely affect the habitat of sensitive plant and wildlife species or those areas of significant scenic value.</p>	<p>Consistent. As discussed in Section 2.2, Biological Resources, of the EIR, the solar facility would result in impacts to sensitive plant and wildlife species. However, through mitigation, potentially significant impacts would be reduced to less than significant.</p> <p>Although implementation of the project was determined to result in significant and unmitigable impacts to focal or panoramic vistas from several locations including I-8 and Old Highway 80, the project would not conflict with this policy. Neither the project site nor the surrounding area has been designated by local, state or federal agencies or organizations as containing or being of "significant" scenic value. Still, the areas identified for solar development encompass flatter terrain and unique or particularly vivid terrain including ridgelines and slopes would not be disturbed by the project development.</p>

Goals, Policies, and Requirements	Consistency Determination
<i>Scenic Highways</i>	
<p>Establish a network of scenic highway corridors within which scenic, historical and recreational resources are protected and enhanced.</p>	<p>Consistent. Within the Mountain Empire Subregion, I-8 from SR 79 east to the Imperial County Line and Old Highway 80, from the Central Mountain Subregion to I-8 are designated scenic corridors. The solar facility would be visible from portions of I-8, SR 94, and Old Highway 80. Despite their inclusion in the County's scenic highway system, there are no current local regulations governing development of lands along I-8 or Old Highway 80. For example, existing energy infrastructure including the Boulevard substation, wind turbines, transmission lines, and the East County substation 138-kilovolt (kV) line are currently visible from I-8, SR 94, and Old Highway 80. Near the project site, I-8, SR 94, and Old Highway 80 were identified as providing opportunities for long and/or broad scenic views. Implementation and operation of the project would not prevent the County from continuing to establish and designate scenic highways and would not inhibit the County from establishing regulations and/or development standards geared toward the protection and enhancement of scenic highways. Due to the inclusion of existing energy infrastructure in the I-8, SR 94, and Old Highway 80 viewsheds and because the project does not inhibit the County from establishing regulations and/or development standards geared toward the protection and enhancement of scenic highways, the project would not be inconsistent with the Scenic Highways goal of the Mountain Empire Subregional Plan.</p>
<i>Boulevard Subregional Planning Area, Mountain Empire Subregional Plan (County of San Diego 2013)</i>	
<i>Community Character</i>	
<p>Policy LU 1.1.2 Encourage development to protect the quality and quantity of ground and surface water resources, air quality, dark skies, visual resources, and low ambient noise levels, as well as retain and protect the existing natural and historic features characteristic of the community's landscape and natural environment.</p>	<p>Consistent. The project has been designed to minimize impacts to existing topography, landforms, and views to the extent practicable. Potential impacts associated with quality and quantity of groundwater and surface water, air quality, dark skies, visual resources, and noise have all been analyzed and disclosed within this EIR. Project design features have been provided to mitigate potential impacts to the extent feasible.</p>
<p>Policy LU 1.1.3 Encourage development to respectfully incorporate existing topography and landforms, watersheds, riparian areas, oaks, and other native vegetation and wildlife, ridgelines, historic and cultural resources, views, and sustainability design factors.</p>	<p>Consistent. The project facilities have been designed to minimize impacts to existing topography, landforms, riparian areas, oaks, native vegetation and wildlife, ridgelines, cultural resources, and views to the extent practicable.</p>
<p>Policy LU 1.1.4 Require commercial and public development along scenic and historic routes to apply designs standards that will blend the development in with the terrain and rustic southwestern nature of the community character, while keeping outdoor lighting to an absolute and well shielded minimum.</p>	<p>Consistent. The project is not considered a commercial or public development as defined by the County Zoning Ordinance.</p>
<p>Policy LU 3.1.1. Encourage development to preserve dark skies with reduced lighting and increased shielding requirements.</p>	<p>Consistent. The project would comply with the County Light Pollution Code, also known as the Dark Sky Ordinance, Section 51.201 et seq. Additionally, lighting for the project would be designed in accordance with the County Zoning Ordinance, Sections 6320, 6322, and 6324, which guide performance standards for glare, and controls excessive or unnecessary outdoor light emissions. Lighting for the project would use shielded bulbs, with motion detection, and a maximum of 100 watts.</p>

Goals, Policies, and Requirements	Consistency Determination
<i>Community Conservation and Protection</i>	
<p>Policy LU 6.1.1 Require commercial, industrial development and large-scale energy generation projects to mitigate adverse impacts to the rural community character, charm, quiet ambiance and lifestyle, or the natural resources, wildlife, and dark skies of Boulevard, if feasible, in accordance with the California Environmental Quality Act.</p>	<p>Consistent. Impacts associated with the project have been evaluated and mitigated to the extent feasible in accordance with CEQA. While the project vicinity has been historically of rural character, there has been a recent increase in renewable energy development in the region. All outdoor lighting would be hooded, directed downward, turned off when not required, and kept to a minimum for safety purposes. All lighting installed on the project site would be fully compliant with the lamp type and shielding requirements of the County Light Pollution Code.</p>
<p>Policy LU 6.1.2 Encourage commercial, industrial development and large-scale energy generation projects to create and maintain adequate buffers between residential areas and incompatible activities that create heavy traffic, noise, infrasonic vibrations, lighting, odors, dust and unsightly views and impacts to groundwater quality and quantity.</p>	<p>Consistent. The project would comply with the setback regulations as indicated in the County Zoning Ordinance, Section 4800 (Setback Regulations). Buffers from residential areas, public roads, surrounding properties, recreational areas, and trails are incorporated into the project design to minimize visual impacts. Lighting installed within the project boundary would be hooded, directed downward, and turned off when not required. Metallic equipment at the high-voltage substation and switchyard would feature a low-reflectivity finish to minimize glare. Lighting for the project would be fully compliant with the County's Light Pollution Code.</p>
<p>Policy LU 6.1.3 Encourage commercial, industrial development and large-scale energy generation projects to provide buffers from public roads, adjacent and surrounding properties and residences, recreational areas, and trails.</p>	

