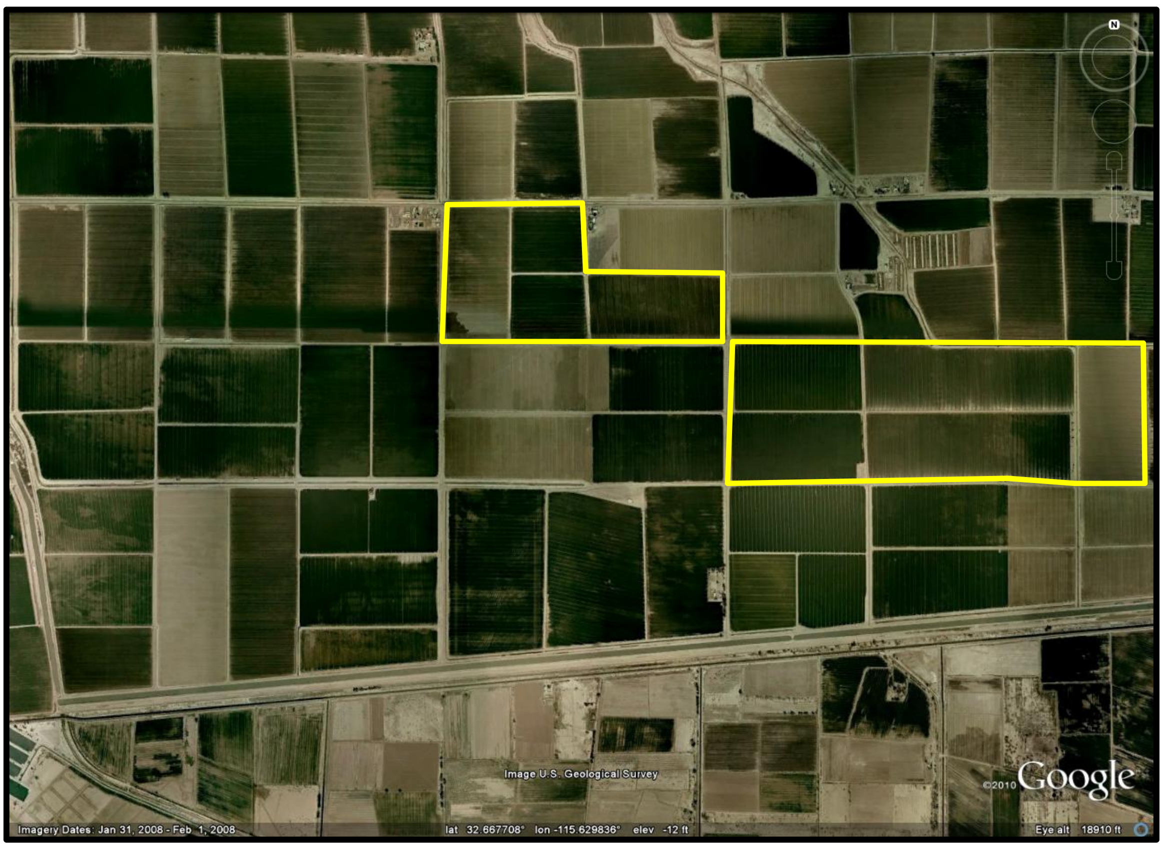
Agricultural Restoration Plan

Calexico Solar Farm I Phase A

South of State Route 98 Brockman to Ferrell Road
Calexico, California

Prepared for:

88FT 8ME, LLC
320 Hayward Avenue
Los Angeles, CA 94588



Prepared by:

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January 2012

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January 24, 2012

Mr. Tom Buttgenbach
88FT 8ME, LLC
320 Hayward Avenue
Los Angeles, CA 94588

Engineer's Estimate of Probable Costs
Agricultural Restoration Plan
Calexico Solar Farm I (Phase A)
Calexico, California
GSL Project No. GS1104

Dear Mr. Buttgenbach:

GS Lyon personnel have developed an Engineer's Estimate of Probable Costs to restore the agricultural lands to "farm ready conditions" at the Calexico Solar Farm I (Phase A) PV Solar Facility in southern Imperial County, California. The solar farm project consists of 100MW of PV solar generation and will encompass nine (9) farm fields totaling approximately 634 net acres, generally located south of State Route 98 between Ferrell and Brockman Roads about 5 miles west of Calexico.

The restoration plan exhibits indicate current conditions of the farm fields and the proposed solar power arrays. The estimate accounts for costs restore the land to farm-ready conditions upon ceasing the power facility operation. No crop planting is included in the restoration costs since customary farm practices do not include planting prior to leasing. Crop type and planting is each individual farmer's selection. Costs are provided for replacement of concrete irrigation ditches and subsurface agricultural tile drainage pipelines, deep chiseling (sub-soiling), discing, landplaning and restoration of irrigation land slopes (land–leveling).

This report also identifies Prime Farmland and Farmland of Statewide Importance as defined by the California Department of Conservation.

GS Lyon appreciates the opportunity to provide professional services in developing the restoration plan. Please contact our office with any questions or comments.

Sincerely Yours,
GS Lyon Consultants, Inc.

Jeffrey O. Lyon, P.E.
Principal Engineer

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Appendices

1.0 Introduction

The Calexico Solar Farm I (Phase A) project will occupy nine (9) agricultural fields that are currently in agricultural crop production. The lands generally consist of silty clay to fat clay soil that require subsurface tile drains to maintain crop yields, normally used for growing field crops such as alfalfa, bermuda grass, sudan grass and wheat. Even though there are lands identified as “Prime Farmland” by the California Department of Conservation, the cropping patterns of all of the agricultural lands within the Calexico Solar Farm I (Phase A) have historically been “field crops”. A complete Land Evaluation and Site Assessment (LESA) Model has been prepared for the project (see **Appendix F**).

The Calexico Solar Farm I (Phase A) project is expected to consist of 100MW of PV solar generation and extend a minimum of 25 years and may extend up to 40 years (see **Appendix E –** Project Description for project specifics). Without regular crop irrigation occurring during this period, there should be no increase in salts in the field (water table is not high enough to drive salts to the surface).

This restoration plan has been prepared to document the agricultural improvements of each farm field and to provide an estimate of the work (cost) required to return the land to agricultural production upon ceasing operation of the PV solar energy generating facility.

2.0 Restoration Methods

2.1 Irrigation Ditches - During extended periods of non-use (as has occurred recently as a result of the on-farm fallowing program), it has been found that the clay soils dry and shrink away from the concrete lining. The thin concrete lining (1.5 inches thick) is prone to cracking and breakage without support of moist soil behind the lining and the amount of ditch repairs required after extended non-use is generally extensive. It is generally more cost efficient to replace the ditch and field gates than to chase the problems created by fractured ditches.

2.2 Sub-surface Tile Drains - Tile drains that currently exist below the farm fields may be punctured by installation of PV panel frame support posts. In order to insure proper operation of the tile drainage system, a new system has been planned for each farm field. Should the steel support posts not be driven to the tile system depth, then only the red clay or concrete tile portions of the tile system would need to be replaced. The plastic tile lines have been found to be relatively unaffected by extended fallowing periods.

2.3 Ground Preparation - Without agricultural tillage over the 25 to 40 year span of the PV solar energy generating facility operation, the clay soils will become compacted. In order to insure crop growth, the fields will need to be sub-soiled (plow shanks extending to 36" to 42" below ground surface), re-leveled with laser controlled drag-scrapers, manure fertilizer applied, disced (2 directions) and landplaned (or tri-planed). A minimum of six (6) soil samples have been scheduled to be collected from each field and analyzed for agronomic minerals, salts and fertilizer compounds.

3.0 Cost Estimating/Unit Pricing

3.1 Irrigation Ditches - Contractors that routinely install concrete lined irrigation ditches in the Imperial Valley were contacted to develop unit pricing of a farm ditch. The overall cost of placing and compacting a 15 ft. by 2 ft. high ditch pad (native soil from the farm field), trenching for concrete lining, placement of concrete lining, installation of jack gates, installation of outlet pipes and slide gates were included into one cost per foot of concrete ditch construction.

3.2 Subsurface Tile Drains – A specialty tile drainage installation contractor in the Imperial Valley was consulted on the installation of tile drain baselines (8-inch diameter pipelines) and laterals (4-inch pipelines) to establish unit rate pricing of the tile system installations. The lengths of the laterals and baselines were taken from the existing tile drainage maps obtained from Imperial Irrigation District records.

3.3 Ground Preparation - Pricing from local farm service providers was used to determine the unit rate pricing for ground preparation prior to placement of irrigation borders and planting. Standard agricultural practices were used for the work to be performed. Land-leveling costs were developed by consultation with an agricultural land-leveling specialty contractor in the Imperial Valley.

