Visual Impacts Report

for the

Dagget Solar 33 and Dagget Solar 66
Photovoltaic Solar Projects

submitted to:
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August 2018

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Acronyms

ACLUP	Airport Comprehensive Land Use Plan
APN	Assessor's Parcel Number
BLM	Bureau of Land Management
BNSF	Burlington North Santa Fe Railroad
CEQA	California Environmental Quality Act
CUP	Conditional Use Permit
FW	Floodway
I-40	Interstate 40
KOP	Key Observation Point
MW	Megawatt
PV	Photovoltaic
RC	Resource Conservation
SCE	Southern California Edison
USGS	U.S. Geological Service
VRM	Visual Resource Management

1.0 INTRODUCTION

This Visual Impact Report has been prepared for both the proposed Daggett Solar 33 and Daggett Solar 66 Projects (Projects) to assess the potential visual impacts resulting from their construction, operation/maintenance and decommissioning activities. The Projects are proposed by Ralph Laks (Applicant), for two (2) photovoltaic (PV) solar energy facilities on a combined total of approximately 168 acres of land east of the City of Barstow, near Daggett, California. (**Figure 1**). The project sites are located within the Desert Region of unincorporated San Bernardino County.

For the purposes of the visual assessment, "Project Site" refers to the area within the delineated boundary for each Project's components, and "Project area" refers to those landscapes within 3 miles of the Project site(s).

2.0 PROJECT DESCRIPTION

The project study area is located on privately owned, undeveloped l land and includes all or portions of Section 25, Township 9 north, Range 1 east (Daggett Solar 33) and Section 18, Township 9 north, Range 1 east (Daggett Solar 66) San Bernardino baseline and meridian. Two (2) separate Conditional Use Permit (CUP) applications have been filed by the Applicant for the proposed Daggett Solar 33 and Daggett Solar 66 Projects. Each individual site project is further described below.

2.1 Daggett Solar 33 Solar Farm

The Applicant proposes to develop a solar facility on a single parcel (Assessor Parcel Number [APN] 0416-041-52) that is approximately 35 acres in size (net 33 acres) sited north of Interstate 40 (I-40), approximately 1.2 miles west of Hidden Springs Road. The site is bisected by Historic Route 66/National Trails Highway in the County of San Bernardino (Section 25, Township 9 north, Range 1 east, USGS Minneola, California Quadrangle). Of the 35 acres, the project would be developed with solar panels on three pads totally about 25 acres.

The Daggett Solar 33 Project includes the construction, operation, maintenance, and decommissioning of a 5 megawatt (MW) solar PV energy generation facility. The Daggett Solar 33 Project Site is zoned Resource Conservation (RC). Implementation of the Daggett Solar 33 Project would require approval of a CUP, which has been filed by the Applicant. **Table 1** identifies the APN, acreage, energy generating capacity and zoning within the project study area.

TABLE 1 - PROJECT STUDY AREA APNS, ACREAGES AND ZONING

Project	APN	Acreage	Energy Generation	Zoning	Development Phasing
Daggett Solar 33	0416-041-52	33.25	5 MW	Resource Conservation (RC)	Not Applicable
Daggett Solar 66	0516-011-04	110.26	4 MW	Resource Conservation (RC) Floodway (FW)*	Phase 2
	0516-012-02	23.73	3 MW	Resource Conservation (RC)	Phase 1
TOTAL	**167.25**				

Note: * No development is proposed within the FW Zone.

A solar field would be the primary feature of the proposed Daggett Solar 33 Project. The solar field, perimeter access roads, and other features would disturb the entire site (**Figure 2** – Daggett Solar 33 Site Plan). Solar panels would be organized in rows, with each row separated by about 18.6 feet (from post to post) (**Figure 3** – Daggett Solar 33 Layout). Single-axis trackers, which rotate to maximize sun exposure, would be used. Generally, panels would be approximately 8 to 9 feet in height.

Solar panels north of Historic Route 66/National Trails Highway would be set back more than 50 feet from the center line of the roadway. Solar panels south of Historic Route 66/National Trails Highway would be set back more than 100 feet.

2.2 Daggett Solar 66 Solar Farm

The Daggett Solar 66 Project includes the construction, operation, maintenance, and decommissioning of a 7 MW solar PV energy generation facility with a hybrid system of fixed panel and/or single axis trackers that would be developed in two (2) Phases. The PV modules at their highest point would be 8.5 feet above the ground.

The Daggett Solar 66 Project Site consists of two (2) parcels totaling 123.08 acres (APNs 0516-012-02 and 0516-011-04). The Daggett Solar 66 Project Site is located 0.25 miles east of Nebo Street, and is bisected by both Historic Route 66/National Trails Highway and the BNSF Railroad. The northern portion of the Daggett Solar 66 Project Site, north of the Daggett Canal, which is not being developed, is within the floodway of the seasonal Mojave River. As shown on **Table 1**, the Daggett Solar 66 Project Site is zoned Resource Conservation (RC) and Floodway (FW). That portion that is zoned FW is located within the northern section of the parcel of 0516-011-04 is above the Daggett Canal, is not being developed, and is not part of the Daggett Solar 66 CUP.

Solar panels north of Historic Route 66/National Trails Highway would be set back more than 200 feet from the center line of the roadway. Solar panels south of Historic Route 66/National Trails Highway would be set back more than 70 feet (See **Figures 4** and **5**).

2.3 Project Features Common to Both Projects

2.3.1 Perimeter Fencing and Access Roads

Chain link fencing, between six (6) to eight (8) feet in height is proposed along the perimeter of the northern and southern portions of both Project Sites Access gates would be provided at each site's entry from Historic Route 66/National Trails Highway, which is a two-lane paved road along the project frontage. On-site access roads will be paved with an aggregate base from Historic Route 66/National Trails Highway entry point. Within the site, a 24-foot-wide interior road in general would be constructed around both the northern and southern portions of the Project Sites. It is anticipated that the roadways would consist of gravel, an aggregate base, or native materials with a soil stabilization material, if necessary.

2.3.2 Lighting

Very limited lighting is proposed for the Daggett Solar 33 or the Daggett Solar 66 Projects. Manually controlled lights with on/off switches or motion detectors would be installed at equipment pads. No other lighting is planned. Cutoffs would be employed to prevent spillover onto neighboring properties.

2.4 Project Characteristics Common to Both Projects

The projects will consist of operation/maintenance and decommissioning of two solar generation facilities that will utilize PV technology on driven pier mounting supports. The projects will be designed for a 25-year life span.

2.4.1 Construction and Operations

Construction activities at both Project sites include removal of vegetation clearing, grubbing, grading, trenching for buried cables and installation of pier foundations. Existing vegetation is minimal and would be either mowed or removed as a result of construction activities. It should be noted that existing vegetation within the setback areas is expected to be maintained. Mass grading is not expected given the relatively flat terrain of the site and the absence of heavy groundcover.

The proposed solar facilities would be unmanned. Several part-time employees would visit periodically to conduct routine maintenance.

2.4.2 Photovoltaic Panels/Solar Arrays

The proposed projects (Daggett Solar 33 and Daggett Solar 66) will employ a series of photovoltaic (PV) module arrays to convert sunlight into electrical energy without the use of heat transfer fluid or cooling water. The facilities will deliver the electrical output to the existing regional transmission system. The PV modules convert sunlight into direct current power, which is subsequently transformed into alternating current power through an inverter.

The solar generation facilities will require installation of PV modules. The total number of PV modules required will depend on the technology selected, optimization evaluation, and detailed design.

2.4.3 Generation Line

The power generated by both Projects would be collected and routed (underground) to the point of interconnection with Southern California Edison (SCE). Existing distribution lines are present along Historic Route 66/National Trails Highway and the Daggett Solar 33 Project would connect directly to these lines, with no off-site distribution line extension required. On-site, power would run through an extension of the overhead powerline, or via underground conduit, as determined by utility company requirements.

Existing distribution lines are also present along the western boundary of the Daggett Solar 66 Project Site and the Daggett Solar 66 Project would connect directly to these lines, with no off-site distribution line extension required. On-site, power would run through an extension of the overhead powerline, or via underground conduit, as determined by utility company requirements.

The generation line extension would be provided by SCE to connect the existing distribution structures solar energy facilities. It is anticipated that these existing distribution lines would be retrofitted to accommodate the new, dedicated generation line extensions; however, it may be necessary to replace the existing poles with new ones. SCE will determine the final design and construct the generation line extension system.

2.5 Decommissioning/Restoration of the Project Sites

Both generating facilities would have a total useful operating life, with appropriate maintenance, repair and component replacement procedures, of up to 25 years. After the useful life of the projects, the solar facilities would be disassembled from the steel mounting frames and the site would be restored to pre- project conditions.

When the projects are decommissioned at the end of their life spans, the Applicant or its successor-in-interest would be responsible for the removal, recycling, and/or disposal of all solar arrays, inverters, transformers and other structures on the site to meet federal, state and local requirements for the rehabilitation and revegetation of the project site after decommissioning. The Applicant anticipates using the best available recycling measures at the time of decommissioning.

