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1.0 Executive Summary

1.1 Project Overview

1.1.1 General Description of Site and Facilities

The Mojave Solar Project (herein "MSP" or "Project") is a solar electric generating facility proposed on approximately 1,765 acres in unincorporated San Bernardino County, California approximately nine miles northwest of Hinkley, CA. The site is largely fallow agricultural land specifically sited and configured to minimize environmental impacts. This land was originally proposed in the 1990s as Solar Electric Generating Stations (SEGS) XI and XII and is located next to the existing SEGS VIII and IX facilities.

The Project will implement well-established parabolic trough technology to solar heat a heat transfer fluid (HTF). This hot HTF will generate steam in solar steam generators (SSGs), which will expand through a steam turbine generator (STG) to produce electrical power with a combined nominal electrical output of 250 megawatts (MW) from twin, independently-operable solar fields, each feeding a 125-MW power island. The sun will provide 100 percent (%) of the power supplied to the Project through solar-thermal collectors; no supplementary fossil-based energy source (e.g., natural gas) is proposed for electrical power production.

The Project is proposing interconnection to connect to the Kramer-Cool Water 230-kV transmission line which is owned by Southern California Edison (SCE), and located adjacent to the southern border of the Project. The Interconnection System Impact Study (ISIS) has been completed in coordination with the California Independent System Operator (CAISO). The Interconnection Facilities Study (IFS) is in progress to detail the on-the-ground system-wide improvements. As a separate process, SCE will lead the permitting effort for the transmission improvements beyond the Project-specific interconnection to the statewide system. All Project-related transmission facilities are within the Project boundaries except the connection within the existing transmission right-of-way adjacent to the site.

The Project proposes to use wet cooling towers for power plant cooling and owns adjudicated water rights for this purpose. The Mojave Water Agency (MWA) administers the adjudication and manages water rights for all users through the Watermaster. Water will be supplied from onsite groundwater wells drawing from these water rights. The water quality is brackish and not suitable for potable purposes without extensive treatment. No offsite backup cooling water supply is planned; the use of multiple onsite water supply wells, redundancy in the well equipment, and reserve water storage will provide an inherent backup. No offsite water pipeline facilities are proposed as part of this Project. The aquifer has been characterized as prolific and studies indicated that the health of the basin will not degrade during the life of the plant due to the Project. Project cooling water blowdown will be piped to lined, onsite evaporation ponds for each plant area.

Natural gas for the project's ancillary purposes, such as the auxiliary boilers, space heating, and the like will be supplied by a Southwest Gas Corporation (SGC) owned pipeline that runs to the project boundary near the Alpha power island. No offsite gas pipeline facilities are proposed as a part of this Project.

1.1.2 Description of Project Location

The proposed Project plant site is located in unincorporated San Bernardino County, California in the Mojave Desert, approximately 90 miles northeast of Los Angeles as shown in Figure 1-1, Regional Map. Located approximately halfway between Barstow, CA and Kramer Junction, CA, the Project is approximately nine miles northwest of Hinkley, CA.

Project access is located approximately 20 miles west of Barstow along the CA-58 corridor. Harper Lake Road provides access to the site approximately six miles north of the intersection at CA-58 as shown in Figure 1-2, Vicinity Map.

Harper Dry Lake is located immediately northeast of the site and SEGS VIII and IX to the immediate northwest as shown in Figure 1-3, Site Map. A small number of local residents are located to the southwest of the site with more residential structures in the area abandoned than not. Approximately 128 acres of land is currently farmed on the Project site and will discontinue once construction begins.

The area surrounding the proposed facility includes the SEGS VIII and IX facilities, northwest of the project, developed in the late 1980s and early 1990s. Northeast of the Project is the Harper Dry Lake bed and a Bureau of Land Management (BLM) Watchable Wildlife Area discussed further in Section 5.3, Biological Resources. To the southwest of the project are approximately six to eight residences that are either occupied or vacant. The south and southeast land is vacant. Beyond the details described above, the land surrounding the project, stretching as far as Hinkley, CA (approximately 9 miles southeast), is vacant and largely undeveloped.