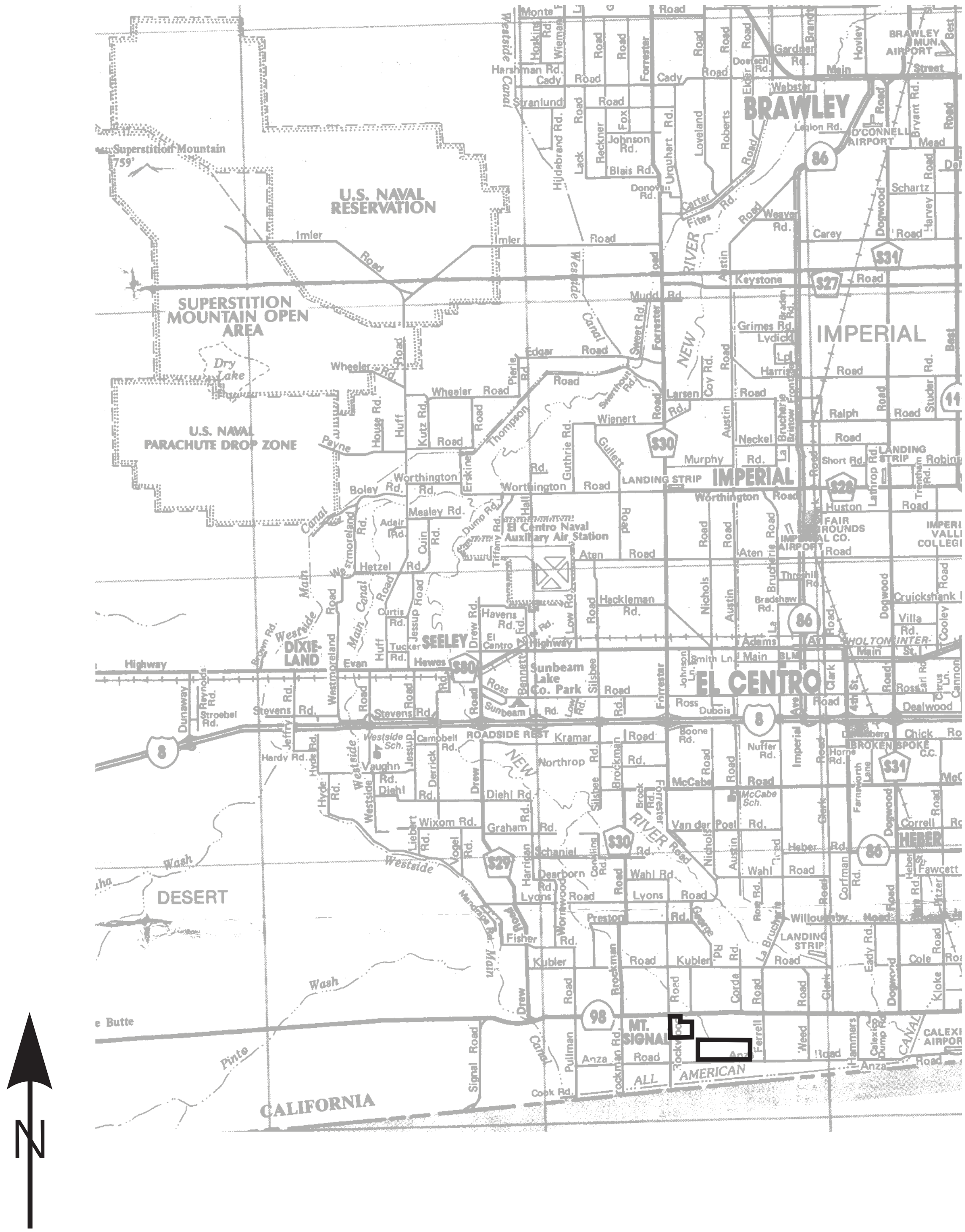
4.0 Prime Farmland and Farmland of State Importance

The California Department of Conservation has classified all agricultural lands in the Imperial Valley as identified in the FARMLAND MAPPING and MONITORING PROGRAM – 2008 Imperial County Important Farmland Map. The Soil Candidate Listing for Prime Farmland and Farmland of Statewide Importance-Imperial County (Rev. 2010) appends the Farmland Map, identifying each soil type described by the US Department of Agriculture, Natural Resources Conservation Service, Soil Survey of Imperial County, Imperial Valley Area, October 1981. The areas that make up Prime Farmland are identified as the Soil Survey Soil Mapping Units described in the Soil Candidate Listing (see **Appendix D**).

This report has identified **121.6 acres** within the Calexico Solar Farm I (Phase A) project site as being classified as **Prime Farmland**. Digital Google Earth™ maps overlain with Soil Survey soil mapping unit contours obtained from the USDA website were used to determine the currently farmed areas that were classified as Prime Farmland. The areas were digitally scaled using electronic mapping programs (see **Plates D4 – Appendix D**).

Appendix A

Project Location Maps and Maps of Existing Conditions



GS Lyon

Project No.: GS1104

Calexico Solar Farm I Phase A
Vicinity Map

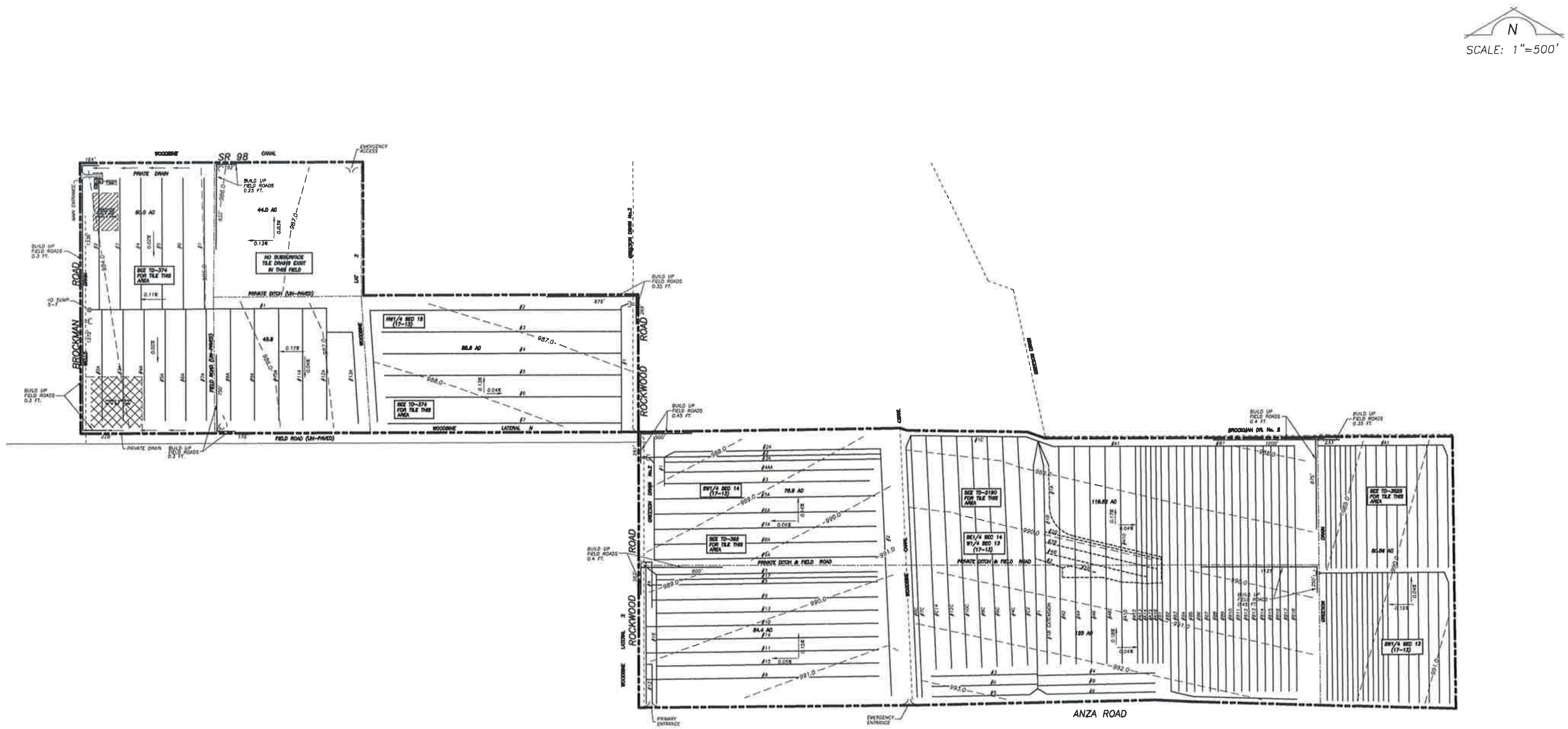
Plate
A-1

GS Lyon

Project No.: GS1104

Calexico Solar Farm I Phase A
Site Map

Plate
A-2



REV No.	REVISION	DATE

8minutenergy RENEWABLES

PREPARED UNDER THE DIRECT SUPERVISION OF:

JEFFREY O. LYON, R.C.E. 31,921
ENGINEER OF RECORD

DATE

REGISTERED PROFESSIONAL ENGINEER JEFFREY O. LYON RCE 31,921 EXP 12-31-12 CIVIL STATE OF CALIFORNIA

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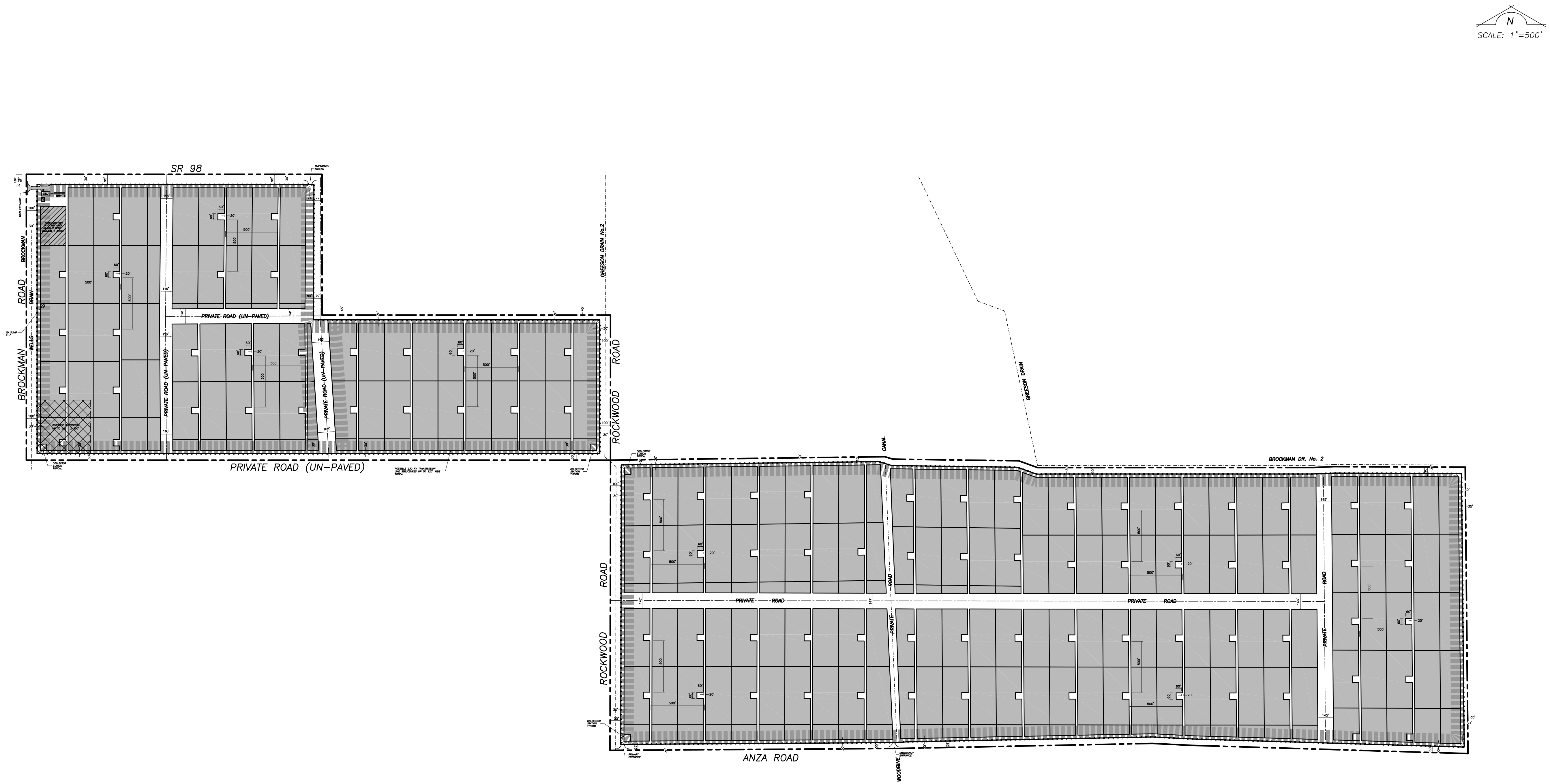
CALEXICO SOLAR FARM I PHASE A (88FT)