- In accordance with Section 84.29.07 of the Development Code, the project owner shall prepare a Closure, Revegetation, and Rehabilitation Plan and submit it to the Planning Division for review and approval prior to building permit issuance.
- Under this plan, all aboveground structures and facilities shall be removed to a depth of three feet below grade, and removed offsite for recycling or disposal. Concrete, piping, and other materials existing below three feet in depth may be left in place.
- Areas that had been graded shall be restored to original contours unless it can be shown that there is a community benefit for the grading to remain as altered.
- Succulent plant species native to the area shall be salvaged prior to construction, transplanted into windrows, and maintained for later transplanting following decommissioning.
- Shrubs and other plant species shall be revegetated by the collection of seeds, and re-seeding following decommissioning.

Project decommissioning shall be performed in accordance with all other plans, permits and mitigation measures that would assure the both projects conform to applicable requirements and would avoid significant adverse impacts.

3.0 REGULATORY SETTING

3.1 California Environmental Quality Act

Two Conditional Use Permits (CUP) will be required from San Bernardino County for construction and operation of the Daggett Solar 33 and Daggett Solar 66 Projects. San Bernardino County is responsible for implementing the requirements of the California Environmental Quality Act (CEQA) for projects proposed in unincorporated San Bernardino County, in accordance with the California Public Resources Code, Section 21000 et. seq. (CEQA).

This Visual Impact Study uses guidance provided by San Bernardino County to assess the potential for significant impacts with respect to visual resources. The County utilizes the same questions contained in Appendix G the State CEQA guidelines to assess impacts to visual resources and aesthetics:

- Would the project have a substantial adverse effect on a scenic vista?
- Would the project substantially damage scenic resources, including, but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway?
- Would the proposed project substantially degrade the existing visual character or quality of the site and its surroundings?
- Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

When analyzing these four questions, four response choices are available:

- Potentially Significant Impact
- Less than Significant Impact with Mitigation
- Less than Significant Impact
- No Impact

Substantiation is then provided to justify each determination. One of the four following conclusions is then provided as a summary of the analysis for each of the major environmental factors.

1. **No Impact:** No impacts are identified or anticipated and no mitigation measures are required.

2. **Less than Significant Impact:** No significant adverse impacts are identified or anticipated and no mitigation measures are required.

3. **Less than Significant Impact with Mitigation Incorporated**: Possible significant adverse impacts have been identified or anticipated and mitigation measures are required as a condition of project approval to reduce these impacts to a level below significant.

4. **Potentially Significant Impact:** A significant adverse impact has been identified or anticipated. An Environmental Impact Report (EIR) is required to evaluate this impacts.

3.2 Land Use Plans and Guidance

3.2.1 California Scenic Highway Program

Caltrans manages the California Scenic Highway Program, which was created in 1963 by the California legislature to preserve and protect scenic highway corridors from changes that would diminish the aesthetic value of lands adjacent to highways. The program includes a list of highways that are "Designated" or "Eligible for Designation" as scenic highways. A highway may be designated as scenic based on certain criteria, including how much of the natural landscape can be seen by travelers, the scenic quality of the landscape, and the extent to which development intrudes on the traveler's enjoyment of the view. State laws governing the Scenic Highway Program are found in the Streets and Highways Code, Sections 260 through 263.

There are no Designated State Scenic Highways in the Project Area. However, although Interstate 40 from I-15 to the Arizona border, is eligible for designation.

3.2.2 San Bernardino County General Plan

The Conservation and Open Space Elements of the San Bernardino County General Plan (San Bernardino County, 2007a) evaluate the visual and aesthetic setting of the County and assess the potential for visual impacts. Conservation is one of the most important strategies for managing the County of San Bernardino's resources. Resources include, but are not limited to, water, energy, land, biodiversity, minerals, natural materials, recyclables, view sheds and air.

To achieve a clean energy future that minimizes negative effects consistent with local values, the San Bernardino Renewable Energy and Conservation Element (2017) considers how to reduce energy use through energy efficiency and conservation measures, and identifies renewable energy facility standards that concentrate on community-oriented renewable facilities that produce electricity for local consumption. Further, the Circulation and Infrastructure Element identifies designated scenic routes and provides guidelines for development near Scenic Routes.

A Scenic Route is defined as roadway that has scenic vistas and other scenic and aesthetic qualities that over time have been found to add beauty to the County. In the vicinity of the Project Sites, the County has designated Historic Route 66 (National Trails Highway or Main Street), from Oro Grande northeast and east to the Arizona state line, excepting those areas with incorporated cities, as a scenic route. The County has also designated I-40 from Ludlow

northeast to Needles as a scenic route, however this portion of the I-40 is located 38 miles east of the project area.

3.2.2.1 Conservation Element

The Conservation Element provides direction regarding the conservation, development, and utilization of the County of San Bernardino's natural resources. The Conservation Element sets goals and policies Countywide and specifically for the Desert Region (in which the Projects are located). These goals and policies include:

- **Goal D/CO1:** Preserve the unique environmental features and natural resources of the Desert Region, including native wildlife, vegetation, water and scenic vistas.
- **D/CO 1.2.** Require future land development practices to be compatible with the existing topography and scenic vistas, and protect the natural vegetation.
- **Goal D/CO 2**. Encourage utilization of renewable energy resources.
- **D/CO 2.1.** Through the development process encourage building orientations conducive to utilizing available solar energy.

3.2.2.2 Open Space Element

The Open Space Element of the General Plan provides a reference to guide the protection and preservation of open space, recreation, and scenic areas, while accommodating future growth within the County. The Open Space element identifies open space goals and policies for the entire County, as well as those for the Desert Region.

- **Goal OS.5:** The County will maintain and enhance the visual character of scenic routes in the County.
- **Policy OS 5.2**: Define the scenic corridor on either side of the designated route, measured from the outside edge of the right-of-way, trail, or path. Development along scenic corridors will be required to demonstrate through visual analysis that proposed improvements are compatible with the scenic qualities present.
- **Policy OS 5.3:** The County desires to retain the scenic character of visually important roadways throughout the County. A "scenic route" is a roadway that has scenic vistas and other scenic and aesthetic qualities that over time have been found to add beauty to the County.

  In the vicinity of the Project Sites, the County has designated the following routes in the Desert Region as scenic highways and applies all applicable policies to development on these routes:

f. Historic Route 66 (National Trails Highway or Main Street) from Oro Grande northeast and east to the Arizona state line, excepting those areas with incorporated cities.

g. Interstate 40 from Ludlow northeast to Needles.

3.2.2.3 Renewable Energy and Conservation Element

The Renewable Energy and Conservation Element is focused on sustainability, public health and wellness, and stewardship of land to promote an environment of prosperity and well-being for those who reside and invest in the County. In this context, the Renewable Energy and Conservation Element is intended to ensure efficient consumption of energy and water, reduce greenhouse gas emissions, pursue the benefits of renewable energy and responsibly manage its impacts on our environment, communities and economy.

- **RE Goal 4:** The County will establish a new era of sustainable energy production and consumption in the context of sound resource conservation and renewable energy development practices that reduce greenhouse gases and dependency on fossil fuels.
- **RE Objective 4.1:** The County will continue its efforts to meet or exceed State Greenhouse Gas reduction goals, by encouraging renewable energy development that will be compatible with the natural environment and the integrity of unincorporated communities.
- **RE Policy 4.1:** Apply standards to the design, siting, and operation of all renewable energy facilities that protect the environment, including sensitive biological resources, air quality, water supply and quality, cultural, archaeological, paleontological and scenic resources.
- **RE Policy 4.3**: Require construction and operation of all renewable energy facilities to minimize negative effects and optimize benefits to unincorporated communities.
- **RE Policy 4.4**: Encourage siting, construction and screening of RE generation facilities to avoid, minimize or mitigate significant changes to the visual environment including minimizing light and glare.
- **RE Policy 4.4.1:** Reduce visual impacts through a combination of minimized reflective surfaces, context- sensitive color treatments, nature-oriented geometry, minimized vegetation clearing under and around arrays, conservation of pre-existing native plants, replanting of native plants as appropriate, maintenance of natural landscapes around the edges of facility complexes, and lighting design to

minimize night-sky impacts, including attraction of and impact to nocturnal migratory birds.

- **RE Policy 4.5:** Require RE generation facility developers to provide and implement a decommissioning plan that provides for reclamation of the site to a condition at least as good as that which existed before the lands were disturbed or another appropriate end use that is stable (i.e. with interim vegetative cover), prevents nuisance, and is readily adaptable for alternative land uses. Decommissioning plans shall:
- **RE Policy 5.7:** Support renewable energy projects that are compatible with protection of the scenic and recreational assets that define San Bernardino County for its residents and make it a destination for tourists.
- **RE Policy 5.7.1:** Site RE generation facilities in a manner that will avoid, minimize or substantially mitigate adverse impacts to sensitive habitats, cultural resources, surrounding land uses, and scenic viewsheds.