An aerial oblique photograph of the visual appearance of the site prior to and a rendering of the site with facilities after construction using the same photograph is included as Figure 1-4(a) and 1-4(b) respectively. Additional photographs of the site in its current condition are presented in Section 2.0, Project Description, Figures 2-2(a), 2-2(b), 2-2(c), 2-2(d) and 2-2(e), Site Photos. The site topography is very planar and ideal for the proposed solar-thermal application, with elevations ranging from approximately 2,025 to 2,105 ft above mean sea level (amsl).

Section 2.0, Project Description, Figure 2-1, Project Site Boundaries includes the details of the parcels included as part of the project and includes the following land:

- S ½ of Section(Sect.) 30, Township(T)11North(N) Range(R)4West(W), San Bernardino Meridian (SBM),
- S ½ of NW ¼ of Sect. 30, T11N R4W, SBM,
- SW ¼ of the NE ¼ of Sect. 30, T11N R4W, SBM,
- S ½ of Sect. 29, T11N R4W, SBM,
- SW ¼ of NW ¼ of Sect. 29, T11N R4W, SBM,
- W ½ of SW ¼ of Sect. 28, T11N R4W, SBM,
- NE ¼ of SW ¼ of Sect. 28, T11N R4W, SBM,
- W ½ of SE ¼ of SW ¼ of Sect. 28, T11N R4W, SBM,
- NE ¼ of Sect. 32, T11N R4W, SBM, and

- Sect. 33, T11N R4W, SBM.

The approximately 1,765-acre plant site is vacant and significantly disturbed from past and current agricultural activities. Demolition and disposal of the structures and removal of associated materials will be performed in accordance with existing regulations. Site control of the following parcels was established to develop the site:

- Assessor's Parcel Number (APN) 0490-121-42
- APN 0490-131-06
- APN 0490-131-07
- APN 0490-131-08
- APN 0490-131-11
- APN 0490-131-12
- APN 0490-131-15
- APN 0490-131-16
- APN 0490-161-08
- APN 0490-161-09
- APN 0490-161-10
- APN 0490-161-11
- APN 0490-161-12
- APN 0490-161-13

1.2 Project Schedule

Major milestones of the planned Project construction schedule are as follows:

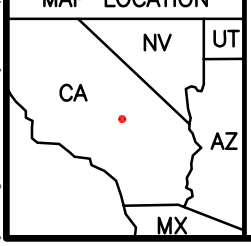
- Begin construction: Fall 2010
- Complete construction: Fall 2012
- Initial startup and test: Fall 2012
- Full-scale Commercial operation: Winter 2012

Start of commercial operation is planned for winter of 2012, subject to timing of regulatory approvals and achievement of Project equipment procurement and construction milestones.

1.3 Project Ownership

Mojave Solar LLC (herein "MSLLC" or "Applicant"), is proposing to construct, own and operate the Mojave Solar Project (herein "MSP" or "Project"). MSLLC is a Delaware limited liability company. Abengoa Solar Inc. (ASI), a Delaware corporation, specializes in solar technologies and is the sole member of MSLLC.