2.1.3.6 Light

Guidelines for the Determination of Significance

For the purpose of this EIR, the County’s *Guidelines for Determining Significance, Report Format and Content Requirements – Dark Skies and Glare* (County of San Diego 2009) was used to establish significance thresholds. According to County guidelines, a significant impact would result if:

- The project will install outdoor light fixtures that do not conform to the lamp type and shielding requirements described in Section 51.204 (Requirements for Lamp Source and Shielding) and are not otherwise exempted pursuant Section 59.108 or Section 59.109 of the San Diego County Light Pollution Code.⁶
- The project will operate Class I or Class III outdoor lighting between 11:00 p.m. and sunrise that is not otherwise exempted pursuant Section 59.108 or Section 59.109 of the San Diego County Light Pollution Code.
- The project will generate light trespass that exceeds 0.2 foot-candles measured 5 feet onto the adjacent property.
- The project does not conform to applicable Federal, State or local statute or regulation related to dark skies or glare, including but not limited to the San Diego County Light Pollution Code.

⁶ The County guidelines specifically reference the Requirements for Lamp Source and Shielding as Section 59.105; however, the County zoning ordinances have been updated since the publication of the guidelines. Requirements for Lamp Source and Shielding is now number as Section 51.204 of the County Light Pollution Code.

Analysis

Construction and Decommissioning

Construction of the project would occur in two phases: Phase I would last approximately 12 months and Phase II would last approximately 18 months. It is anticipated there would be approximately a 1-year gap between construction of Phase I and Phase II. Construction activities would generally occur during the County's allowable hours and days of operation from 7:00 a.m. to 7:00 p.m., Monday to Saturday but may involve extended hours, as needed, to complete certain construction activities and/or during emergencies or as approved by the County. For most of the year, nighttime construction lighting would not be required. However, during emergencies, tasks requiring extended hours, and during late fall and winter months, the lack of adequate natural light may dictate that portable lighting sources be used at specific construction sites. If required, portable construction night lighting would temporarily illuminate and be focused on active areas of construction.

All temporary construction lighting would be compliant with the County's Light Pollution Code. Specifically, portable night lighting used during construction would be fully compliant with the lamp type and shielding requirements for Class II lighting as established by Section 51.204 of the County Light Pollution Code. Lighting would be fully shielded and directed downward to minimize opportunities for unnecessary sky glow and light trespass. Due to the anticipated limited frequency of night construction lighting use and compliance with the lamp type and shielding requirements of the County Light Pollution Code, short-term construction lighting impacts to nighttime views would be minimal.

Due to the anticipated limited frequency of night construction lighting use and through compliance with the lamp type and shielding requirements of the County Light Pollution Code, short-term construction lighting impacts to nighttime views would result in **less than significant** impacts.

Operation

All project lighting would have bulbs that do not exceed 100 watts or equivalent, and all lights would be shielded, directed downward, and would comply with the County Light Pollution Code, Section 51.201 et seq. The project would not generate light trespass that exceeds 0.2 foot-candles measured 5 feet onto the adjacent property. Outdoor lighting circuits would incorporate dusk-to-dawn photocell controllers, occupancy sensors, and/or switches, as appropriate. Additionally, lighting for the project would be designed in accordance with the County Zoning Ordinance, Sections 6320, 6322, and 6324, which guide performance standards for glare and control of excessive or unnecessary outdoor light emissions. Further, the project would comply with the County Light Pollution Code. Lighting associated with operation of the project would conform with outdoor light fixtures, lamp types, and shielding requirements described in Section 51.205 and would not otherwise be exempt pursuant to Section 59.107 or Section 59.109 of the County Light Pollution Code. The project would not operate Class I or Class III outdoor lighting between 11:00 p.m. and sunrise that is not otherwise exempted pursuant to Section 51.212 of the County Light Pollution Code. Therefore, the project would result in **less than significant** impacts related to outdoor lighting, light trespass, and compliance with the County Light Pollution Code.

2.1.3.7 Glare

Guidelines for the Determination of Significance

For the purpose of this EIR, the County's *Guidelines for Determining Significance, Report Format and Content Requirements – Dark Skies and Glare* (County of San Diego 2009) was used to establish significance thresholds. According to County guidelines, a significant impact would result if:

- The project will install highly reflective building materials, including but not limited to reflective glass and high-gloss surface color, that will create daytime glare and be visible from roadways, pedestrian walkways or areas frequently used for outdoor activities on adjacent properties.

Analysis

Construction and decommissioning of the project would not be expected to introduce any unique sources of glare. After construction, the project would introduce new structural elements and materials which could be potential sources of glare onto the project site, inherent with the conversion of undeveloped land to a solar facility. However, the solar glare analysis (see Appendix C) identifies no substantial daytime glare effects resulting from PV panels. The solar glare analysis finds that the project would have zero minutes of potential glint or glare at all airports and route receptors. This is primarily a result of the project location, with the main obstructing factors being intervening topography and vegetation that effectively prevents potential glint or glare.

Review of the solar glare analysis and the project lighting description indicates that proposed lighting, implemented in compliance with the County Light Pollution Code and policies, would not result in substantial light or glare nor adversely affect daytime or nighttime views in the area. Inclusion of **PDF-AE-2** through **PDF-AE-4** would ensure infrastructure equipment (inverters, BESS containers, and transmission line conductors) would be non-reflective in color and design. The project is not located on airport property and therefore is not subject to FAA jurisdiction under Federal Aviation Regulations Part 77 to protect airspace safety. The project is also located beyond the 2-mile final approach for the Jacumba Airport as defined in the Interim Solar Policy. In addition, the solar glare analysis (see Appendix C) identifies no substantial daytime glare effects resulting from PV panels. The project would have zero minutes of potential glint or glare at all airports and route receptors. Therefore, the project would result in **less-than-significant** impacts related to glare.

2.1.4 Cumulative Impact Analysis

The discussion of cumulative impacts relates to the potential for the project to contribute to an aggregate change in visual quality from the surrounding public viewing areas, taking into consideration existing as well as proposed development. The cumulative study boundary for visual resources encompasses the project viewshed. The character elements of cumulative development occurring within the project viewshed contribute to the overall visual character of the viewshed and would affect, either negatively or positively, the quality of existing views of the landscape. Both the project and development occurring or planned within the viewshed of a designated scenic road could combine to permanently alter the visual character of the landscape and diminish the quality of existing views of valued scenic resources.