3.2.3 Barstow-Daggett Airport Comprehensive Land Use Plan

Barstow-Daggett Airport is a publicly owned, public use general aviation airport that accommodates virtually all general aviation aircraft with maximum gross takeoff weights of 12,500 pounds or less. The airport is situated on 1,087 acres in an unincorporated area of San Bernardino County, approximately 15 miles east of the City of Barstow. The Airport Comprehensive Land Use Plan for Barstow-Daggett Airport (ACLUP) has was prepared by the San Bernardino County Planning Department in 1992 to comply with State planning law (County of San Bernardino, 1992). It is the primary land use document for the Barstow-Daggett Airport (ACLUP) Planning Boundary and its purpose is fourfold: To promote the development of compatible land uses in the area influenced by airport operations; To safeguard the general welfare of the inhabitants within the vicinity of the airport by minimizing exposure to excessive noise levels; To safeguard the general welfare of the inhabitants within the vicinity of the airport by minimizing exposure to crash hazards associated with aircraft operations; and, To safeguard the general welfare of aviation activities within the vicinity of the airport by imposing appropriate height restrictions for the protection of aircraft operations. The proposed Daggett Solar 66 and proposed Daggett Solar 33 projects are located 6.25 miles west, and 1.15 miles south-west of the airport, respectively. Both Project Sites are outside of the airport's planning boundary, depicted on Figure 7 of the ACLUP (County of San Bernardino, 1992; p. 16).

3.2.4 San Bernardino Development Code

The purpose of the San Bernardino County Development Code (Development Code) is to implement the San Bernardino General Plan by classifying and regulating land uses and development within unincorporated San Bernardino County, including conserving and protecting the County's important agricultural, cultural, natural, open space and scenic resources (San Bernardino County, 2007b).

Ch. 84.29 - Renewable Energy Generation Facilities

The Renewable Energy Generation Facilities Chapter of the Development code established standards and permit procedures for the establishment, maintenance and decommissioning of renewable energy generation facilities. These regulations are intended to ensure that renewable energy generation facilities are designed and located in a manner that minimizes visual and safety impacts on the surrounding community. In accordance with Sections 84.29.020 and, commercial renewable energy facilities are an allowable use with the RC Land Use Zoning District with a Conditional Use Permit (Section 82.03.040).

Development standards specific to Solar Energy Facilities are contained in:

- Section 84.29.040 -Setbacks, glare, night lighting;
- Section 84.29.050 – Special Fencing Standards;
- Section 84.29.060 - Additional Wind and Solar Energy Development Standards for facilities adjoining agricultural operations and to protect large birds; and
- Section 84.29.070 - Decommissioning Requirements

Additional sections of the Development Code applicable to the proposed Daggett Solar 33 and Daggett Solar 66 Projects include:

- Ch. 83.02 - General Development and Use Standards
- Ch. 83.10 - Landscaping Standards
- Ch. 83.11 - Parking and Loading Standards
- Ch. 83.13 - Sign Regulations
- Ch. 84.01 - Accessory Structures and Uses
- Ch. 83.07 - Glare and Outdoor Lighting
- Ch. 83.09 - Infrastructure Improvement Standards

4.0 VISUAL RESOURCE INVENTORY METHODOLOGY & RESULTS

4.1 Visual Resource Inventory Methodology

The visual resource inventory considered visual resources potentially affected by the construction and operation of the proposed Daggett Solar 33 and Daggett Solar 66 Projects. Neither CEQA nor San Bernardino County has existing guidelines for conducting visual resource inventories. Therefore, the visual resource inventory methodology used for these projects was based on the Bureau of Land Management's (BLM) Visual Resource Management (VRM) System because it is a widely accepted and defensible process, even though the project does not occur on or cross lands under the jurisdiction of the BLM. The project study area was focused within a 3 to 5-mile buffer in order to characterize the visual resources for the proposed Projects. The 3 to 5-mile buffer was based on topographic features (i.e., mountains) surrounding the Project Sites, assuming most views of the project Sites beyond those features would be screened or disseminated by distance of views.

To inventory and characterize the affected environment for visual resources, the following visual components were considered: landscape scenery, and sensitive viewers including key observation points (KOPs). These visual components are described below.

4.1.1 Landscape Scenery

Landscape Scenery is the aggregate features that give character to the landscape (BLM Manual 8400). Typically, every landscape comprises varying levels of landform, vegetation, existence of water, color, scarcity, adjacent scenery, and cultural modifications; all of which combine to exhibit landscape character (BLM Manual H-8410-1). Existing conditions were evaluated through field reconnaissance and are described in Section 4.2 Summary of Inventory Results.

4.1.2 Sensitive Viewers/KOPs

The term "sensitive viewers" refers to specific user groups associated with various land uses that have a sensitivity to landscape change, and therefore could be adversely affected by the construction and operation of the proposed project. In this regard, viewing locations are typically associated with travel routes, recreation areas, and residences.

Key Observation Points (KOPs): one or a series of points on a travel route or at a use area or a potential use area, where the view of a management activity would be most revealing. KOPs represent a critical or typical viewpoint within, or along, an identified viewing location

and are used to assess visual impacts of a proposed project. The sensitivity rating for each sensitive viewer/KOP is based on the following criteria;

- type of use
- volume of use
- duration of use
- concern for aesthetics
- formal scenic or historic designations, and
- special status or designation.

Identifying groups of individuals that will be sensitive to visual changes is an important part of the visual assessment process and provides specific locations from which to assess the visual character of the landscape. The selection for KOPs for the project considered: 1) the most critical viewpoints (i.e., views from communities, residences, or recreational areas); and 2) views from areas identified in county and local planning documents. Descriptions of the KOPs and their associated existing viewing conditions are described in Section 4.2 Summary of Inventory Results.

4.1.3 Field Visit

To properly assess the existing visual character of the landscapes in the project area, a field visit to the Project Sites and the surrounding Project Area was conducted on August 9, 2018 by BRG Consulting, environmental planner John Addenbrooke and Rachel Rowe. Photos were taken near the project site between 9:30 AM and 10:30 AM. The weather was clear and sunny.

During this site visit, the following locales were visited and photographed:

- The proposed Project Sites;
- Locations in representative landscapes in the project area where the project may be seen;
- Sensitive viewing areas where the project may be seen;
- Scenic areas identified in the San Bernardino County General Plan

Sensitive viewing areas can include the following:

- Residential areas
- Community facilities, such as community centers or schools
- Recreational facilities, such as parks, trails, open space areas, fairgrounds, or playgrounds

- Highways or well-traveled roads
- Designated scenic roads/highways

Photographs were taken of the proposed Project Sites from locations along adjacent roads and intersections, including National Trails Highway (Historic Route 66) a San Bernardino County designated scenic highway. Photographs were also taken along I-40, a highway that is eligible for designation as a State scenic highway..

4.2 Summary of Inventory Results

4.2.1 Landscape Setting/Existing Conditions

The project area is in the unincorporated area of San Bernardino County north of Interstate 40, south of Interstate 15, west of Nebo Road and east of Hidden Springs Road near Daggett, California.

Topographic character within the project area is relatively flat, with some low sloping hills, leading to low foothills and coarse jagged slopes and irregular peaks associated with the surrounding mountain ranges. The Daggett Solar 66 Project Site crosses a wash, but it runs dry due to the area's climate. The vegetation of the project area is dominated by shrub and bush, representative of its desert-valley location.

4.2.2 Project Area

The project area consists of 167-acres of combined vacant/undeveloped land. The topographic character of both sites can be described as relatively flat with the Daggett Solar 66 Project Site at an elevation of 1,999.51' and the Daggett Solar 33 Project Site at and 1,979.47'. The vegetation at both sites consist of primarily native grasses and shrubs. Biological studies performed by RCA Associates in support of the CUP application and no Joshua trees were present on either site.

There are no existing structures on either site. The Daggett Solar 66 project site crossed by both the National Trails Highway and the BNSF Railroad. The Daggett Solar 33 site is crossed by the National Trails Highway.

4.2.3 Sensitive Views/KOPs

4.2.3.1 Travel Routes

Scenic Routes

As previously noted, Historic Route 66 (National Trails Highway or Main Street) from Oro Grande in northeast San Bernardino County to the Arizona state line, excepting those areas with incorporated cities is designated as a scenic route by the County of San Bernardino. The County has also designated Interstate 40, from Ludlow northeast to Needles, as a scenic route however, this segment of the I-40 is more than 38 miles east of the Project Area. In the vicinity of the Project Sites, Interstate 40, from I-15 to the Arizona border, is "Eligible for Designation" under the Caltrans Scenic Highway Mapping Program but is not an officially State Designated Scenic Route.

Local Routes

There are numerous local routes (paved and unpaved) throughout the Project area that provide access primarily to rural residential, agricultural and developed areas. Travelers along these routes typically have open, expansive views due to the level to slightly superior terrain and low vegetation associated with the arid desert landscape. Views from local roads may also be partially obstructed due to vegetation and development associated with residential areas.

4.2.3.2 Recreation Areas

In general, public recreation areas are a destination for visitors (viewers). Public recreation users are thus are considered to have a high sensitivity because of the concern for aesthetics and the potential for long viewing durations. A description of recreational facilities in the project area is provided on **Table 2**.

Table 2 – Recreation Facilities in Vicinity of Project Sites

Recreational Facility	Jurisdiction/ Administration	Approximate Distance from Project Sites (Miles) and Direction
Daggett Solar 66		
Sorensen Field	US Marine Corps Logistic Base	2.1 miles west
Logistics Base Golf Course	US Marine Corps Logistic Base	1.8 miles north
Daggett Solar 33		
Obregon Park	County of San Bernardino	3 miles northwest
Hurst Park	County of San Bernardino	3.7 miles northeast
Smith Park	County of San Bernardino	3.7 miles northeast
Newberry Mountains Wilderness Area	Bureau of Land Management	2.7 miles southwest

Recreational users of Sorensen Field and the Logistics Base Golf Course would not have views of the Dagget Solar 66 Project, because of intervening development. Additionally, recreational uses of Obregon, Hurst and Smith Parks and the Newberry Mountains Wilderness Area would not have views of the Dagget Solar 33 Project, due to distance and intervening topography.