MAP LOCATION



Mojave Solar Project

MOJAVE SOLAR PROJECT

Figure 1-1
Regional Map

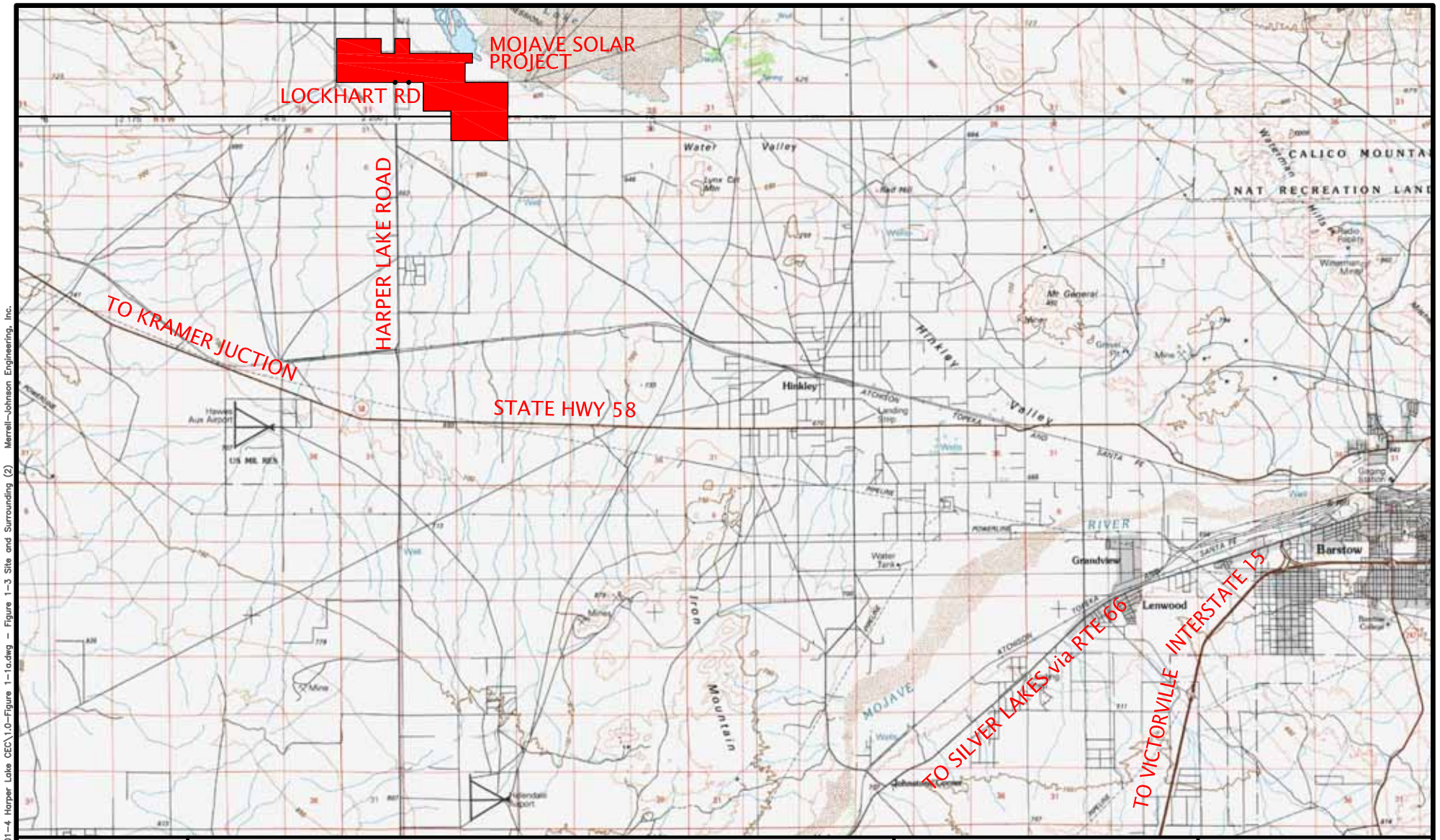
0 7.5 15 22.5 Miles
1:960,000

MOJAVE SOLAR LLC

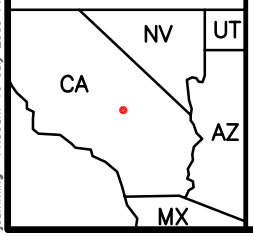
Merrell-Johnson Engineering, Inc.

PROJECT:
DATE: 07-16-2009

jcumming 11:47am 16 July 2009 P:\3001-4 Harper Lake CEC\1.0-Figure 1-1.dwg — Figure 1-1 Regional and Vicinity Merrell-Johnson Engineering, Inc.



MAP LOCATION



Legend

Plant Site Boundary

0 1000' 2000' 3000'