The cumulative analysis for aesthetic impacts was performed using the projects listed in Table 1-4 in Chapter 1.0, Project Description, Location, and Environmental Setting. Cumulative projects in the area include several existing and proposed wind and solar renewable energy projects, public facilities improvement projects, and the Rough Acres Ranch Campground, all located within the project viewshed and the greater surrounding area.

This analysis focuses on the operational impacts of the project, as construction would be temporary in nature and would have minimal impacts compared to full buildout. Following the end of its useful life (approximately 30 years), the project would be subject to decommissioning and site reclamation. Structures and equipment would be removed, and new project access roads and corridors would be closed. Decommissioning of the substation and switchyard would involve deconstruction of those structures.

Cumulative projects considered in this analysis are those in the project viewshed that would produce similar visual effects as the project. Therefore, for purposes of this analysis, electrical substation, solar energy, wind energy, transmission line, and energy storage projects within the cumulative study area are considered and would include highly visible and distinct elements (e.g., wind turbines) or would create similar form, line, color, and texture contrasts as the proposed solar facility. The projects listed in Table 1-4 (see Chapter 1.0) are considered in the cumulative impact analysis provided below.

2.1.4.1 Cumulative, Visual Character and Quality

The project would not align with the undeveloped, desert landscape and small-town character of Boulevard. The implementation of the project and other foreseeable projects considered in the cumulative scenario would result in an increasingly modified landscape and reduced visual quality. Contrasts in structure and facility scale, size, massing, color, and materials associated with cumulative projects and less-intensely developed lands would be visible to a relatively large volume of viewers within the cumulative study area, including motorists on federal and state highways, local roads, users of recreational lands, and rural residential communities. The number of completed and proposed energy generation developments, electrical substations, and electrical transmission lines in the Boulevard area would result in significant visual changes. The implementation of projects considered in the cumulative scenario would result in an increasingly modified landscape and reduced visual quality.

Thus, in conjunction with cumulative projects, the project would result in a **cumulatively considerable** impact (**Impact AE-CU-1**) on the existing visual character of the area.

2.1.4.2 Cumulative, Valued Visual Character and Image of Community

The introduction of numerous prominent and bold structures and facilities would contrast with the valued visual character of the local communities in the cumulative study area. Existing development in the cumulative study area primarily features a rural residential character. However, the area is also characterized by interstate and local road development, a major U.S. Customs and Border Protection station, regional electrical infrastructure and substations, and utility-scale wind and solar energy projects. In addition, cumulative approved projects, including the Campo Wind project, would be visible from the I-8 corridor. Solar and wind projects with visually prominent components and/or large development footprints would typically result in the removal of existing vegetation, an element identified in the Boulevard Subregional Plan as contributing to the valued visual character of the community (County of San Diego 2013). Similarly, the project would result in the removal of vegetation throughout the site, degrading the open, unencumbered characteristic of the project site.

In conjunction with the project, the cumulative projects would dominate views in the area and result in prominent visual changes within the largely undeveloped landscape. Therefore, the project would result in a **cumulatively considerable** impact (**Impact AE-CU-2**) on the valued visual character or image of neighborhoods, communities, and localized areas.

2.1.4.3 Cumulative, Focal and Panoramic Vistas

Views of the project site are available from I-8, Old Highway 80, Jewel Valley Road, SR 94, and Tierra del Sol Road, as well as from privately owned residences. The cumulative projects are situated near the project site and are similarly visible from these public roads. Although components of these projects would not result in substantial view blockage, the large footprints of the developments and their contrasting forms, lines, and colors are particularly noticeable in the local desert environment and tend to interrupt panoramic views from public roads. Therefore, combined with existing and proposed developments in the study area,

the project would contribute to a **cumulatively considerable** impact (**Impact AE-CU-3**) on focal or panoramic vistas.

2.1.4.4 Cumulative, Plan Compliance

The project would introduce a utility-scale solar facility into an otherwise mostly natural setting which would be seen throughout much of the surrounding region. Although other renewable energy facilities exist in the region, the project features would visually diminish the existing landscape quality and character of the site and surroundings. As discussed in Section 2.1.3.5, Plan Compliance, the project would comply with applicable visual and aesthetic goals as listed in the Mountain Empire Subregional Plan and Boulevard Subregional Plan.

Since the project would adhere to the goals, policies, and requirements of the applicable plans, and because similar development has occurred and is proposed within the subregional plan area, impacts from the project related to plan compliance would **not be cumulatively considerable**.

2.1.4.5 Cumulative, Light

Similar to the project, identified cumulative projects would be evaluated individually to determine the severity of lighting and glare impacts. As discussed above, all project lighting would have bulbs that do not exceed 100 watts or equivalent, and all lights would be shielded, directed downward, and would comply with the County Light Pollution Code, Section 51.201 et seq. Outdoor lighting circuits would incorporate dusk-to-dawn photocell controllers, occupancy sensors, and/or switches, as appropriate. Additionally, lighting for the project would be designed in accordance with performance standards listed in the County Zoning Ordinance. Adhering to these requirements would minimize the potential for light trespass onto adjacent properties and excess illumination of the nighttime sky. All other proposed cumulative solar facilities are expected to have similar operational lighting scenarios as the project. Furthermore, all proposed cumulative projects located on private lands under County jurisdiction would need to comply with the applicable lighting and shielding requirements of the County Light Pollution Code. By conforming to existing County regulations, the project **would not result in a cumulatively considerable impact** associated with facility lighting.

2.1.4.6 Cumulative, Glare

As discussed in Section 2.1.3, the project would introduce new structural elements and materials which could be potential sources of glare onto the project site, inherent with the conversion of undeveloped land to a solar energy facility. However, the solar glare analysis (see Appendix C) identifies no substantial daytime glare effects resulting from PV panels. The solar glare analysis finds that the project would have zero minutes of potential glint or glare at all airports and route receptors. It is anticipated that all related projects would also be required to analyze and mitigate potential glare impacts. Therefore, glare from project components would not combine with anticipated glare effects from other solar projects to create a cumulative glare impact on daytime views in the area. Thus, the project **would not result in a cumulatively considerable impact** associated with glare.