4.2.3.3 Developed Areas and Residences

Residences were inventoried as high sensitivity because of the long viewing duration, strong concern for aesthetics, and the visual setting of the surrounding landscape. Residential development within the Project area is rural in nature, and the nearest residential areas are located approximately 1.5 miles east of the proposed Daggett Solar 33 Project Site and 0.8 miles east of the proposed Dagget Solar 66 Project Site.

5.0 VISUAL ANALYSIS METHODOLOGY AND RESULTS

The purpose of the visual impact assessment is to identify and characterize the level of visual change to the landscape and views from sensitive viewers that would result from the construction, operations/maintenance and decommissioning of the proposed Projects. Modification of the landscape is described in levels of visual contrast, which affects scenic quality and sensitive viewers. The BLM's visual contrast rating process (Handbook 8431-1 Visual Resource Contrast Rating) was used as the basis for reviewing potential impacts to visual resources resulting from the proposed project, because neither CEQA nor San Bernardino County has existing guidelines for assessing visual resource impacts and the BLM methodology is a widely accepted and defensible process. Because the proposed project is on private land and not subject to BLM regulations, a form adapted from the BLM's Visual Contrast Rating Worksheet (BLM Form 8400-4) was used to assess the degree of contrast the proposed project will introduce to the existing landscape.

The objectives and allowed levels of change for each of the four VRM classes are as follows:

- **Class I Objective:** To preserve the existing character of the landscape. **Allowed Level of Change**: This class provides for natural ecological changes; however, it does not preclude very limited management activity. The level of change to the characteristic landscape should be very low and must not attract attention.
- **Class II Objective**: To retain the existing character of the landscape. **Allowed Level of Change**: The level of change to the characteristic landscape should be low. Management activities may be seen, but should not attract the attention of the casual observer. Any changes must repeat the basic elements of form, line,

color, and texture found in the predominant natural features of the characteristic landscape.

- **Class III Objective:** To partially retain the existing character of the landscape. **Allowed Level of Change**: The level of change to the characteristic landscape should be moderate. Management activities may attract attention but should not dominate the view of the casual observer. Changes should repeat the basic elements found in the predominant natural features of the characteristic landscape.
- **Class IV Objective**: To provide for management activities which require major modification of the existing character of the landscape. **Allowed Level of Change**: The level of change to the characteristic landscape can be high. Management activities may dominate the view and may be the major focus of viewer attention. However, the impact of these activities should be minimized through careful siting, minimal disturbance, and repeating the basic elements of form, line, color, and texture within the existing setting. The VRM class designations set VRM objectives for lands in each class, as well as the level of visual change in the landscape character that is allowed as a result of proposed activities.

VRM class designations and objectives direct land use plan decisions. The VRM Class I management objective is to preserve the natural character of the landscape, and minimal visual change from human activities is allowed. VRM Class II and III lands allow progressively greater amounts of visual change to the existing landscape, while VRM Class IV lands provide for management activities which require major modification of the existing character of the landscape, and the level of change to the characteristic landscape can be high.

5.1 Visual Contrast Rating

The level of project contrast is based upon the level of modification to the existing landscape features. In the context of the project, existing landscape scenery is defined by the visual characteristics (form, line, color, and texture) associated with the landform (including water), vegetation, and existing facilities within and adjacent to the project. The visual contrast rating worksheet uses these visual character elements and distance zones (discussed below) to describe the landscape. Descriptions of each visual character element are listed below:

- Form – The shape and mass of landforms or structures
- Line – The edge of shapes or masses, silhouettes, or bands

- Color – The property of reflecting light of a particular intensity of wavelength that the eye can see
- Texture – The nature of the surface of landforms, vegetation, or structures

The level of visual contrast introduced by a proposed project is measured by changes in form, line, color, and texture. The greater the difference between these character elements found within the landscape and the proposed project components, the level of visual contrast becomes more apparent, which typically increases perceived contrast.

As part of the contrast rating process landscapes are subdivided into three distance zones based on relative visibility from sensitive viewers. The three distance zones are foreground (0-0.5 mile), middleground (0.5-3 miles), and background (3 miles or more). Generally, for sensitive viewers who have level views of a project (in which viewers are situated at the same elevation as a proposed project), objects or features that are closer to a viewer's location will appear more detailed and more dominant. As distance from a project increases the perception of visual contrast tends to decrease because a level viewer would typically not see the solar panels due to the low profile of the structures. These components are typically screened by vegetation or blend into the level, flat landscapes such as found in the project area.

Angle of observation refers to the angle between the viewer's line-of-sight and a project's location. Angles of observation are typically described as inferior (in which viewers are situated at a lower elevation than the proposed project), level (as described above), and superior (in which viewers are situated at a higher elevation than the proposed project). Angle of observation influences the perception of visual contrast. Viewers at higher elevations (superior views) tend to see larger portions of a project. In the context of PV solar projects, from an elevated viewpoint at a distance, viewers would perceive the rectangular outline of the solar field, which would not appear dissimilar from an agricultural field from a certain distance. Individual PV modules and rows of modules may/or may not be distinguishable, and the solar field as a whole would appear as gray tones, as the modules will be non-reflective and highly absorptive.

5.2 Area Photos and Photographic Simulations

Photographs of the project area were taken from the following locations and are illustrated in **Figure 6**:

- Photo Location 1: Intersection of Nebo Street and National Trails Highway looking east towards Daggett Solar 66 project site (**Figure 6a**)

- Photo Location 2: Intersection of Nebo Street and National Trails Highway looking northeast towards Daggett Solar 66 project site (**Figure 6b**)
- Photo Location 3: Intersection of Ponnay Street and National Trails Highway looking northwest towards Daggett Solar 66 project site (**Figure 6c**)
- Photo Location 4: Western edge of Daggett Solar 33 project site along National Trails Highway looking south/southeast towards southern portion of Daggett Solar 33 project site (**Figure 6d**)
- Photo Location 5: Midpoint of Daggett Solar 33 project site along National Trails Highway looking north/northeast towards northern portion of Daggett Solar 33 project site (**Figure 6e**)
- Photo Location 6: Intersection of Hidden Springs Road and National Trails Highway looking west towards Daggett Solar 33 project site (**Figure 6f**)
- Photo Location 7: Along I-40 looking north towards Daggett Solar 33 project site (**Figure 6g**)
- Photo Location 8: Along I-40 looking north towards Daggett Solar 66 project site (**Figure 6h**)

From the photographs taken, photographic simulations were created to help visualize the potential impacts to the existing landscape and to aid in the description of the proposed project components. The simulations helped to compare the level of contrast between the existing landscape and the expected landscape after the proposed project is implemented.

Four (4) photographic simulations were created for this assessment and represent potentially sensitive viewers from Historic Route 66/National Trails Highway and from I-40 within the Project area. Photographs of existing conditions and post-construction simulations are illustrated in Appendix B - Simulations.

5.3 Visual Impact Analysis

Using the CEQA checklist criteria presented in Section 3, Regulatory Setting of this report, the visual impacts from the proposed Dagget Solar 33 and Dagget Solar 66 Projects were assessed:

Would The Project Have A Substantial Adverse Effect On A Scenic Vista?

Less Than Significant. The County General Plan Open Space Element, Policy OS 5.1 states that a feature (roadway, vista point, area) can be considered scenic if it:

- Provides a vista of undisturbed natural areas;
- Includes a unique or unusual feature that comprises an important or dominant portion of the viewshed; or
- Offers a distant vista that provides relief from less attractive views of nearby features such as views of mountain backdrops from urban areas.

Daggett Solar 33 and Daggett Solar 66 Projects

The Dagget Solar 33 project site, and those portions of the Dagget Solar 66 project site that are included in the CUP are zoned RC and are relatively flat. The solar equipment proposed for both sites would consist of PV modules mounted on fixed-tilt foundations or tracker units and associated electrical equipment will maintain a low profile. The project will also include access roads and a six-to-eight foot chain link perimeter fence. None of the proposed equipment would have a substantial adverse effect on any scenic vista.

The Daggett Solar 33 and Dagget Solar 66 Project Site sits to the north and south of the National Trails Highway and are located north of I-40.

While the Project sites would be visible for several minutes by motorists traveling on Historic Route 66/National Trails Highway and I-40, views would be partially screen by project fencing (See Visual Simulations on Figures 7, 8, 9 and 10 – Appendix C); would not dominate the motorist view shed; nor would it be likely to attract particular attention. Additionally, the motorists' overall view toward the Projects while traveling along Historic Route 66/National Trails Highway and I-40 would be temporary and limited to a few minutes.

Though PV solar fields would be noticeable, they would not be dominant in comparison to existing features from these viewpoints. The resulting structural form, color, line and texture contrast would be weak based intervening obstructions and existing vertical utility lines that are prominent in these views.