1:24,000

MOJAVE SOLAR PROJECT

Figure 1-2
Vicinity Map

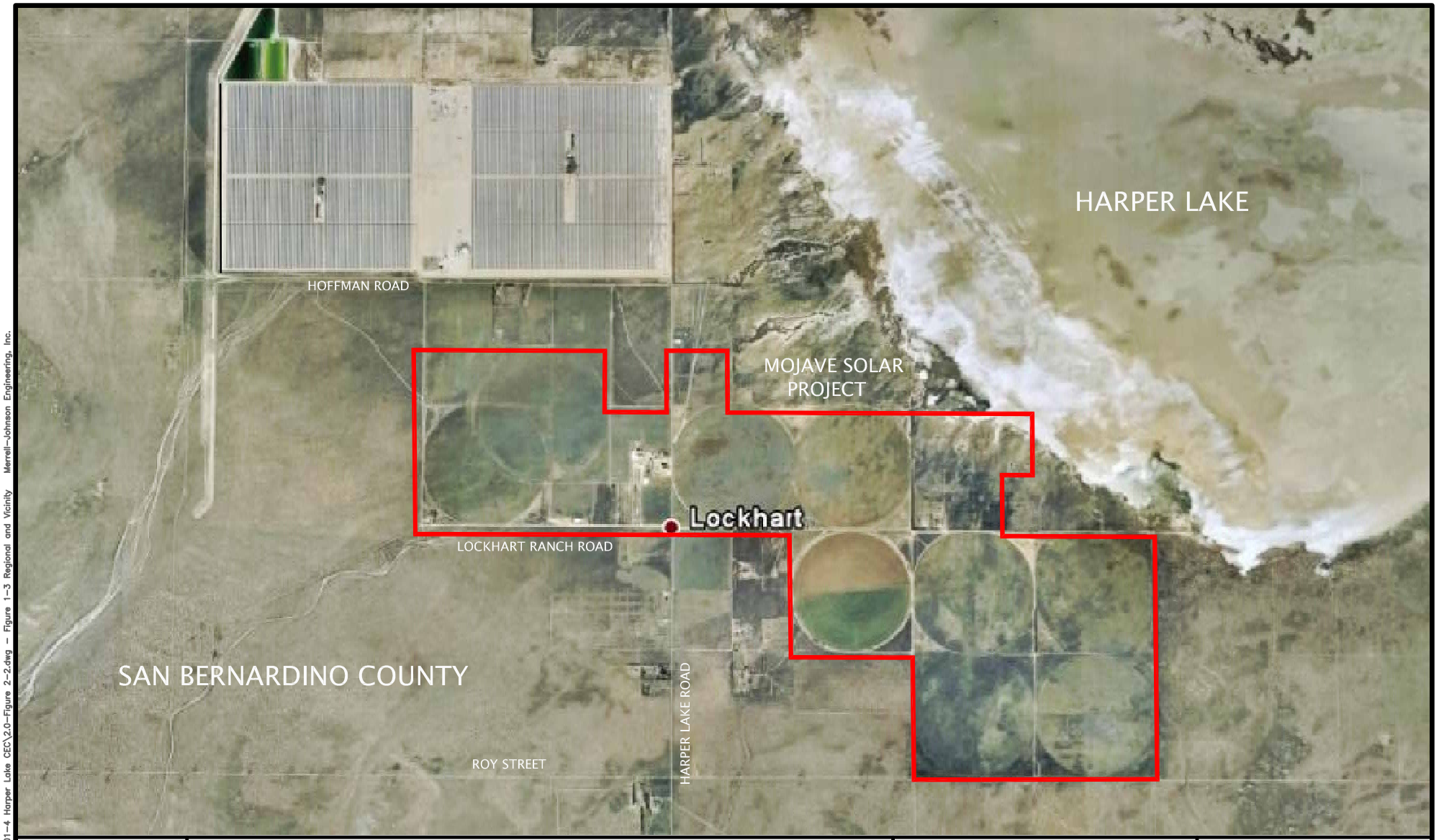
MOJAVE SOLAR LLC

Merrell-Johnson Engineering, Inc.

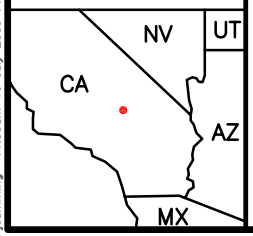
PROJECT:

DATE: 07-16-2009

jcumming 11:50am 16 July 2009 P:\3001-4 Harper Lake CEC\1.0-Figure 1-1a.dwg — Figure 1-3 Site and Surrounding (2) Merrell-Johnson Engineering, Inc.



MAP LOCATION



Legend

Plant Site Boundary

0 1,500 3,000 4,500 Feet

1:36,000

MOJAVE SOLAR PROJECT

Figure 1-3
Site Map

MOJAVE SOLAR LLC

Merrell-Johnson Engineering, Inc.