LOCATION CALEXICO, CA
SHEET TITLE EXISTING AG CONDITIONS
CLIENT 8MINUTENERGY RENEWABLES

SHEET No.
1
BY GMG
DATE 9/12/11
JOB # GS1104

Appendix B

Solar Farm Improvements



REV No.	REVISION	DATE

PRINTED: 1/20/12

8minutenergy RENEWABLES

PREPARED UNDER THE DIRECT SUPERVISION OF:

JEFFREY O. LYON, R.C.E. 31,921 ENGINEER OF RECORD — DATE

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CALEXICO SOLAR FARM I PHASE A (88FT)

LOCATION CALEXICO, CA
SHEET TITLE OVERALL SITE PLAN
CLIENT 8MINUTENERGY RENEWABLES

SHEET No. 1
BY GMG
DATE 3/22/11
JOB # GS1104

Appendix C

Restoration Cost Summary

Calexico Solar Farm I Phase A (88FT)

Field No. 1 - 052-210-001 (66.2 ac)

Subsurface Tile Drainage System - Baseline	1,681	LF	$	7.65	$	12,859.65
Subsurface Tile Drainage System - Laterals	13,989	LF	$	2.25	$	31,475.25
Irrigation Ditch/Pad and Outlets/Gates/Slide Gates	2,505	LF	$	62.25	$	155,936.25
Land Leveling	66.2	ac	$	150.00	$	9,930.00
Ground Work (Subsoil/ Stubble Disc/Landplane)	66.2	ac	$	130.00	$	8,606.00
Manure Application	66.2	ac	$	75.00	$	4,965.00
Agronomic Soil Sampling	1	LS	$	800.00	$	800.00
			Total		**$**	**224,572.15**
			Cost/Ac.		**$**	**3,392.33**

Field No. 2 - 052-210-002 (North Field) (35 ac)

Subsurface Tile Drainage System - Baseline	0	LF	$	7.65	$	-
Subsurface Tile Drainage System - Laterals	0	LF	$	2.25	$	-
Irrigation Ditch/Pad and Outlets/Gates/Slide Gates	1,194	LF	$	62.25	$	74,326.50
Land Leveling	35.0	ac	$	150.00	$	5,250.00
Ground Work (Subsoil/ Stubble Disc/Landplane)	35.0	ac	$	130.00	$	4,550.00
Manure Application	35.0	ac	$	75.00	$	2,625.00
Agronomic Soil Sampling	1	LS	$	800.00	$	800.00
			Total		**$**	**87,551.50**
			Cost/Ac.		**$**	**2,501.47**

Field No. 3 - 052-210-002 (South Field) (37 ac)

Subsurface Tile Drainage System - Baseline	917	LF	$	7.65	$	7,015.05
Subsurface Tile Drainage System - Laterals	6,579	LF	$	2.25	$	14,802.75
Irrigation Ditch/Pad and Outlets/Gates/Slide Gates	1,237	LF	$	62.25	$	77,003.25
Land Leveling	37.0	ac	$	150.00	$	5,550.00
Ground Work (Subsoil/ Stubble Disc/Landplane)	37.0	ac	$	130.00	$	4,810.00
Manure Application	37.0	ac	$	75.00	$	2,775.00
Agronomic Soil Sampling	1	LS	$	800.00	$	800.00
			Total		**$**	**112,756.05**
			Cost/Ac.		**$**	**3,047.46**

Field No. 4 - 052-210-002 (East Field) (71.5 ac)

Subsurface Tile Drainage System - Baseline	1,320	LF	$	7.65	$	10,098.00
Subsurface Tile Drainage System - Laterals	14,779	LF	$	2.25	$	33,252.75
Irrigation Ditch/Pad and Outlets/Gates/Slide Gates	2,495	LF	$	62.25	$	155,313.75
Land Leveling	71.5	ac	$	150.00	$	10,725.00
Ground Work (Subsoil/ Stubble Disc/Landplane)	71.5	ac	$	130.00	$	9,295.00
Manure Application	71.5	ac	$	75.00	$	5,362.50
Agronomic Soil Sampling	1	LS	$	800.00	$	800.00
			Total		**$**	**224,847.00**
			Cost/Ac.		**$**	**3,144.71**

Field No. 5 - 052-210-015 (North Field) (68 ac)

Subsurface Tile Drainage System - Baseline	1,580	LF	$	7.65	$	12,087.00
Subsurface Tile Drainage System - Laterals	21,054	LF	$	2.25	$	47,371.50
Irrigation Ditch/Pad and Outlets/Gates/Slide Gates	2,402	LF	$	62.25	$	149,524.50
Land Leveling	68.0	ac	$	150.00	$	10,200.00
Ground Work (Subsoil/ Stubble Disc/Landplane)	68.0	ac	$	130.00	$	8,840.00
Manure Application	68.0	ac	$	75.00	$	5,100.00
Agronomic Soil Sampling	1	LS	$	800.00	$	800.00
			Total		**$**	**233,923.00**
			Cost/Ac.		**$**	**3,440.04**

Field No. 6 - 052-210-015 (South Field) (72.5 ac)

Subsurface Tile Drainage System - Baseline	4,719	LF	$	7.65	$	36,100.35
Subsurface Tile Drainage System - Laterals	33,111	LF	$	2.25	$	74,499.75
Irrigation Ditch (Common with Field No. 5)	2,543	LF	$	62.25	$	158,301.75
Land Leveling	72.5	ac	$	150.00	$	10,875.00
Ground Work (Subsoil/ Stubble Disc/Landplane)	72.5	ac	$	130.00	$	9,425.00
Manure Application	72.5	ac	$	75.00	$	5,437.50
Agronomic Soil Sampling	1	LS	$	800.00	$	800.00
			Total		**$**	**295,439.35**
			Cost/Ac.		**$**	**4,075.03**

Field No. 7 - 052-210-014 (North Field) (103.2 ac)

Subsurface Tile Drainage System - Baseline	3,914	LF	$	7.65	$	29,942.10
Subsurface Tile Drainage System - Laterals	51,846	LF	$	2.25	$	116,653.50
Irrigation Ditch/Pad and Outlets/Gates/Slide Gates	3,940	LF	$	62.25	$	245,265.00
Land Leveling	103.2	ac	$	150.00	$	15,480.00
Ground Work (Subsoil/ Stubble Disc/Landplane)	103.2	ac	$	130.00	$	13,416.00
Manure Application	103.2	ac	$	75.00	$	7,740.00
Agronomic Soil Sampling	1	LS	$	800.00	$	800.00
			Total		**$**	**429,296.60**
			Cost/Ac.		**$**	**4,159.85**

Field No. 8 - 052-210-014 (South Field) (109.4 ac)