The weak level of change would meet the VRM Class III objective of a moderate (or lower) degree of visual change. The PV solar fields would barely be visible from the KOPs based on their low profile, proposed fencing and vegetation that would be maintained in the setback areas. The degree of visual change would be low.

Additionally, the dull color of the solar panels will help to blend the solar facilities with the dull colored vegetation of the surrounding landscape, thus reducing their contrast. There are existing distribution lines, railways and associated components therefore the vertical elements introduced by the project would not create a high contrast.

Even where visible, the proposed Project components will not be a dominant element in the landscape unless the viewer was directly adjacent to the facility. At approximately 8 feet tall, the PV panels are relatively short, and given their design, which absorbs as much sunlight as possible, the panels will not be highly reflective. From viewing points at approximately the same elevation as the solar facility, it will either be screened by project fencing or fade into the flat landscape and will not dominate the view. From viewing points at higher elevations than the solar facility, the form, line and color created by project components are similar to its surrounding landscape features which help to reduce contrast within the landscape. It is anticipated that the proposed Projects will not significantly degrade views from nearby scenic vistas and would be compatible with the scenic qualities present.

Would the project substantially damage scenic resources, including, but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway?

Less Than Significant. While the Project sites are along National Trails Highway (Historic Route 66), it is not a state designated scenic highway. The Dagget Solar 33 and Dagget Solar 66 Projects sites are located in a relatively flat area and do not contain scenic resources such rock outcroppings or historic buildings. No scenic resources such as Joshua Trees or other scenic natural formations are present on Project sites. Biological studies prepared in support of the Conditional Use permits confirm that no Joshua Trees are present on either the Dagget Solar 33 or Dagget Solar 66 Project sites.

Due to the low profile of the proposed components and the maintenance of vegetation within the setback areas, the proposed Dagget Solar 33 and Dagget Solar 66 Projects would not detract from the natural features, open space and visual qualities of the area as viewed from the surrounding community and major roadways/highways in the area.

Would the proposed project substantially degrade the existing visual character or quality of the site and its surroundings?

Less Than Significant. The existing Project Sites are currently an open land typical of the surrounding landscape. The visual quality of the Project Sites are “low”. The project sites themselves do not have unique or rare features. The topography is uniform and relatively flat with some short hills. Vegetation primarily consists of grasses and short shrubs, sparsely and uniformly distributed across the sites. No permanent water features occur on the sites, and there are no features or characteristics that set the project sites apart from the surrounding of the desert landscape.

The proposed projects will have a low-profile design and will not substantially degrade the existing character or quality of the site and its surroundings. The project area is rural in

character with a wide variety of developments, including electrical distribution lines the BNSF Railroad, dirt roads and National Trails Highway, limited commercial. The Projects will be compatible with the area's use and the general character.

Proposed fencing and maintenance of the existing vegetation within the perimeter of the Project Sites will ensure that the visual impacts of the proposed Dagget Solar 33 and Dagget Solar 66 solar energy generation facilities will be minimized and blend with and be subordinate to the environment and character of the project area.

Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Less Than Significant. The Projects are not expected to create a substantial new source of nighttime lighting or daytime glare. The proposed Project will provide external safety lighting for both normal and emergency conditions at the primary access points. Lighting will be designed to provide the minimum illumination needed to achieve safety and security and will be downward facing and shielded to focus illumination in the immediate area. Additionally, the Project will comply with San Bernardino County Code section 84.29.040(c) which regulates glare, outdoor lighting, and night sky protection. All lighting associated with the proposed Project will be subject to County approval and compliance with San Bernardino County requirements. Therefore, the Project will have a less than significant impact associated with nighttime lighting.

Project components will introduce minimal amounts of glare to the existing landscape. The projects PV panels are designed to absorb sunlight, and the glass panels that protect the PV surface are typically formulated glass designed to allow sunlight to pass with minimal reflection. The Project will comply with San Bernardino County Code section 84.29.040 which states that solar energy facilities shall be designed to preclude daytime glare on any abutting residential land use zoning district, residential parcel, or public right-of-way (County of San Bernardino, 2007b). Compliance with San Bernardino County Code section 84.29.040 will minimize any potential impacts associated with glare to roadway travelers and the adjacent railway. Viewers are not expected to experience substantially increased glare or glint as a result of the Project. Therefore, the proposed Projects will have a less than significant impact in terms of light and glare.

6.0 REFERENCES

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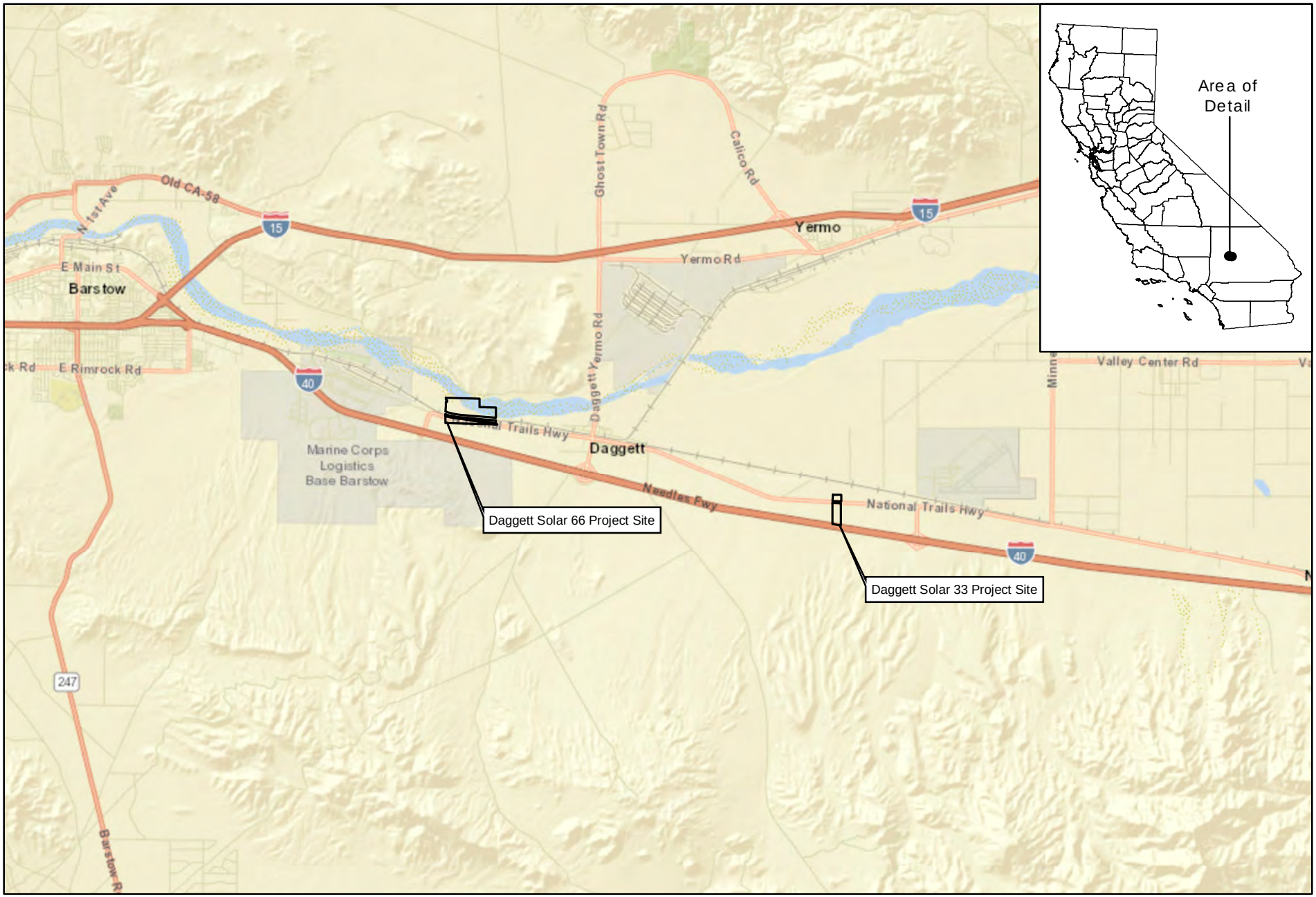
APPENDIX A

PROJECT LOCATION, SITE PLANS AND LAYOUTS



SOURCE: Basemap- Esri; County of San Bernardino

BRG CONSULTING, INC.