PROJECT:

DATE: 07-16-2009

jcumming 11:53am 16 July 2009 P:\3001-4 Harper Lake CEC\2.0-Figure 2-2.dwg — Figure 1-3 Regional and Vicinity Merrell-Johnson Engineering, Inc.

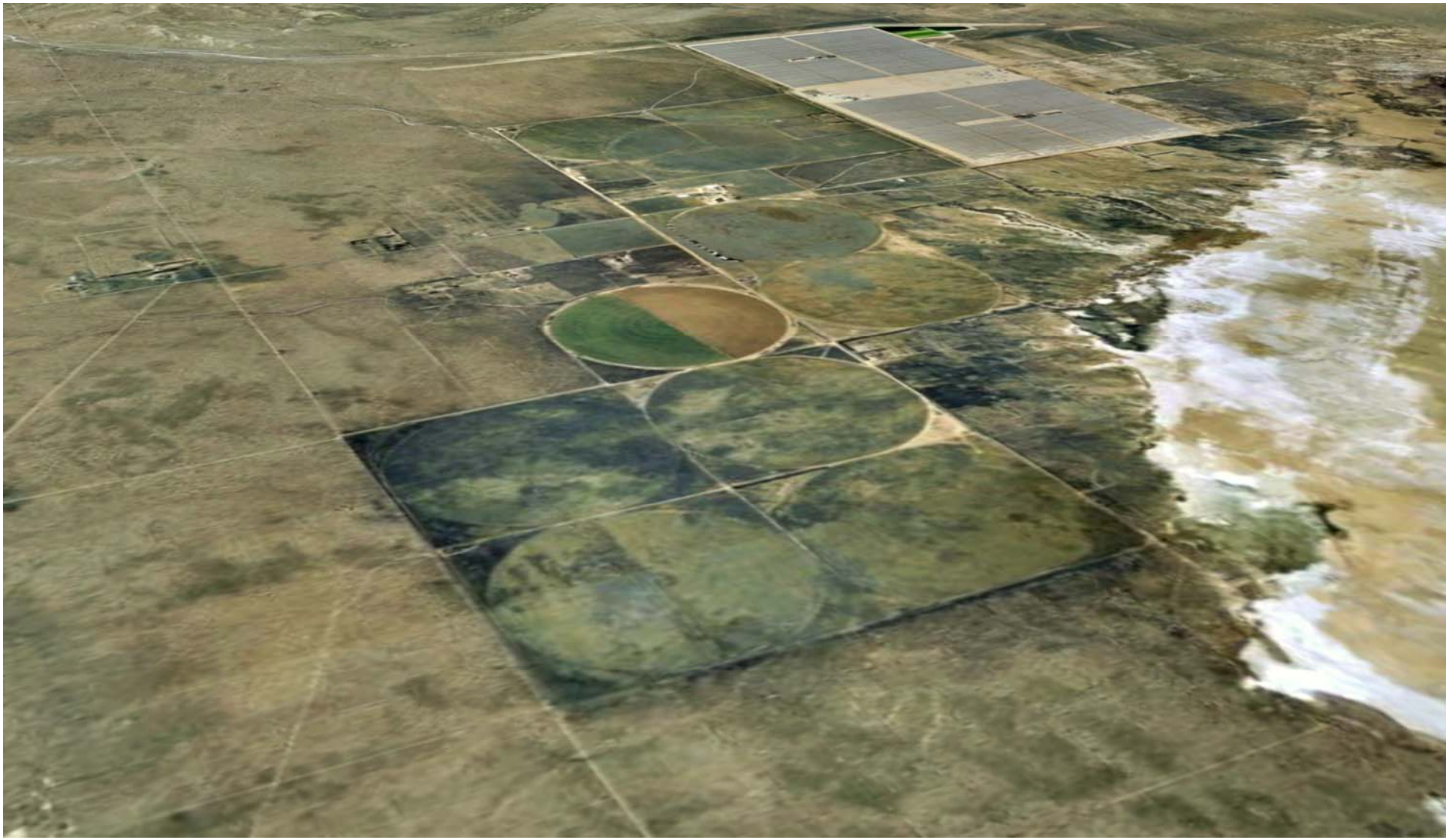


Figure 1-4(a). Visual Appearance of the Site Prior to Construction

Figure 1-4(b). Visual Appearance of the Site After Construction