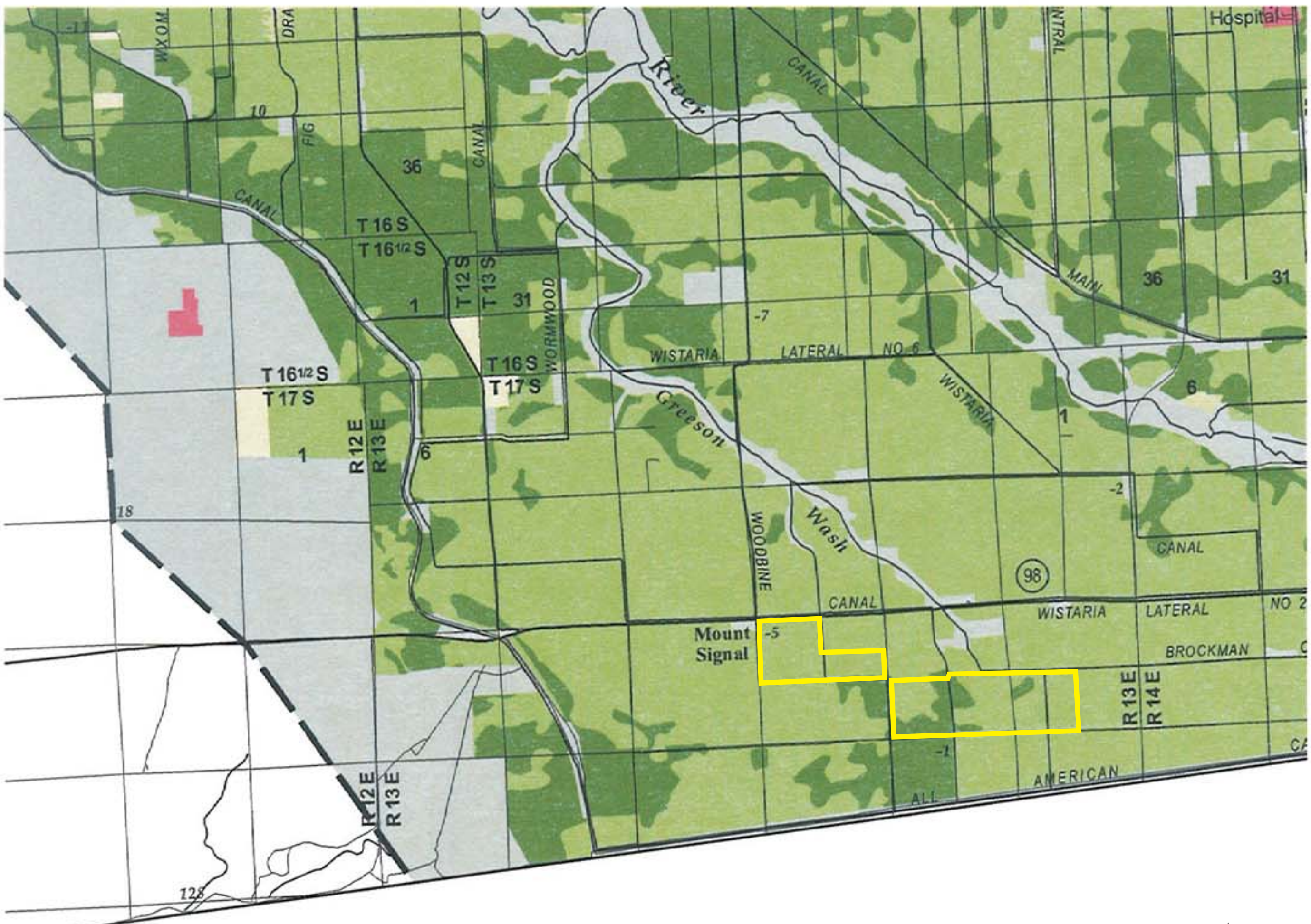
Subsurface Tile Drainage System - Baseline	3,914	LF	$	7.65	$	29,942.10
Subsurface Tile Drainage System - Laterals	51,846	LF	$	2.25	$	116,653.50
Irrigation Ditch (Common with Field No. 7)	4,010	LF	$	62.25	$	249,622.50
Land Leveling	109.4	ac	$	150.00	$	16,410.00
Ground Work (Subsoil/ Stubble Disc/Landplane)	109.4	ac	$	130.00	$	14,222.00
Manure Application	109.4	ac	$	75.00	$	8,205.00
Agronomic Soil Sampling	1	LS	$	800.00	$	800.00
			Total		**$**	**435,855.10**
			Cost/Ac.		**$**	**3,984.05**

Field No. 9 - 052-210-014 (East Field) (70.8 ac)

Subsurface Tile Drainage System - Baseline	2,446	LF	$	7.65	$	18,711.90
Subsurface Tile Drainage System - Laterals	43,202	LF	$	2.25	$	97,204.50
Irrigation Ditch/Pad and Outlets/Gates/Slide Gates	2,536	LF	$	62.25	$	157,866.00
Land Leveling	70.8	ac	$	150.00	$	10,620.00
Ground Work (Subsoil/ Stubble Disc/Landplane)	70.8	ac	$	130.00	$	9,204.00
Manure Application	70.8	ac	$	75.00	$	5,310.00
Agronomic Soil Sampling	1	LS	$	800.00	$	800.00
			Total		**$**	**299,716.40**
			Cost/Ac.		**$**	**4,233.28**
			TOTAL		**$**	**2,343,957.15**

Appendix D

Prime Farmland and Farmland of Statewide Importance



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Project No.: GS1104

Calexico Solar Farm I Phase A
Imperial County Important Farmland 2010

Plate
D-1

PRIME FARMLAND - 195,589 acres

PRIME FARMLAND HAS THE BEST COMBINATION OF PHYSICAL AND CHEMICAL FEATURES ABLE TO SUSTAIN LONG-TERM AGRICULTURAL PRODUCTION. THIS LAND HAS THE SOIL QUALITY, GROWING SEASON, AND MOISTURE SUPPLY NEEDED TO PRODUCE SUSTAINED HIGH YIELDS. LAND MUST HAVE BEEN USED FOR IRRIGATED AGRICULTURAL PRODUCTION AT SOME TIME DURING THE FOUR YEARS PRIOR TO THE MAPPING DATE.

FARMLAND OF STATEWIDE IMPORTANCE - 311,048 acres

FARMLAND OF STATEWIDE IMPORTANCE IS SIMILAR TO PRIME FARMLAND BUT WITH MINOR SHORTCOMINGS, SUCH AS GREATER SLOPES OR LESS ABILITY TO STORE SOIL MOISTURE. LAND MUST HAVE BEEN USED FOR IRRIGATED AGRICULTURAL PRODUCTION AT SOME TIME DURING THE FOUR YEARS PRIOR TO THE MAPPING DATE.

UNIQUE FARMLAND - 2,196 acres

UNIQUE FARMLAND CONSISTS OF LESSER QUALITY SOILS USED FOR THE PRODUCTION OF THE STATE'S LEADING AGRICULTURAL CROPS. THIS LAND IS USUALLY IRRIGATED, BUT MAY INCLUDE NONIRRIGATED ORCHARDS OR VINEYARDS AS FOUND IN SOME CLIMATIC ZONES IN CALIFORNIA. LAND MUST HAVE BEEN CROPPED AT SOME TIME DURING THE FOUR YEARS PRIOR TO THE MAPPING DATE.

FARMLAND OF LOCAL IMPORTANCE - 32,109 acres

UNIRRIGATED AND UNCULTIVATED LANDS WITH PRIME AND STATEWIDE SOILS.

URBAN AND BUILT-UP LAND - 27,709 acres

URBAN AND BUILT-UP LAND IS OCCUPIED BY STRUCTURES WITH A BUILDING DENSITY OF AT LEAST 1 UNIT TO 1.5 ACRES, OR APPROXIMATELY 6 STRUCTURES TO A 10-ACRE PARCEL. COMMON EXAMPLES INCLUDE RESIDENTIAL, INDUSTRIAL, COMMERCIAL, INSTITUTIONAL FACILITIES, CEMETERIES, AIRPORTS, GOLF COURSES, SANITARY LANDFILLS, SEWAGE TREATMENT, AND WATER CONTROL STRUCTURES.

OTHER LAND - 458,829 acres

OTHER LAND IS LAND NOT INCLUDED IN ANY OTHER MAPPING CATEGORY. COMMON EXAMPLES INCLUDE LOW DENSITY RURAL DEVELOPMENTS, BRUSH, TIMBER, WETLAND, AND RIPARIAN AREAS NOT SUITABLE FOR LIVESTOCK GRAZING, CONFINED LIVESTOCK, POULTRY, OR AQUACULTURE FACILITIES, STRIP MINES, BORROW PITS, AND WATER BODIES SMALLER THAN 40 ACRES. VACANT AND NONAGRICULTURAL LAND SURROUNDED ON ALL SIDES BY URBAN DEVELOPMENT AND GREATER THAN 40 ACRES IS MAPPED AS OTHER LAND.

WATER - 1,029 acres

PERENNIAL WATER BODIES WITH AN EXTENT OF AT LEAST 40 ACRES.

(All acreages are totals for Imperial County)

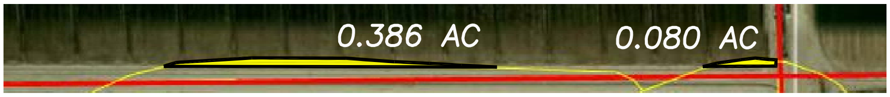
GS Lyon **Project No.: GS1104**	**Calexico Solar Farm I Phase A** **I.C. Important Farmland 2010 Legend**	**Plate** **D-2**