N

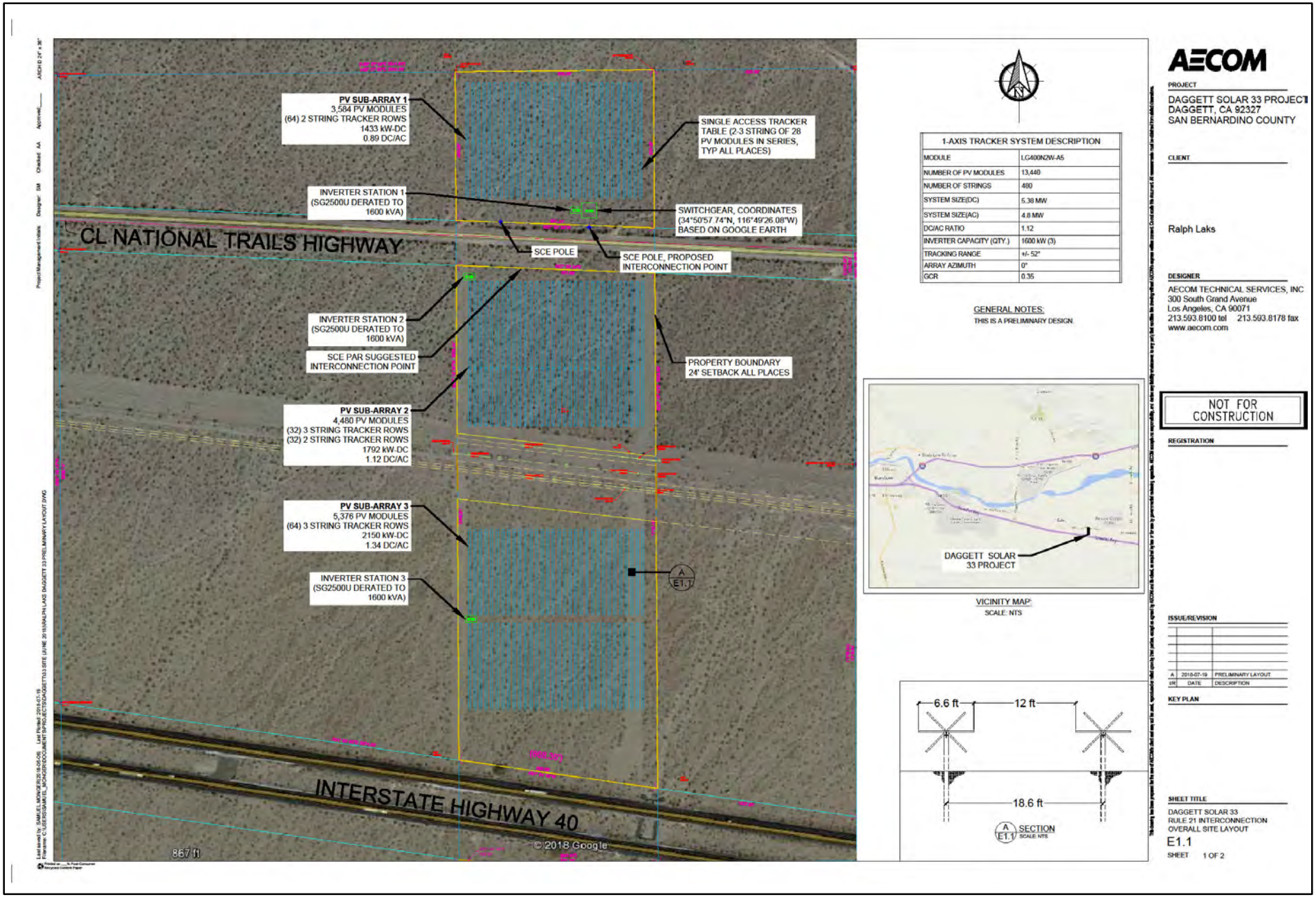
0 1.75 3.5 Miles

Project Location

Daggett Solar 33 and Daggett Solar 66 Visual Impacts Report

Figure 1

8/30/18



SOURCE: AECOM, 2018

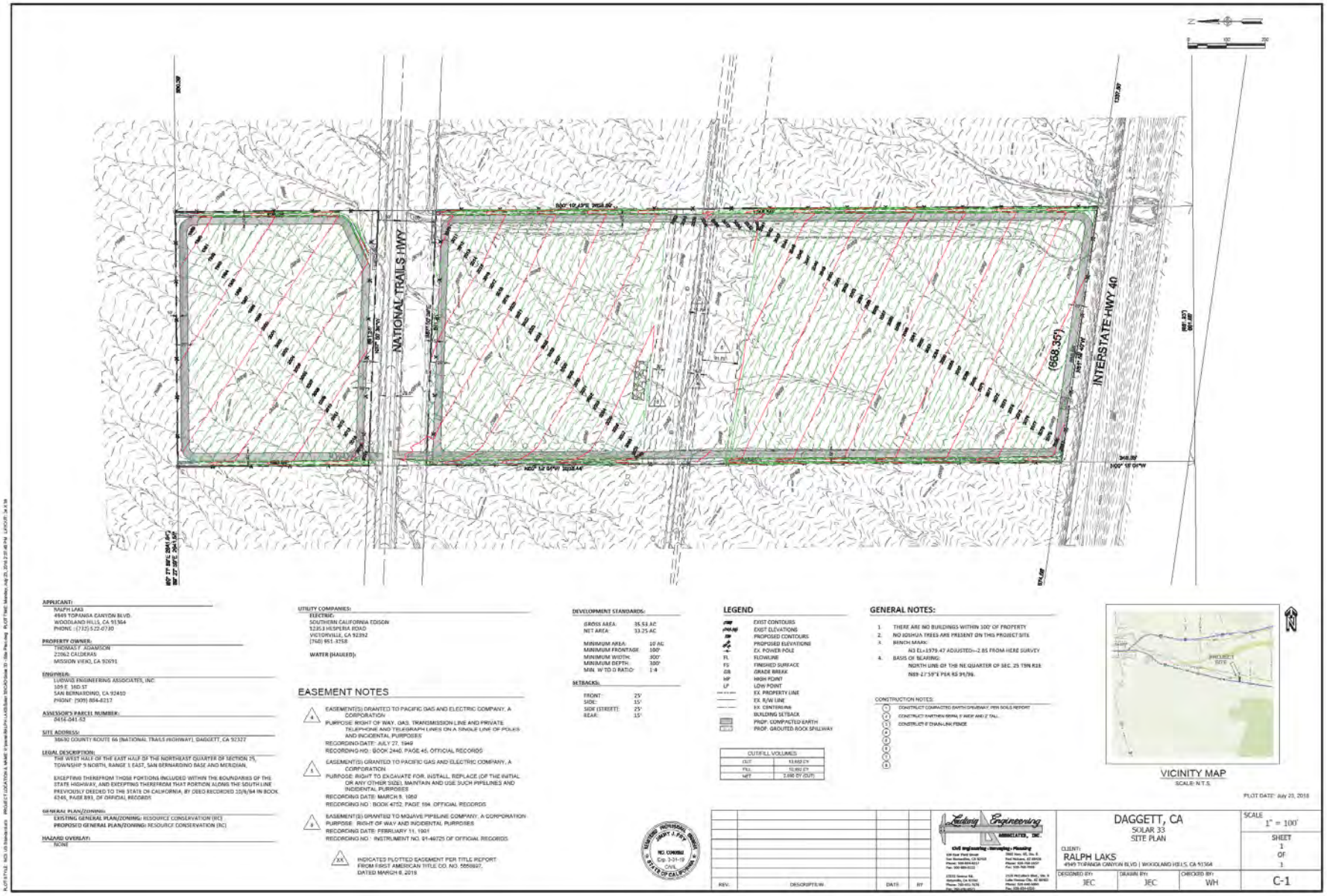
BRG CONSULTING, INC.

Dagget Solar 33 - Site Layout

Dagget Solar 33 and Dagget Solar 66 Visual Impacts Report

Figure 2

8/28/18



SOURCE: Ludwig Engineering, 2018

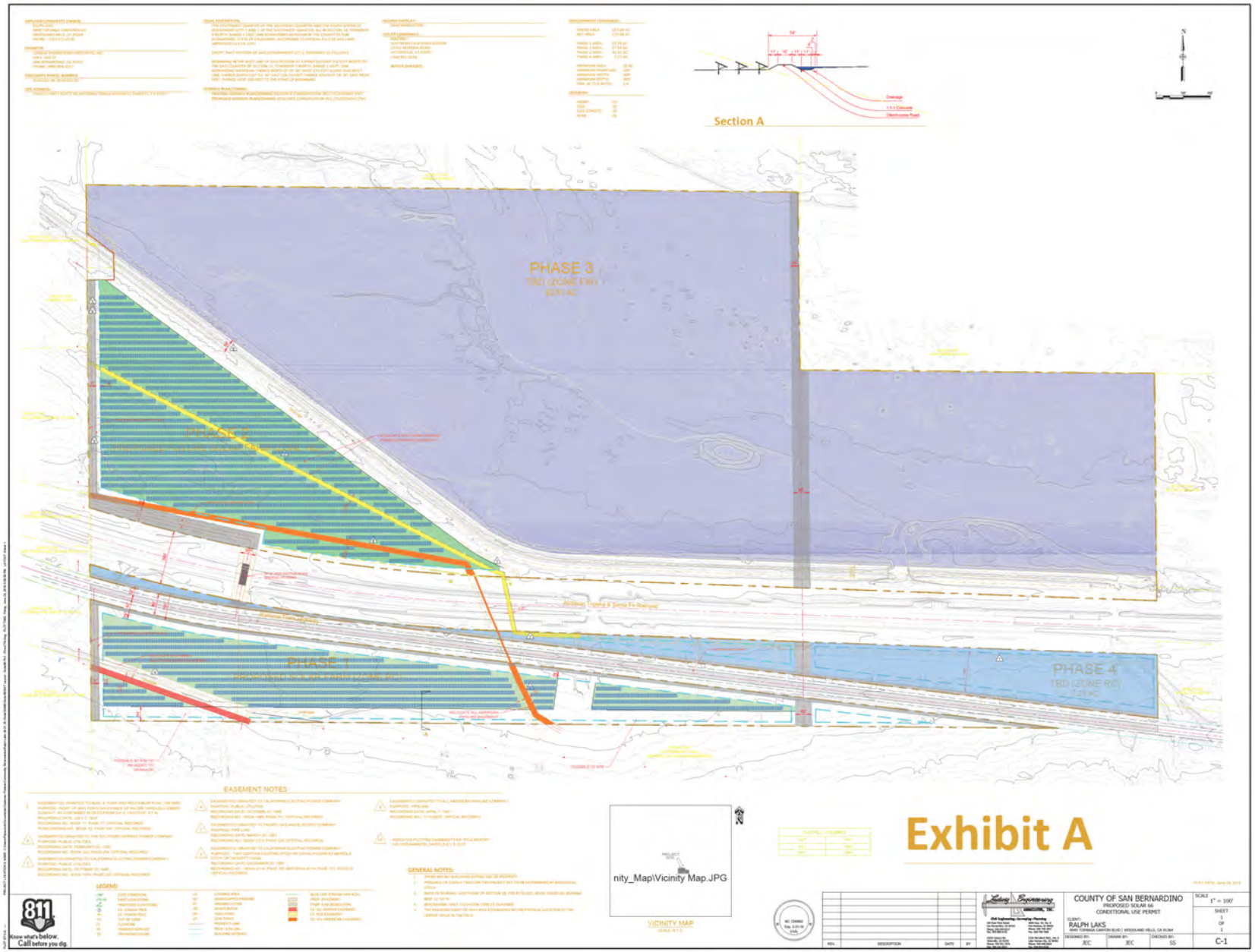
BRG CONSULTING, INC.