2.1.5 Significance of Impacts Prior to Mitigation

2.1.5.1 *Visual Character and Quality*

The existing visual character of the project site and its surroundings is a product of both natural and built elements, including uses such as rural and agriculture uses, residential, commercial, public infrastructure, and open space. The project site is spread over a large and varied area; however, its rolling topography and hillsides, patterns of native vegetation, and mostly rural use all contribute to a moderately high to high existing visual quality.

Although visibility of the project would be somewhat blocked from certain mid- and long-range public views, the project would result in a noticeable contrast with the visual character and quality of the natural and rural setting where visible. As seen from closer viewpoints, the project would be visible and alter the visual context. The project would alter the visual character of the site and the project vicinity. A change in character is inherent with the conversion of open space and rural land to an infrastructure development such as this. The project would remove substantial amounts of mature native vegetation. Large swaths of PV arrays and other supporting project elements constructed throughout the project site would introduce a new, visually detracting use into the viewshed as seen from surrounding public viewpoints.

Therefore, the project would detract from the existing visual quality and contrast with the mostly rural and natural landscape and small-town character of the surrounding community and would result in **significant** impacts (**Impact AE-1**).

2.1.5.2 *Valued Visual Character and Image of Neighborhood or Community*

The project would alter the visual character of the site and the project vicinity. As seen from distant viewpoints, the project would result in a noticeable contrast with the visual character and quality of the natural and rural setting. From closer viewpoints, the project would be visible and would alter the visual context.

The project would introduce a utility-scale solar array facility into an otherwise mostly natural setting which would be seen throughout the surrounding region. However, the Boulevard Subregional Plan Area has and continues to experience changes in its neighborhood character due to the continued development of renewable energy facilities. The area that originally was predominantly rural in nature with large homesteads is becoming increasingly developed with private facilities, civic uses and energy infrastructure and facilities. The subregional plan area supports a range of development including large lot rural residential structures, private use equestrian facilities, small-scale rural commercial businesses, undeveloped open space, communication facilities and electrical infrastructure, and existing and approved wind energy facilities.

While the landscape of the area has changed, the project features would still visually detract with the existing landscape quality and character. The project would interrupt primary and secondary ridgelines as seen from two important travel corridors, I-8 and SR 94. The proposed substantial removal of native vegetation would be noticeable with the natural landscape patterns. The scale and visual exposure of the project would alter the scenic quality of the landscape.

As a result of these factors, the project would still result in an adverse change to aesthetic features that contribute to the valued visual character and image of the community and surrounding area. Therefore, the project would result in a **significant** impact to visual character (**Impact AE-2**).

2.1.5.3 Focal and Panoramic Vistas

Because of its large expanse, layout, and varied landform, portions of the project would be seen over a wide area in the region and would have a potential effect on a number of scenic vistas throughout the area, including views from I-8, SR 94, Jewel Valley Road, and Tierra del Sol Road. As seen from many of the surrounding viewpoints, portions of the project would be seen on either a primary or secondary ridgeline, extending above the horizon line. This alteration of the surrounding ridgelines and visual backdrop would adversely affect existing scenic vistas throughout the region. As a result, the project would cause a reduction in the quality of existing scenic vistas. Therefore, the project would substantially obstruct, interrupt, or detract from a valued focal and/or panoramic vista from a public road, scenic vista or highway, and recreational area. As such, the project would have a substantial effect on the existing scenic vistas, resulting in a **significant** impact (**Impact AE-3**).

2.1.5.4 General Plan and Subregional Plan Compliance

The project would introduce a utility-scale solar array facility into an otherwise mostly natural setting which would be seen throughout much of the surrounding region. Although other renewable energy facilities exist in the region, the project features would still visually detract from the existing landscape quality and character of the site and surroundings.

As discussed in Section 2.1.3.5, Plan Compliance, and Section 2.1.4, Cumulative Impact Analysis, although implementation of the project was determined to result in significant and unmitigable impacts to focal or panoramic vistas from several locations including I-8 and Old Highway 80, the project would comply with applicable visual and aesthetic goals as listed in the General Plan (County of San Diego 2011b), the Boulevard Subregional Plan (County of San Diego 2013), and the Mountain Empire Subregional Plan (County of San Diego 2016). Therefore, the project would result in **less than significant** impact related to plan compliance.

2.1.5.5 Light

Review of the project and the surrounding area shows that it would introduce new lighting onto the project site, inherent with the conversion of undeveloped land to a solar energy facility. However, the project would be in compliance with the County Light Pollution Code and policies and would not result in substantial light nor adversely affect daytime or nighttime views in the area. Therefore, the project would result in a **less than significant** impact related to light.

2.1.5.6 Glare

Review of the project and the surrounding area shows that it would introduce potential sources of glare onto the project site, inherent with the conversion of undeveloped land to a solar energy facility. However, the solar glare analysis (see Appendix C) identifies no substantial daytime glare effects resulting from PV panels. However, the project would be in compliance with the County Light Pollution Code and policies, and would not result in substantial glare nor adversely affect daytime or nighttime views in the area. Therefore, the project would result in a **less than significant** impact related to glare.

2.1.6 Mitigation Measures and Project Design Features

2.1.6.1 Mitigation Measures

As stated above, the project would result in a significant effect on the existing visual quality and character of the site and surroundings and degrade scenic vistas. No feasible mitigation measures have been identified to reduce the visual impacts of the project to a less than significant level (**Impacts AE-1 through AE-3**).

Potential mitigation measures that may reduce the project impact to visual quality and character were considered, including measures that are recommended by the County's *Guidelines for Determining Significance and Report Format and Content Requirements – Visual Resources*, including the use of landforms, vegetation, and structures as visual screens (County of San Diego 2007). However, implementation of these measures would either be infeasible or unlikely to substantially lessen or avoid the project's significant impacts to visual quality and character for several reasons, as described below.