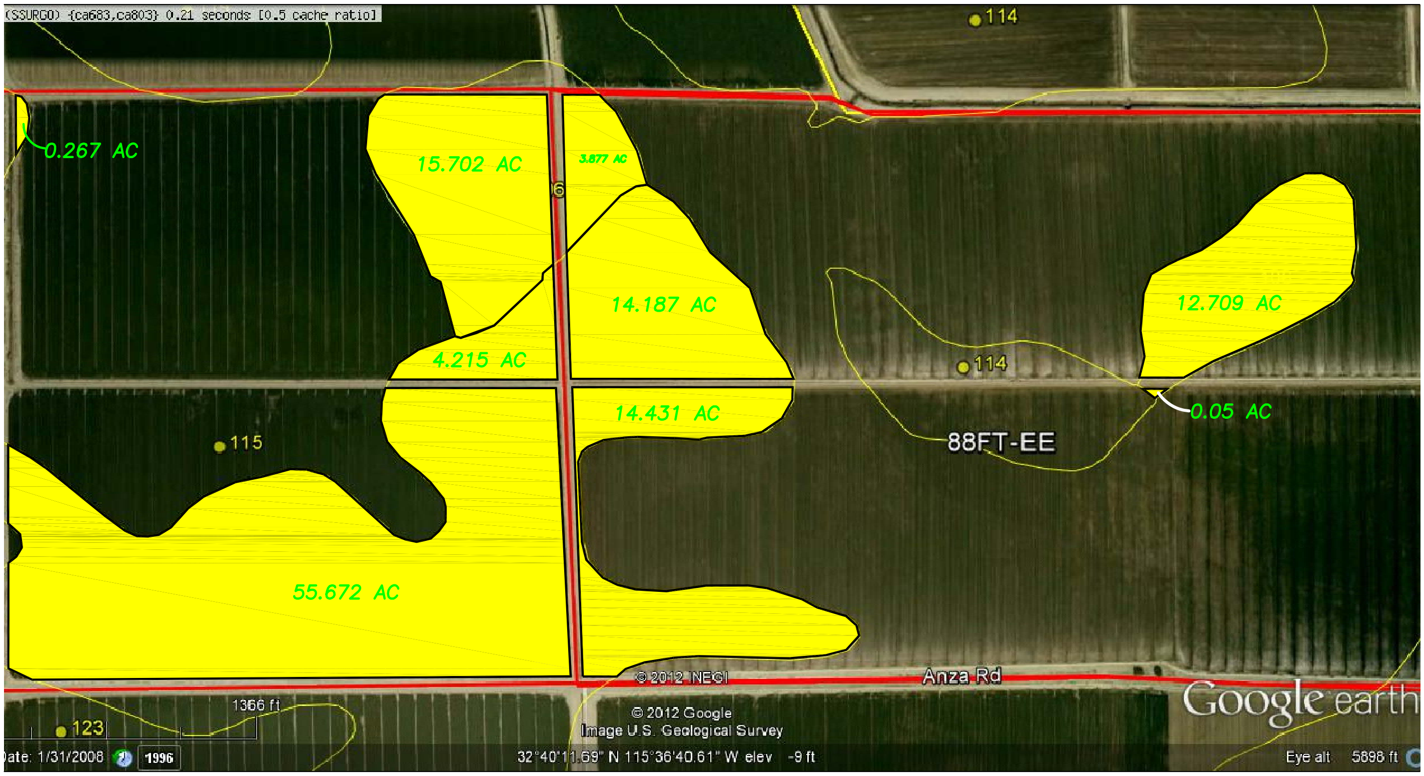
GS Lyon

Project No.: GS1104

Calexico Solar Farm I Phase A
Soil Survey Map

Plate
D-3





Prime Farmland Area - 121.57 Acres

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GS Lyon

Project No.: GS1023

Calexico Solar Farm I (88FT Phase A)
Prime Farmland Area

Plate
D-4

California Department of Conservation

FARMLAND MAPPING AND MONITORING PROGRAM

SOIL CANDIDATE LISTING

for

PRIME FARMLAND AND FARMLAND OF STATEWIDE IMPORTANCE

IMPERIAL COUNTY

U.S. Department of Agriculture, Natural Resources Conservation Service, soil surveys for Imperial County include:

Soil Survey of Imperial County, California, Imperial Valley Area, October 1981

Soil Survey of Yuma-Wellton Area: Parts of Yuma County, Arizona, and Imperial County, California, December 1980

Soil Survey of Palo Verde Area, California, September 1974

Beginning in 2002, SSURGO digital soil information has been incorporated into the Imperial County Important Farmland Map. Prior versions of the map have not been modified.

The SSURGO data includes Imperial County, Imperial Valley Area (published 3/22/2004), Yuma-Wellton Area (published 08/11/2004) and Palo Verde Area (published 4/20/2004). The digital surveys contain additional soil units beyond those published in the original paper surveys. Soils on the Prime and Statewide lists that only occur in the SSURGO data are appended to this list in italics.

For more information on the NRCS SSURGO data, please see: http://soils.usda.gov/survey/geography/ssurgo/

7/12/95, updated 06/02/2010

IMPERIAL COUNTY
PRIME FARMLAND SOILS

U.S. DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE
DAVIS, CALIFORNIA 95616

THESE SOIL MAPPING UNITS MEET THE CRITERIA FOR PRIME FARMLAND AS OUTLINED IN THE U.S. DEPARTMENT OF AGRICULTURE'S LAND INVENTORY AND MONITORING (LIM) PROJECT FOR THE IMPERIAL VALLEY AREA, YUMA-WELLTON AREA (WINTERHAVEN), AND PALO VERDE AREA SOIL SURVEYS.

IMPERIAL VALLEY AREA

Symbol	Name
100	Antho loamy fine sand
101*	Antho-Superstition complex
105	Glenbar clay loam
106[#]	Glenbar clay loam, wet
108	Holtville loam
109	Holtville silty clay
110[#]	Holtville silty clay, wet
117	Indio loam
118[#]	Indio loam, wet
119	Indio-Vint complex
120	Laveen loam
122[#]	Meloland very fine sandy loam, wet
123[#]	Meloland and Holtville loams, wet
137	Rositas silt loam, 0 to 2 percent slopes
139*	Superstition loamy fine sand
142[#]	Vint loamy very fine sand, wet

IMPERIAL VALLEY AREA Continued

Symbol	Name
143	Vint fine sandy loam
144[#]	Vint and Indio very fine sandy loams, wet

[*] Prime Farmland is managed so that in all horizons within a depth of 40 inches (1 meter), during part of each year the conductivity of the saturation extract is less than 4 mmhos/cm and the exchangeable sodium percentage (ESP) is less than 15.

[#] Prime Farmland if drained

Note: Soils 107 (Glenbar complex), 132 (Rositas fine sand, 0 to 2 percent slopes), 133 (Rositas fine sand, 2 to 5 percent slopes), 135 (Rositas fine sand, wet, 0 to 2 percent slopes), 136 (Rositas loamy fine sand, 0 to 2 percent slopes) and 138 (Rositas and Superstition loamy fine sands) have been moved from the Prime Farmland list to the Farmland of Statewide Importance list per NRCS in 1995.

YUMA-WELLTON AREA (Imperial County portion)

Symbol	Name
8#	Gadsden clay
10#	Glenbar silty clay loam
12#	Holtville clay
13#	Indio silt loam
17	Kofa clay
24	Ripley silt loam

Prime Farmland if reclaimed of excess salts and sodium.

Notes: *Soil 8* (Gadsden clay) was moved from the Farmland of Statewide Importance list to the Prime Farmland list per AZ NRCS letter of September 27, 2004.
Soil 19 (Lagunita silt loam) was removed from the Prime Farmland list per AZ NRCS letter of September 27, 2004.

<u>PALO VERDE AREA</u>

Symbol	Name
Ac	Aco gravelly loamy sand
Af	Aco sandy loam
Gb	Gilman fine sandy loam
Gc	Gilman silty clay loam
Ge	Glenbar silty clay loam
Hb*	Holtville fine sandy loam
Hc*	Holtville silty clay
Id*	Indio very fine sandy loam
Ie*	Indio silty clay loam
Oc*	Orita fine sand
Og*	Orita gravelly loamy sand
Or*	Orita gravelly fine sandy loam
Rb*	Ripley very fine sandy loam
Rc*	Ripley silty clay loam
RoA	Rositas fine sand, 0 to 2 percent slopes
RoB	Rositas fine sand, 2 to 9 percent slopes
RtA	Rositas silty clay loam, 0 to 2 percent slopes
9#	*Gadsden clay*

PALO VERDE AREA Continued

Symbol	Name
9A#	*Gadsden loam*
36#	*Indio silt loam*

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* Prime Farmland if reclaimed of excess salts and sodium.

Prime Farmland if either protected from flooding or not frequently flooded during the growing season.

U.S. DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE
DAVIS, CALIFORNIA 95616

THESE SOIL MAPPING UNITS MEET THE CRITERIA FOR FARMLAND OF STATEWIDE IMPORTANCE AS OUTLINED IN THE U.S. DEPARTMENT OF AGRICULTURE'S LAND INVENTORY AND MONITORING (LIM) PROJECT FOR THE IMPERIAL VALLEY AREA, YUMA-WELLTON AREA (WINTERHAVEN), AND PALO VERDE AREA SOIL SURVEYS.

IMPERIAL VALLEY AREA

Symbol	Name
107	Glenbar complex
111	Holtville-Imperial silty clay loams
112	Imperial silty clay
113	Imperial silty clay, saline
114	Imperial silty clay, wet
115	Imperial-Glenbar silty clay loams, wet, 0 to 2 percent slopes
116	Imperial-Glenbar silty clay loams, 2 to 5 percent slopes
121	Meloland fine sand
124	Niland gravelly sand
125	Niland gravelly sand, wet
126	Niland fine sand
127	Niland loamy fine sand
128	Niland-Imperial complex, wet
130	Rositas sand, 0 to 2 percent slopes

IMPERIAL VALLEY AREA Continued

Symbol	Name
131	Rositas sand, 2 to 5 percent slopes
132	Rositas fine sand, 0 to 2 percent slopes
133	Rositas fine sand, 2 to 9 percent slopes
135	Rositas fine sand, wet, 0 to 2 percent slopes
136	Rositas loamy fine sand, 0 to 2 percent slopes
138	Rositas-Superstition loamy fine sands

YUMA-WELLTON AREA (Imperial County Portion)

Symbol	Name
14*	Indio silt loam, saline
16*	Indio-Lagunita-Ripley complex
18*	Lagunita loamy sand
25*	Rositas sand

* Due to insufficient documentation of qualifying criteria, these units were dropped from the Farmland of Statewide Importance list per the Arizona office of NRCS (September 27, 2004).

Note: *Soil 8* (Gadsden Clay) was moved to the Prime Farmland list from the Farmland of Statewide Importance list per AZ NRCS letter of September 27, 2004.