Daggett Solar 33 - Site Plan

Daggett Solar 33 and Daggett Solar 66 Visual Impacts Report

Figure 3

8/30/18



SOURCE: Ludwig Engineering, 2018

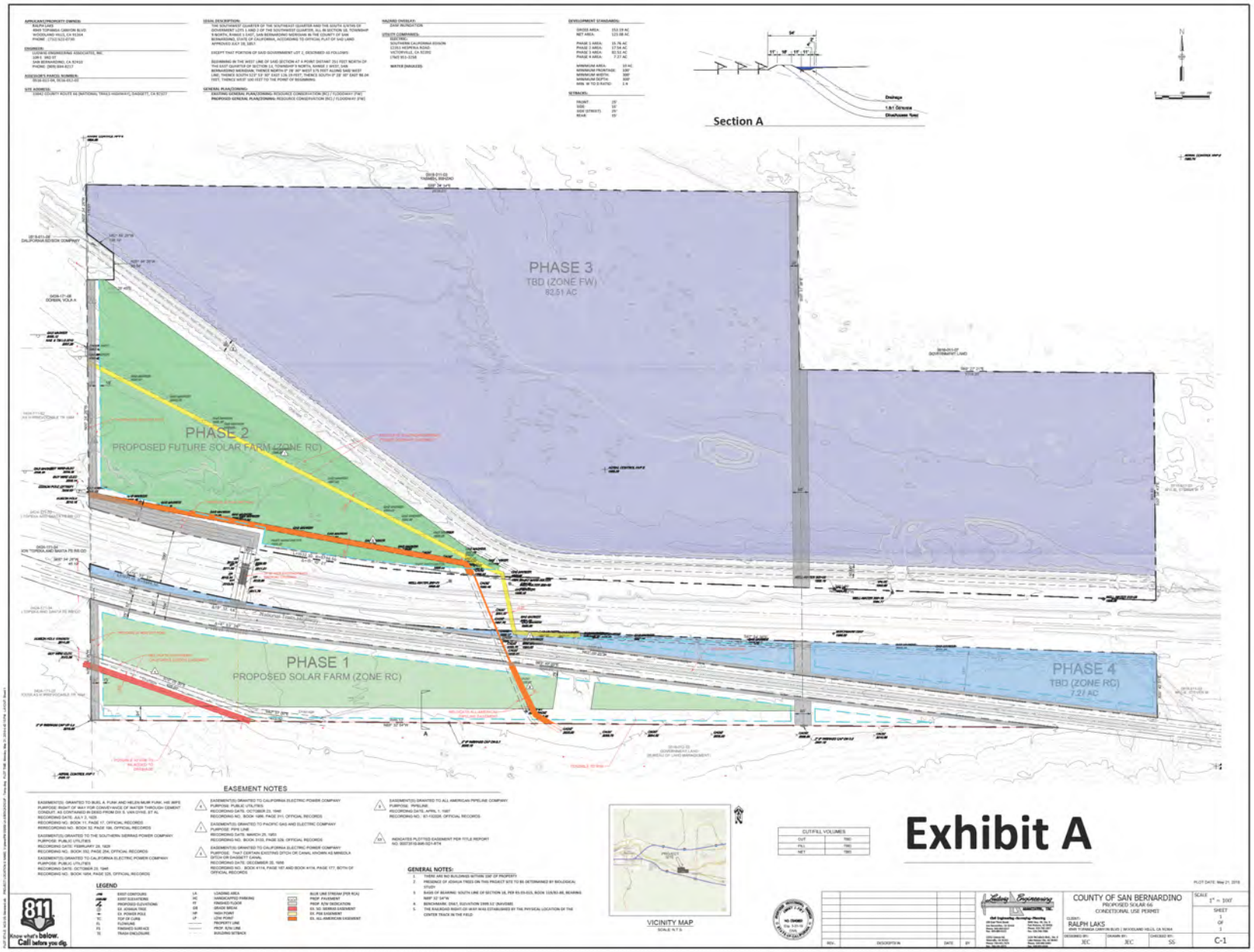
BRG CONSULTING, INC.

Daggett Solar 66 - Site Layout

Daggett Solar 33 and Daggett Solar 66 Visual Impacts Report

Figure 4

8/30/18



SOURCE: Ludwig Engineering, 2018

BRG CONSULTING, INC.

Daggett Solar 66 - Site Plan

Daggett Solar 33 and Daggett Solar 66 Visual Impacts Report

Figure 5

8/30/18

SOURCE: Basemap, State Scenic Routes- Esri; BRG, 2018.

BRG CONSULTING, INC.

N

0 0.75 1.5 Miles

Key Observation Points (KOPs) and Area Photo Locations Overview Map

Daggett Solar 33 and Daggett Solar 66 Visual Impacts Report

Figure 6

8/30/18

Photo Location 1: Intersection of Nebo Street and National Trails Highway looking east towards Dagget Solar 66 project site

SOURCE: BRG Consulting, Inc., 2018

BRG CONSULTING, INC.

Site Area Photographs - Location 1

Daggett Solar 33 and Daggett Solar 66 Visual Impacts Report

Figure 6a

8/30/18

Photo Location 2: Intersection of Nebo Street and National Trails Highway looking northeast towards Dagget Solar 66 project site






SOURCE: BRG Consulting, Inc., 2018

BRG CONSULTING, INC.

Site Area Photographs - Location 2

Daggett Solar 33 and Daggett Solar 66 Visual Impacts Report

Figure 6b

8/30/18

Photo Location 3: Intersection of Ponnay Street and National Trails Highway looking northwest towards Dagget Solar 66 project site






SOURCE: BRG Consulting, Inc., 2018

BRG CONSULTING, INC.

Site Area Photographs - Location 3

Daggett Solar 33 and Daggett Solar 66 Visual Impacts Report

Figure 6c

8/30/18

Photo Location 4: Western edge of Dagget Solar 33 project site along National Trails Highway looking south/southeast towards southern portion of Dagget Solar 33 project site

SOURCE: BRG Consulting, Inc., 2018

BRG CONSULTING, INC.

Site Area Photographs - Location 4

Daggett Solar 33 and Daggett Solar 66 Visual Impacts Report

Figure 6d

8/30/18

Photo Location 5: Midpoint of Dagget Solar 33 project site along National Trails Highway looking north/northeast towards northern portion of Dagget Solar 33 project site








SOURCE: BRG Consulting, Inc., 2018

BRG CONSULTING, INC.

Site Area Photographs - Location 5

Daggett Solar 33 and Daggett Solar 66 Visual Impacts Report

Figure Xe

8/30/18

Photo Location 6: Intersection of Hidden Springs Road and National Trails Highway looking west towards Dagget Solar 33 project site

SOURCE: BRG Consulting, Inc., 2018

BRG CONSULTING, INC.

Site Area Photographs - Location 6

Daggett Solar 33 and Daggett Solar 66 Visual Impacts Report

Figure 6f

8/30/18

Photo Location 7: Along I-40 looking north towards Dagget Solar 33 project site

SOURCE: BRG Consulting, Inc., 2018

BRG CONSULTING, INC.

Site Area Photographs - Location 7

Daggett Solar 33 and Daggett Solar 66 Visual Impacts Report

Figure 6g

8/30/18

Photo Location 8: Along I-40 looking north towards Dagget Solar 66 project site

SOURCE: BRG Consulting, Inc., 2018

BRG CONSULTING, INC.

Site Area Photographs - Location 8

Daggett Solar 33 and Daggett Solar 66 Visual Impacts Report

Figure 6h

8/30/18

APPENDIX B

VISUAL SIMULATIONS

KOP 4. Existing view from National Trails Highway south, southeast towards the Daggett Solar 33 Project Site.