The large size of the project site and topography of the project area would limit the effectiveness of physical screening treatments, as it would not be possible to obscure views of the solar arrays from all identified KOPs. Several of the KOPs identified above, such as KOP 3, would be located at or above the elevation of the project site. Therefore, to effectively screen the project site, the potential screening treatments would need to be constructed to a considerable height. In order to reach a sufficient height to successfully screen the project site, the screening treatments could appear visually inconsistent with the area's visual character, and would not significantly lessen the visual impacts of the project. Natural screens, such as vegetation, would introduce the least contrast; however, as previously discussed, due to high winds and arid conditions of the project area, it would be infeasible to install and maintain landscaping at a large enough scale to screen the project from nearby KOPs.

Alternative sites were also considered as an option to reduce project impacts to visual quality and character. However, relocating the project to a potential alternative site would be infeasible. As discussed in Chapter 4, Alternatives, the underlying purpose of the project is to develop a solar energy project that maximizes energy generation and battery storage as near as possible to existing transmission infrastructure. Therefore, a potential alternative site would have to meet the following criteria: 1) be located in an area with high direct solar irradiance, 2) be located near existing transmission infrastructure, and 3) be under the control of the Applicant. No suitable alternative sites have been identified that would meet all three criteria. Given the nature of the project, the specific characteristics of the location of the project site that are necessary for solar power, and the project objectives, no such alternative location for the project is available. As a result, no feasible additional mitigation measures are available that would substantially reduce the project's residual visual impacts while maintaining the intent and purpose of the project.

2.1.6.2 Project Design Features

The Applicant has identified and committed to including the following project design features as part of the project to alleviate adverse aesthetics effects, to the extent feasible.

PDF-AE-1 The Applicant will coordinate with the resident of any existing (existing as of the date of ~~Record of Decision approval~~ this Major Use Permit Decision) private residence located within a distance of 500 feet of a project solar panel installation to assess visibility impact complaints made within 1 year from the initial ~~operations~~ occupancy date of each phase of the project. This assessment would include possible remedies that the Applicant may implement depending upon the level of visibility impacts occurring at the residence, including financial assistance for the installation of visual screening measures, such as landscaping or fencing. Requests for assistance can be made through a project hotline to be established by the Applicant and published on the Applicant's website.

- PDF-AE-2** Inverter enclosures will be a non-reflective color. If the enclosures are not manufactured as non-reflective, the enclosures shall be painted a non-reflective color.
- PDF-AE-3** Energy storage containers will be a non-reflective color. If the containers are not manufactured as non-reflective, the containers will be painted a non-reflective color.
- PDF-AE-4** All new transmission line conductors will be non-reflective in design to reduce conductor visibility and visual contrast.

2.1.7 Conclusion

2.1.7.1 Visual Character and Quality

Although the project includes **PDF-AE-1** through **PDF-AE-4**, the project would still detract from the existing visual quality and contrast with the mostly rural and natural landscape and small-town character of the surrounding community. Since feasible mitigation measures have not been identified that would further reduce anticipated theme, style, size, scale, massing, and color contrasts resulting from construction and operation of the project, **Impact AE-1** would be **significant and unavoidable**.

2.1.7.2 Valued Visual Character and Image of Neighborhood or Community

Although the project includes **PDF-AE-1** through **PDF-AE-4**, the project would still result in a change to aesthetic features that contribute to the valued visual character and image of the community and surrounding area. Since feasible mitigation measures have not been identified that would further reduce the project's adverse effect on the valued visual character and quality of the community, neighborhood, and area, **Impact AE-2** would be **significant and unavoidable**.

2.1.7.3 Focal and Panoramic Vistas

Although the project includes **PDF-AE-1** through **PDF-AE-4**, the project would still substantially obstruct, interrupt, or detract from a valued focal and/or panoramic vista from a public road, scenic vista or highway, and recreational area. Since feasible mitigation measures have not been identified that would further reduce the project's adverse effect on valued scenic vistas, **Impact AE-3** would be **significant and unavoidable**.

2.1.7.4 Plan Compliance

The project would have a **less than significant** impact related to compliance with applicable goals, policies or requirements of an applicable County community plan or subregional plan, or a historic district's zoning.

2.1.7.5 Light

The project would comply with County performance standards regarding lighting during construction and operations; therefore, impacts would be **less than significant**.

2.1.7.6 Glare

The project would comply with County performance standards regarding glare-related issues; therefore, impacts would be **less than significant**.