PALO VERDE AREA

Symbol	Name
Co	Cibola fine sandy loam
Cs	Cibola silty clay loam
Ib	Imperial fine sandy loam
Ic	Imperial silty clay
Md	Meloland fine sandy loam
Me	Meloland silty clay loam
RsA	Rositas gravelly loamy sand, 0 to 2 percent slopes

Appendix E

Project Description

Calexico Solar Farm I Phases A and B

PROJECT DESCRIPTION

88FT 8ME, LLC
Sponsor: 8minutenergy Renewables LLC
10100 Santa Monica Boulevard, Suite 300
Los Angeles, CA 90067
(213) 281-9771

With Technical Assistance By:
GS Lyon Consultants, Inc.
780 North 4th Street
El Centro, CA 92243
(760) 337-1100

July 2011

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PROJECT INFORMATION

Project Name: Calexico Solar Farm I

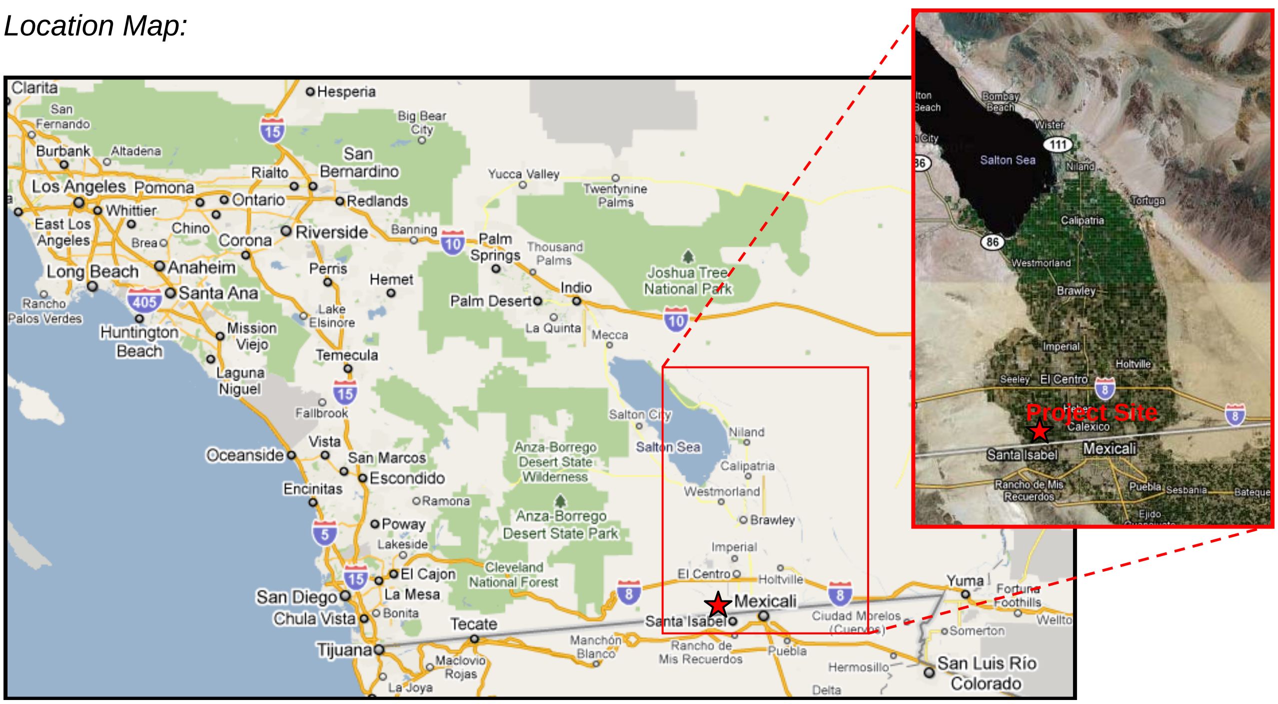
General Location: The project will be located approximately four miles west of Calexico, California in southern Imperial County. The project comprises several agricultural parcels totaling approximately 1,300 acres, generally located between State Route 98 to the north and the US-Mexico border to the south, and between a private road to the west (½ mile east of Pullman Rd) and a private road to the east (½ west of Ferrell Road). The land used by the project is owned by several land owners. Agricultural lands lie to the immediate north, south, east, and west of the project, with the exception of isolated residential and/or commercial structures.

Calexico Solar Farm I comprises two phases (Phase A and Phase B), each requesting approval of a separate CUP.

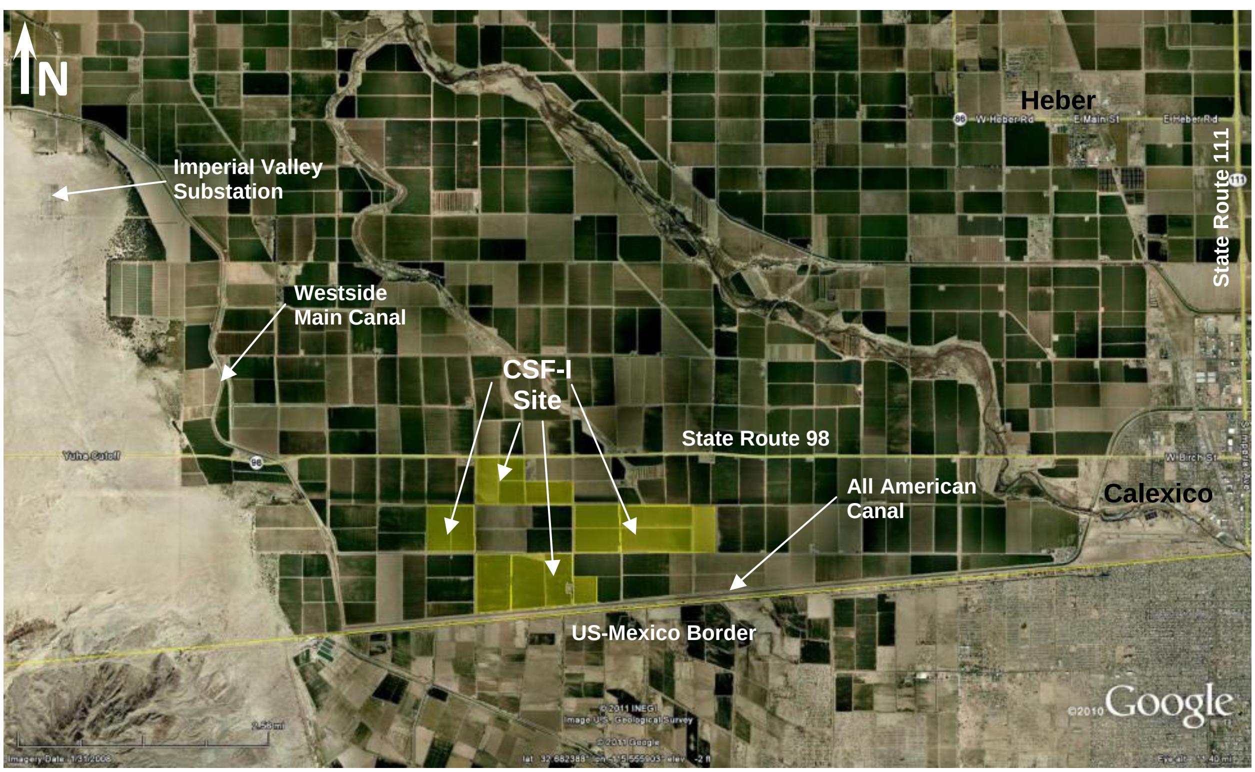
Assessor's Parcel Numbers:

- Phase A (~720 AC): 052-210-001, 052-210-002, 052-210-015, 052-210-14
- Phase B (~610 AC): 052-190-011, 052-210-037, 052-210-038, 052-210-039, 052-210-018

Location Map:



Vicinity Map:



DESCRIPTION OF PROPOSED PROJECT

88FT 8ME, LLC and 8minutenergy Renewables LLC (the "Applicant") are seeking approval of two Conditional Use Permits (CUP) from Imperial County for the development of an up to 200 MW Calexico Solar Farm I ("CSF-I") solar farm located west of Calexico (see "Vicinity Map" above). The Applicant plans to develop this project in two phases: Phase A and Phase B, each with a separate CUP, and each intended to generate up to 100 MW. The Applicant further intends for each phase to have its own O&M building and onsite substation.

Project Phases

An interconnection application process for the entire CSF-I project with the California Independent System Operator (CAISO) has been initiated, and a queue position with CAISO has been secured for a total of 200 MW, which will be shared by the two phases of the CSF-I project. The Applicant intends for each CUP application of the project's two phases to produce up to 100 MW. However, each phase and CUP may produce up to 200 MW if the other phase and CUP either does not get built at all or does not get built for its full 100 MW share. The total output of both CUPs and phases combined will not exceed a total of 200 MW in any scenario.

The land requirements of a solar farm can vary significantly depending on the mounting structures used (e.g., fixed-tilt vs. tracking) and the efficiency of the modules selected. In general, on a per-MW basis, less land is required for higher efficiency modules (which may not be available cost effectively at the time of construction) with fixed-tilt mounts than for lower efficiency modules with tracking mounts. Thus, by using high efficiency modules and fixed-tilt mounts, a single phase and CUP of CSF-I could accommodate up to 200 MW itself. It is entirely possible that each phase and CUP ends up with a mix of fixed tilt and/or tracking mounts and different module efficiencies.

Therefore, the Applicant requests the approval of two CUPs for the CSF-I project: one CUP for Phase A, and a second CUP for Phase B. The CUP term requested for each phase and CUP is 40 years. The Applicant proposes to construct, own, operate, and fund the CSF-I project. The Applicant expects both phases of the CSF-I project to produce power by 2013 to 2014.