Visual Simulation of the proposed Daggett Solar 33 Project Site Panels from KOP 4.

SOURCE: BRG Consulting, Inc., 2018.

BRG CONSULTING, INC.

Existing and Simulated View - Daggett Solar 33 Project Site From National Trails Highway (KOP 4)

Daggett Solar 33 and Daggett Solar 66 Visual Impacts Report

Figure 7

8/30/18

KOP 7. Existing view from I-40 north towards the Daggett Solar 33 Project Site.

Visual Simulation of the proposed Daggett Solar 33 Project Site Panels from KOP 7.

SOURCE: BRG Consulting, Inc., 2018.

BRG CONSULTING, INC.

Existing and Simulated View - Daggett Solar 33 Project Site From I-40 (KOP 7)

Daggett Solar 33 and Daggett Solar 66 Visual Impacts Report

Figure 8

8/30/18

KOP 2. Existing view from intersection of Nebo Street and National Trails Highway looking northeast towards the Daggett Solar 66 Project Site.

Visual Simulation of the proposed Daggett Solar 66 Project Site Panels from KOP 2.

SOURCE: BRG Consulting, Inc., 2018.

BRG CONSULTING, INC.

Existing and Simulated View - Daggett Solar 66 Project Site From National Trails Highway (KOP 2)

Daggett Solar 33 and Daggett Solar 66 Visual Impacts Report

Figure 9

8/29/18

KOP 8. Existing view from I-40 looking north towards the Daggett Solar 66 Project Site.

Visual Simulation of the proposed Daggett Solar 66 Project Site Panels from KOP 8.

SOURCE: BRG Consulting, Inc., 2018.

BRG CONSULTING, INC.

Existing and Simulated View - Daggett Solar 66 Project Site From I-40 (KOP 8)

Daggett Solar 33 and Daggett Solar 66 Visual Impacts Report

Figure 10

8/30/18

APPENDIX C

CONTRAST RATING WORKSHEETS

Visual Contrast Rating Worksheet
For KOPs on Non-NFS/BLM Lands

SECTION A. PROJECT INFORMATION

1. Project Name: Dagget Solar 66	4. Notes: View northeast towards the Solar 66 project site from the intersection of Nebo Street and National Trails Highway Used for Visual Simulation, as the National Trails Highway is a county designated scenic route.
2. Key Observation Point: 2	
3. Latitude/Longitude: 34°52'4"N, 116°55'48"W	

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Uneven	Low irregular brush	Tall, narrow powerlines
LINE	Horizontal	Random	Vertical
COLOR	Sandy brown	Green/brown	Brown
TEX-TURE	Flat, medium	Sparse	Ordered

SECTION C. PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	No change – remains flat	Foreground: Vegetation along the roadway and in FG would remain Background: Vegetation would be removed, removing rounded forms within the landscape	Linear/horizontal
LINE	No change – remains horizontal	Foreground: no change Background: Vegetation (brush) would be removed, creating a more linear horizon	Uniform/parallel
COLOR	Dark Grey/metallic	Background: Vegetation (brush) would be removed, removing some dark green vegetation	Uniform/parallel
TEX-TURE	Smooth	Background: Vegetation (brush) would be removed, removing some of the texture created by them	Smooth

SECTION D. CONTRAST RATING

SECTION E. VIEWER SENSITIVITY

1. DEGREE OF CONTRAST		FEATURES											
		LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)			
		STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE
ELEMENTS	FORM				X			X				X	
	LINE				X			X				X	
	COLOR			X				X				X	
	TEXTURE			X				X				X	

Viewer Expectations: High

Duration of View: Moderate

Use Volume: Low

Overall Sensitivity: High

Additional Comments:

Evaluator's Names: John Addenbrooke, Rachel Rowe
Date: August 9, 2018

Visual Contrast Rating Worksheet
For KOPs on Non-NFS/BLM Lands

SECTION A. PROJECT INFORMATION

1. Project Name: Dagget Solar 33	4. Notes: View from National Trails Highway south, southeast towards Solar 33 project site Used for Visual Simulation, as the National Trails Highway is a county designated scenic route.
2. Key Observation Point: 4	
3. Latitude/Longitude: 34°50'57"N, 116°49'32"W	

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Flat	Low irregular brush	None
LINE	Horizontal	Random	None
COLOR	Sandy brown	Green/brown	None
TEX-TURE	Flat medium	Sparse, random	None

SECTION C. PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	No change – remains flat	Foreground: no change – vegetation remains Middle ground: removal of vegetation creating flat/straight form Background: Vegetation would be removed, removing rounded forms within the landscape	Linear/horizontal
LINE	No change – remains horizontal	Foreground: no change Middle ground/Background: Vegetation (brush) would be removed, creating a more linear horizon	Uniform/parallel
COLOR	Dark Grey/metallic	Middle ground/Background: Vegetation (brush) would be removed, removing some dark green vegetation	Uniform/parallel
TEX-TURE	Smooth	Middle ground/Background: Vegetation (brush) would be removed, removing some of the texture created by them	Smooth

SECTION D. CONTRAST RATING

SECTION E. VIEWER SENSITIVITY

1. DEGREE OF CONTRAST		FEATURES											
		LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)			
		STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE
ELEMENTS	FORM				X			X				X	
	LINE				X			X				X	
	COLOR			X			X				X		
	TEXTURE			X			X					X	

Viewer Expectations: High

Duration of View: Moderate

Use Volume: Low

Overall Sensitivity: High

Additional Comments:

Evaluator's Names: John Addenbrooke, Rachel Rowe
Date: August 9, 2018

Visual Contrast Rating Worksheet
For KOPs on Non-NFS/BLM Lands

SECTION A. PROJECT INFORMATION

1. Project Name: Dagget Solar 33	4. Notes: View from I-40 north towards Solar 33 project site
2. Key Observation Point: 7	Used for Visual Simulation, as views from I-40 of the project site will have the greatest visual impact to the most viewers
3. Latitude/Longitude: 34°50'38"N, 116°49'21"W	

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Flat	Low irregular brush	Background: transmission lines, solar panels, agriculture
LINE	Horizontal	Foreground: random Background: ordered agriculture	Horizontal
COLOR	Sandy brown	Foreground: green/brown Background: green	Metallic, white
TEX-TURE	Flat medium	Foreground: sparse random Background: ordered	Ordered

SECTION C. PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	No change – remains flat	Foreground: Vegetation (brush) would be removed, removing rounded forms within the landscape but retaining some along roadway Background: no change	Linear/horizontal
LINE	No change – remains horizontal	Foreground: Vegetation (brush) would be removed, creating a more linear horizon Background: no change	Uniform/parallel
COLOR	Non-reflective metallic	Foreground: Vegetation (brush) would be removed, removing some dark green vegetation	Uniform/parallel
TEX-TURE	Smooth	Foreground: Vegetation (brush) would be removed, removing some of the texture created by them	Smooth

SECTION D. CONTRAST RATING

1. DEGREE OF CONTRAST		FEATURES											
		LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)			
		STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE
ELEMENTS	FORM				X			X				X	
	LINE				X			X				X	
	COLOR			X			X				X		
	TEXTURE			X			X					X	

SECTION E. VIEWER SENSITIVITY

Viewer Expectations: High

Duration of View: Moderate

Use Volume: Low

Overall Sensitivity: High

Additional Comments: The existing character of the landscape will be largely retained with weak level of change occurring.
Evaluator's Names: John Addenbrooke, Rachel Rowe
Date: August 9, 2018

Visual Contrast Rating Worksheet
For KOPs on Non-NFS/BLM Lands

SECTION A. PROJECT INFORMATION

1. Project Name: Dagget Solar 66	4. Notes: View from I-40 north towards Solar 66 project site
2. Key Observation Point: 8	Used for Visual Simulation, as views from I-40 of the project site will have the greatest visual impact to the most viewers
3. Latitude/Longitude: 34°51'38"N, 116°54'56"W	

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Flat	Low irregular brush	Powerlines
LINE	Horizontal	Random	Horizontal
Sandy brown	Sandy brown	Green/brown	Brown
TEX-TURE	Flat medium	Sparse	Ordered

SECTION C. PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	No change – remains flat	Vegetation would be removed creating geometric forms	Solar field creates a low, long narrow strip
LINE	No change – remains horizontal	Vegetation would be removed creating straight horizontal and diagonal lines	Low, horizontal, straight, thin band (solar field)
COLOR	Grey/metallic	Vegetation would be removed, removing dull olive green vegetation	Grey/metallic
TEX-TURE	Smooth	Vegetation (brush) would be removed, removing some of the texture created by them	Smooth

SECTION D. CONTRAST RATING

SECTION E. VIEWER SENSITIVITY

1. DEGREE OF CONTRAST		FEATURES											
		LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)			
		STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE
ELEMENTS	FORM				X			X				X	
	LINE				X			X				X	
	COLOR			X				X				X	
	TEXTURE			X				X				X	

Viewer Expectations: High

Duration of View: Moderate

Use Volume: Low

Overall Sensitivity: High

Additional Comments: The existing character of the landscape will be largely retained with weak level of change occurring.
Evaluator's Names: John Addenbrooke, Rachel Rowe
Date: August 9, 2018