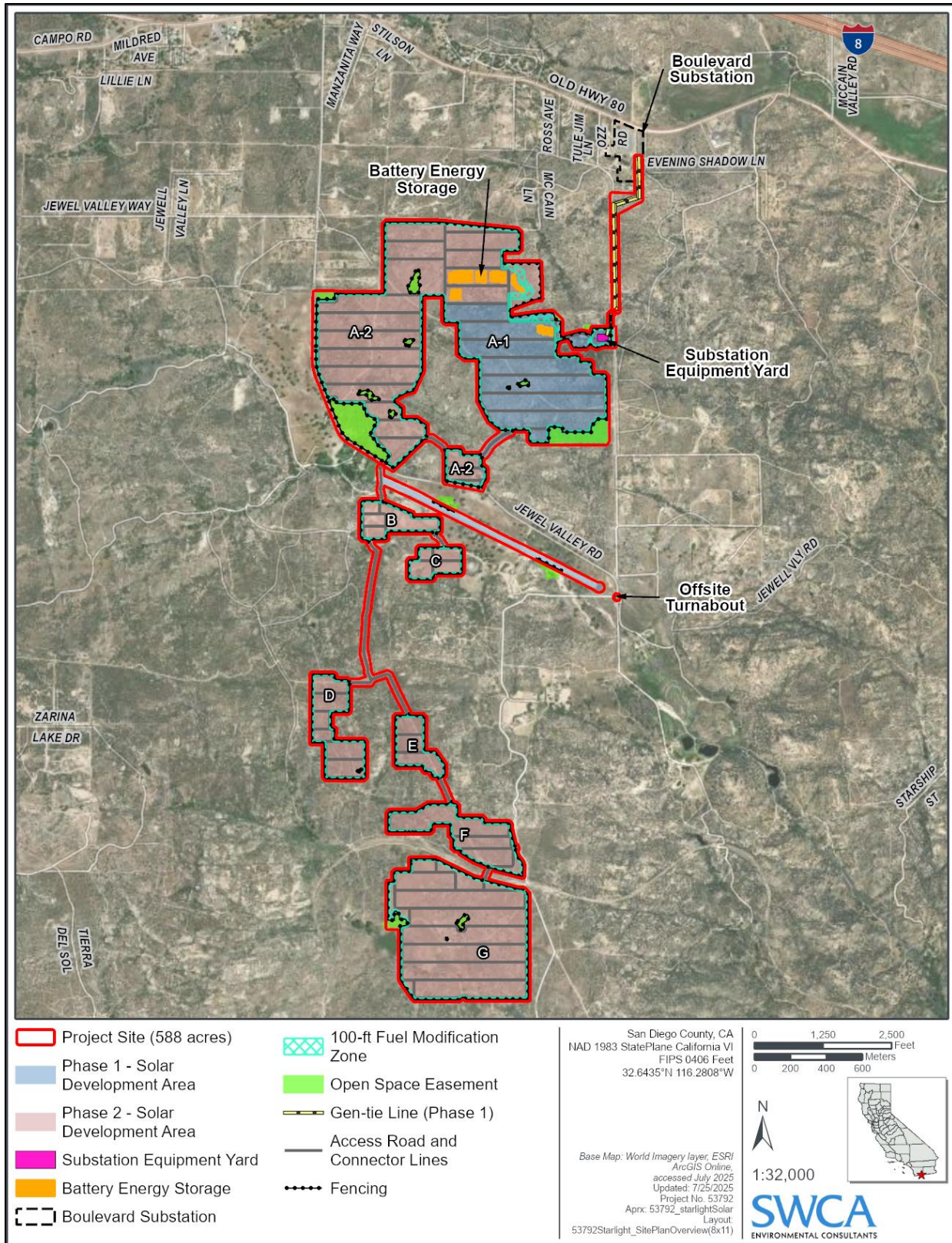


Figure 2.1-1. Project Layout

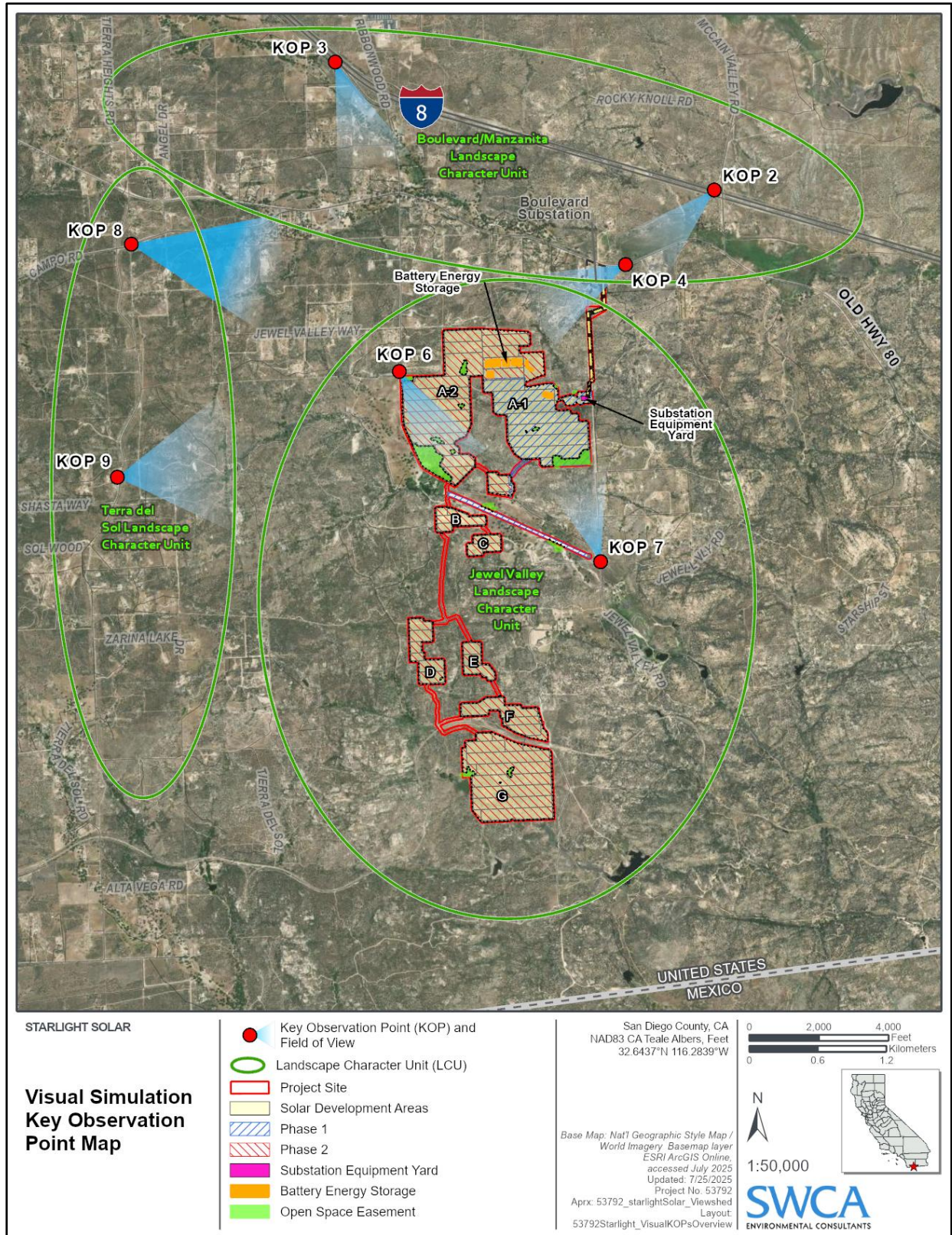


Figure 2.1-2. Key Observation Point and Landscape Character Unit Locations

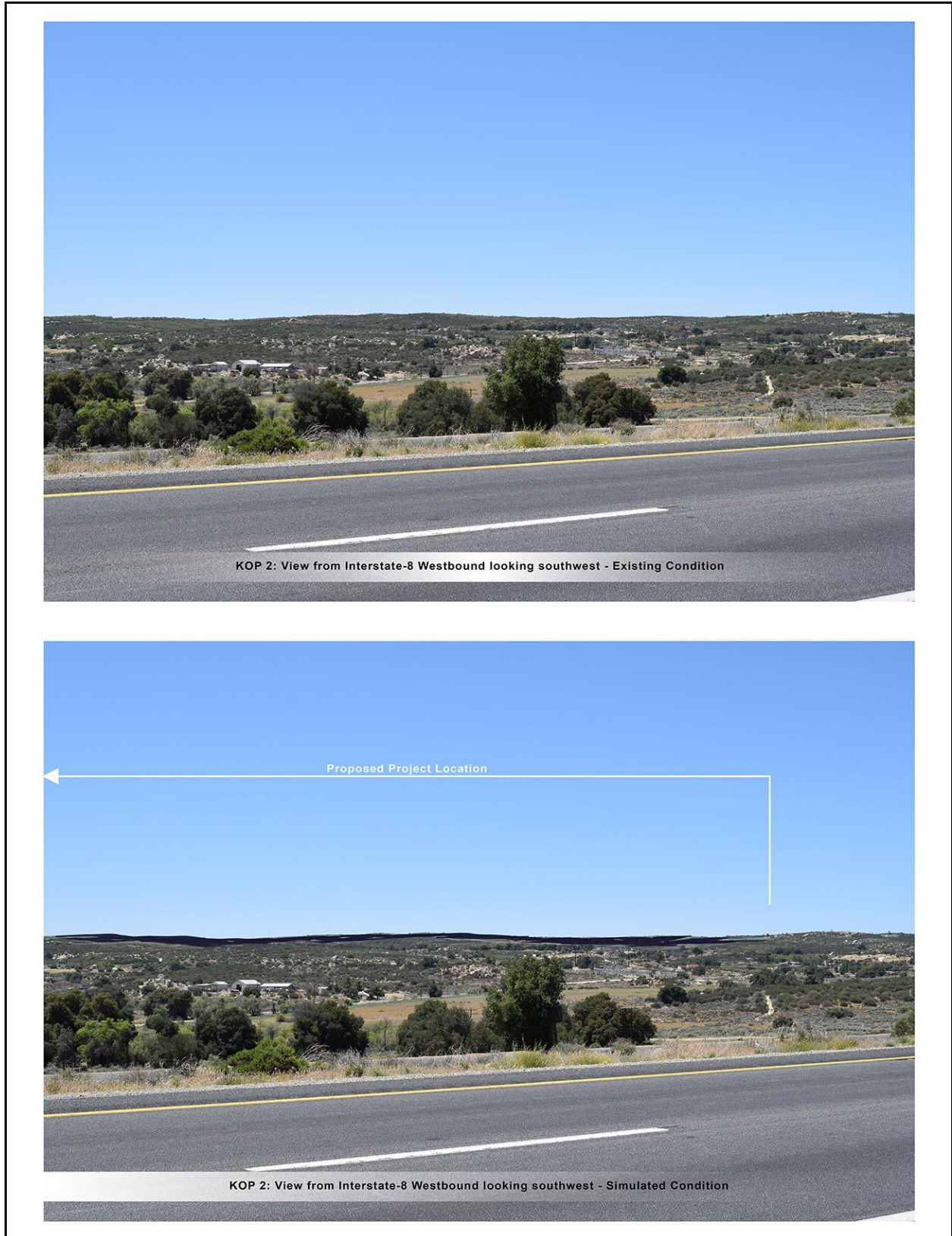


Figure 2.1-3. Visual Simulation – KOP 2, View from Interstate 8 Westbound, Facing Southwest



Figure 2.1-4. Visual Simulation – KOP 3, View from Interstate 8 Eastbound, Facing Southeast



Figure 2.1-5. Visual Simulation – KOP 4, View from Old Highway 80, Facing Southwest