CSF-I's interconnection will occur at the 230 kV side of the SDG&E Imperial Valley (IV) Substation, located approximately 5 miles northwest of the project site. The Applicant intends to interconnect via 230 kV transmission facilities shared with one or more solar projects in the vicinity; several suitable transmission facilities are currently planned in CSF-I's immediate area. CSF-I intends to transfer electrical power from both of its onsite substations (one each on Phase A and Phase B land) to IV Substation via an offsite shared substation and transmission facility constructed, owned, operated, and funded by Mount Signal Solar Farm I (82LV 8me, LLC), which has a Right-of-Way (ROW) application being processed by the Bureau of Land Management (BLM). Alternatively, CSF-I may:

1. Build a single onsite substation located in one of CSF-I's phases, which would collect power generated by both phases of CSF-I and transmit that power to IV Substation via the method described above; or

2. "Host" a shared substation onsite in one of CSF-I's phases, which c/would receive power from the other phase as well as from another nearby solar project(s). Power would then be transmitted to IV Substation via shared transmission facilities constructed, owned, operated, and funded by a separate legal entity; or

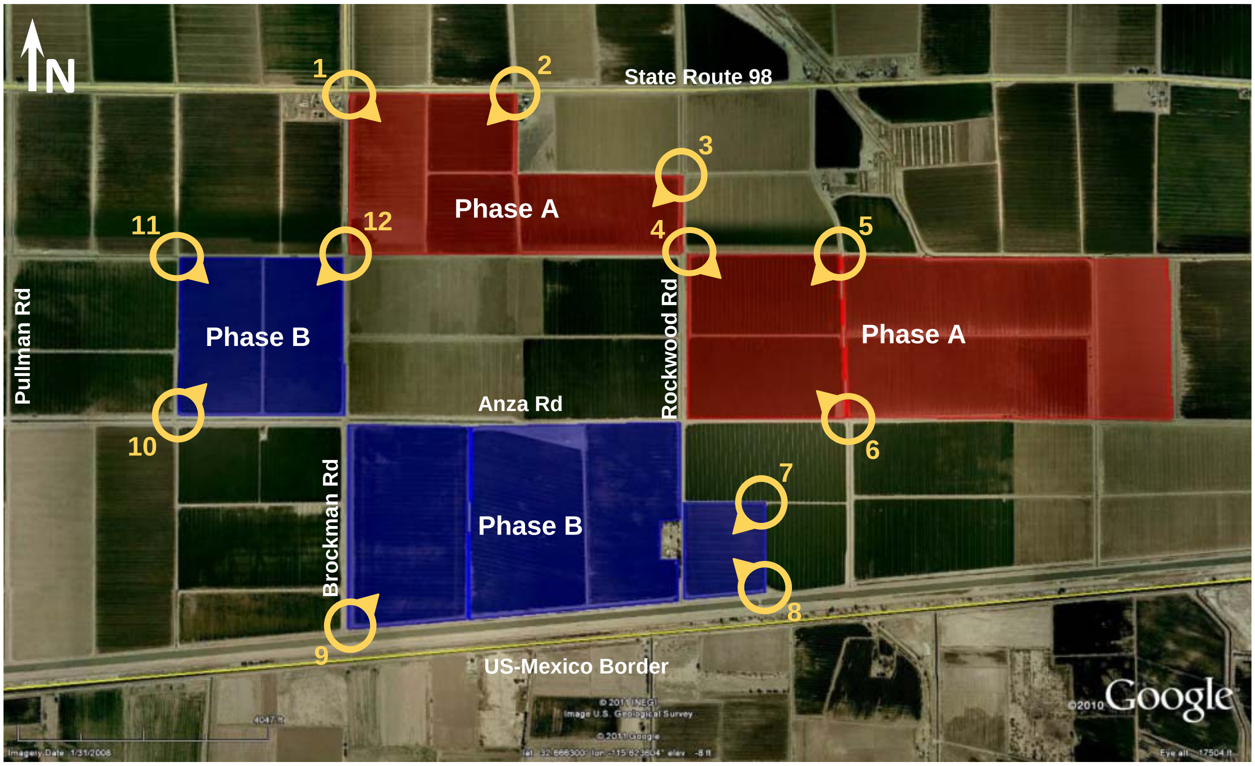
3. Utilize the transmission, substation, and/or O&M facilities of another legal entity(ies) other than those of Mount Signal Solar Farm I, such as another neighboring solar project or a Special Purpose Vehicle (SPV) created to accommodate multiple solar projects' shared transmission, substation, and/or O&M facilities.

In the above alternative scenarios, CSF-I's onsite transmission, substation, and/or O&M facilities c/would be reduced or eliminated, and those areas c/would instead by covered with solar panels.

Any necessary authorization or agreement to share facilities would be obtained from the appropriate legal entity(ies) prior to CSF-I's construction.

The Applicant has considered the following in its selection of the CSF-I site for detailed evaluation:

- Land availability (approximately 1,300 acres);
- Zoning (the CSF-I will be sited on land currently zoned "A-2" General Agriculture, "A-2-R" General Agriculture Rural Zone, and "A3" Heavy Agriculture);
- Minimal environmental consequences (CSF-I will be located on disturbed land currently used for agriculture);
- Water availability (no water wells required);
- Primarily (75%+) low production agricultural land (Farmland of Statewide Importance);
- Long-term land lease (25-year lease commencing with entitlements with a 15-year extension for a total of 40 years)



Map of CSF-I Photo Locations

#1 Looking SE

#2 Looking SW

#3 Looking SW

#4 Looking SE

#5 Looking SW

#6 Looking NW

#7 Looking SW

#8 Looking NW

#9 Looking NE

#10 Looking NE

#11 Looking SE

#12 Looking SW

Up to twelve (12) full time employees will operate the entire CSF-I project (split roughly evenly between phases, and between daytime and nighttime shifts). Typically, up to six (6) staff total for both phases combined will work during the day shift (sunrise to sunset), and the remainder during the night shifts and weekend. As noted earlier, it is possible that one phase of CSF-I would simply feed its power to the other phase. In that scenario, CSF-I's phases would share personnel, thereby reducing the staff required for CSF-I as a whole to a total of approximately ten (10) staff. It is also possible that CSF-I would share another legal entity's O&M facilities. In that scenario, CSF-I c/would also share personnel with that legal entity, thereby reducing or eliminating the onsite staff required for CSF-I.

CSF-I will export and sell the generated electricity via the CAISO grid. After the useful life of the project (up to 40 years) the panels will be disassembled from the steel mounting frames and the site restored to its pre-development condition. CSF-I as a whole is planned to generate up to 200 MW AC of electricity during peak daylight hours (up to 100 MW planned for each phase, or up to 200 MW if technology permits or is available; total for CSF-I as a whole would not exceed 200 MW in either case).

CSF-I will utilize non-reflective photovoltaic (PV) panels (or modules) to convert sunlight directly into electricity. Individual panels will be installed on either fixed-tilt or tracker mount systems, which will stand up to 15 feet high (depending on the mount) while either flat or tilted up to approximately 40 degrees from horizontal. The solar array field will be arranged in grids, and each grid will include an inverter container and a pad-mounted transformer near the center. CSF-I will also have several electrical control containers throughout the project. CSF-I as a whole will require the installation of up to 1.6 million photovoltaic panels to generate up to 200 MW AC (direct current ("DC") nameplate capacity of approximately 264 MW DC). The initial energy production of CSF-I as a whole will be up to approximately 480,000 MWh per year, sufficient to power over 68,000 homes and displacing over 270,000 tons of CO_2 emissions per year when compared to a gas-fired power plant or 540,000 tons when compared to a coal-fired power plant. This displacement of CO_2 emissions is equivalent to planting approximately 11 to 22 million trees or removing approximately 50,000 to 100,000 cars from the roads, respectively.