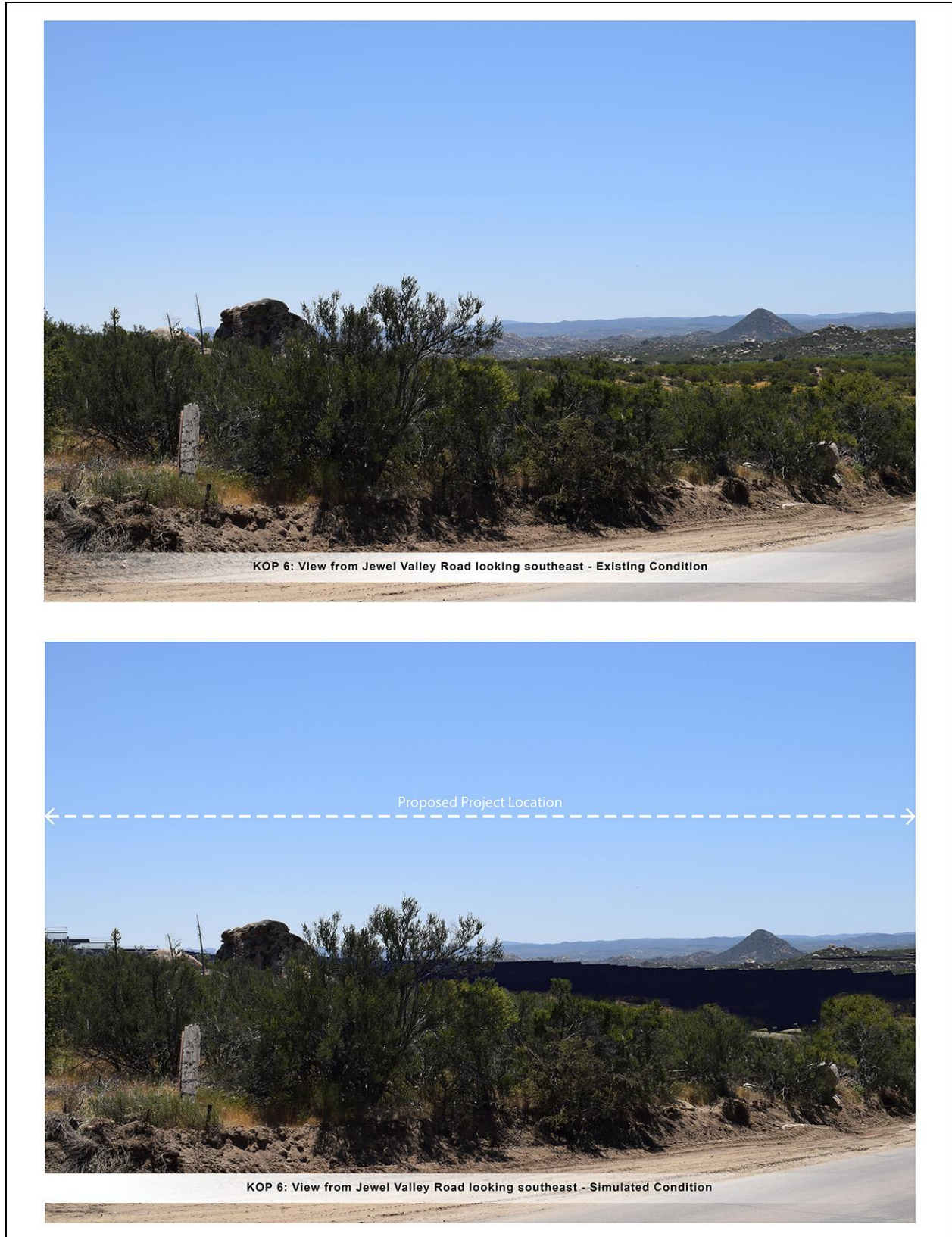


Figure 2.1-6. Visual Simulation – KOP 6, View from Jewel Valley Road, Facing Southeast

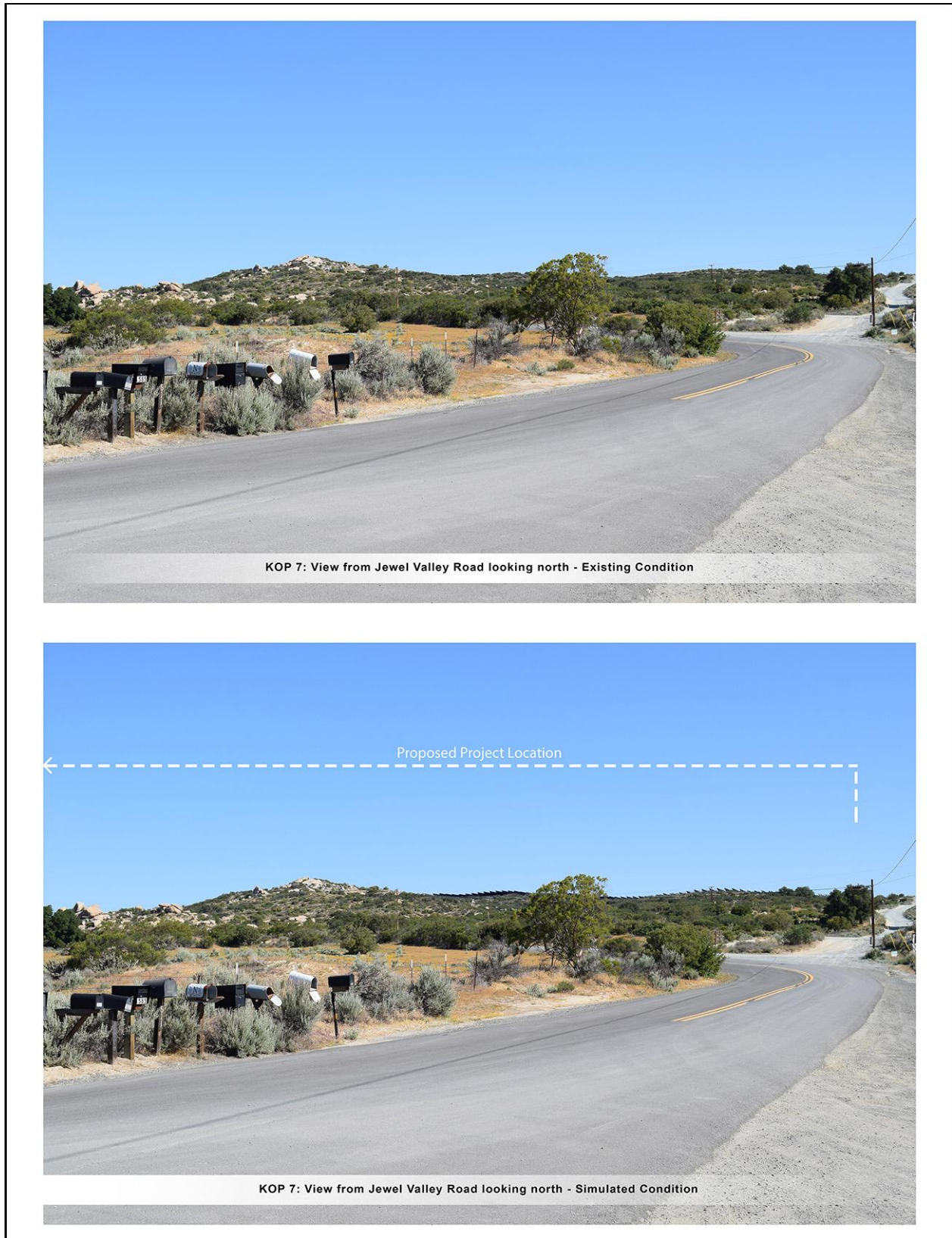


Figure 2.1-7. Visual Simulation – KOP 7, View of Jewel Valley Road, Facing North



Figure 2.1-8. Visual Simulation – KOP 8, View from State Route 94, Facing East



Figure 2.1-9. Visual Simulation – KOP 9, View from Tierra del Sol Road, Facing East

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