Fixed-tilt solar panels

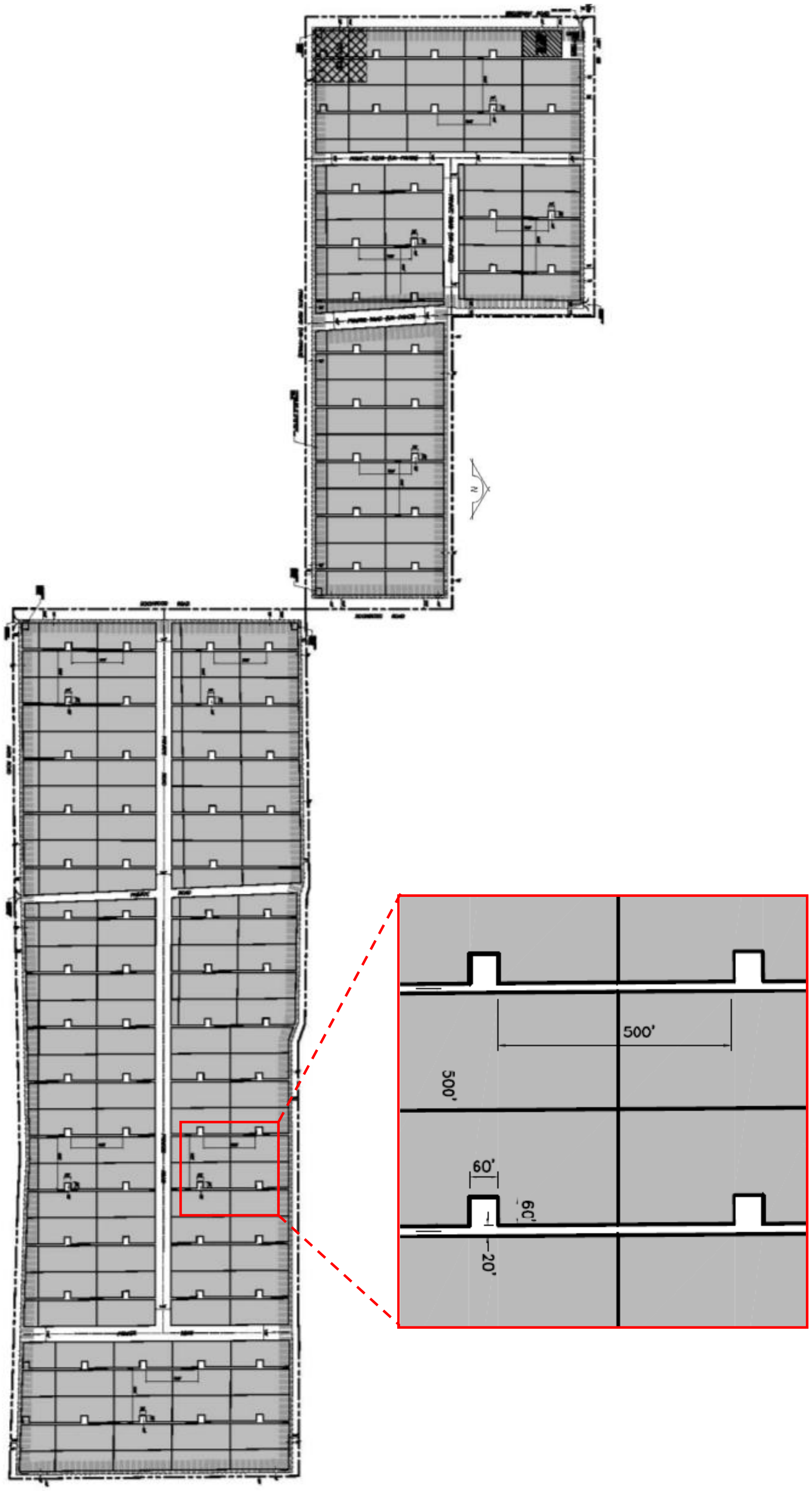
Typical fixed-tilt solar panel rows

Typical single-axis tracking solar panels

Typical single-axis tracking solar panel rows

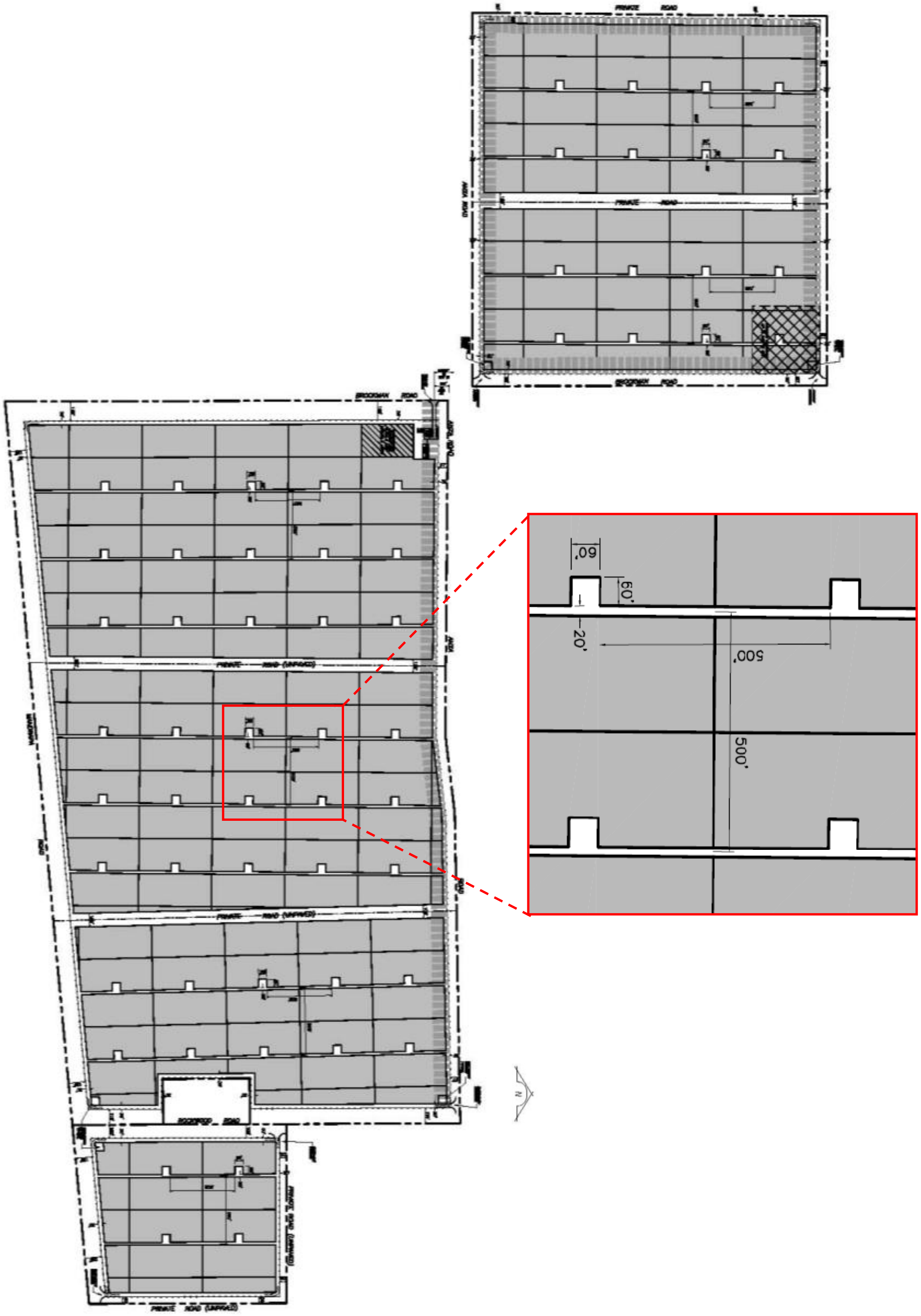
Typical single-axis tracking solar panel rows

Typical azimuth tracking solar panel rows



Project Site Layout – Phase A[1]

[1] See Appendix for enlarged version



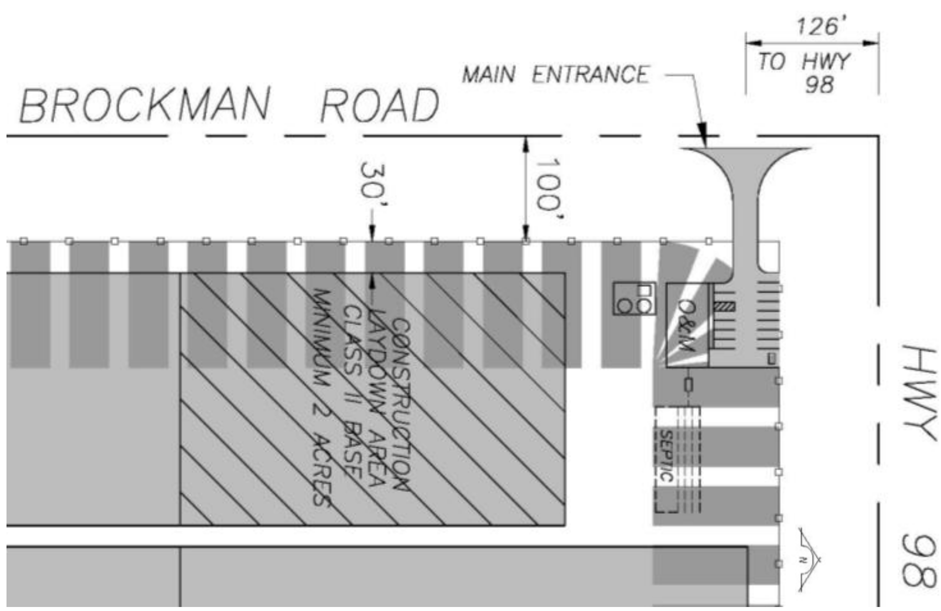
Project Site Layout – Phase B[1]

[1] See Appendix for enlarged version

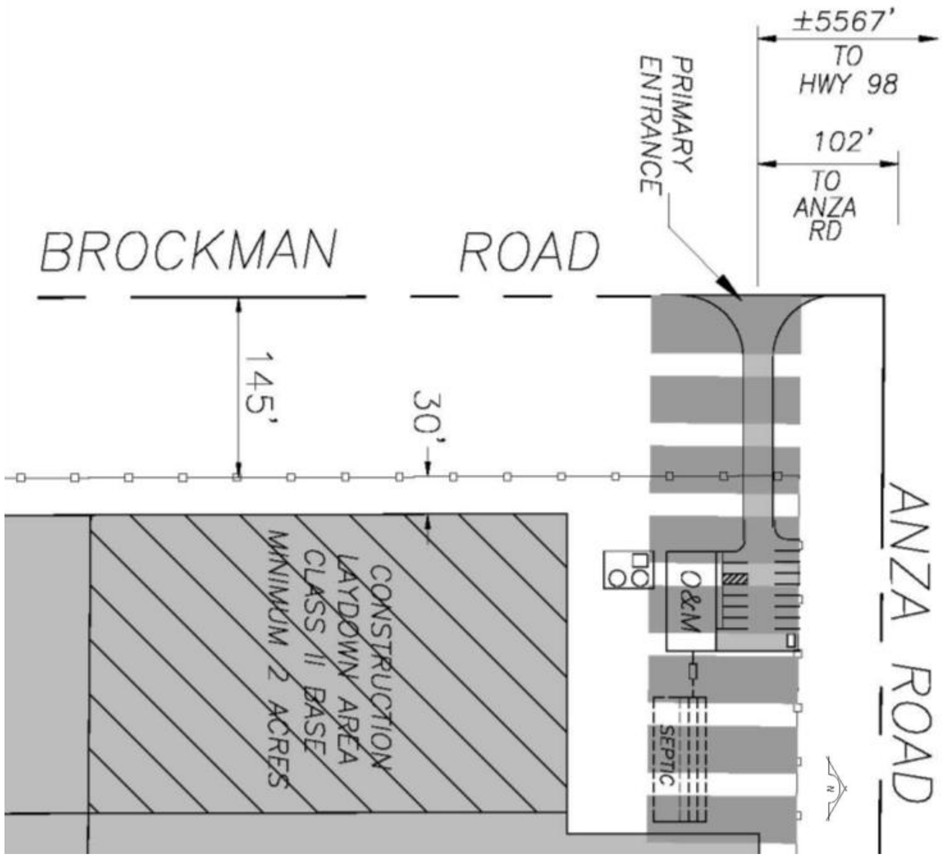
The Applicant proposes to situate the solar array on agricultural lands generally located between State Route 98 to the north and the US-Mexico border to the south, and between a private road to the west (½ mile east of Pullman Rd) and a private road to the east (½ west of Ferrell Road). Any Imperial Irrigation District (IID) irrigation canals and drains will remain in place, including maintenance access roads as per IID easements.

The Applicant intends for each phase of CSF-I to have a separate operations and maintenance ("O&M") building (up to approximately 320 square feet each, or 40' x 80' each), with associated parking, which will be constructed near the southeast corner of Brockman Road and SR-98 for Phase A and the southeast corner of Brockman Road and Anza Road for Phase B (see Site Plan in the Appendix). The O&M buildings will be steel framed, with metal siding and roof panels, painted to match the surrounding setting (desert sand). Each O&M building site will have a septic tank and leach field for wastewater disposal. A water system and small water treatment plant will be placed at each O&M building to provide onsite de-ionized water for panel washing.

Panel washing requires about one quart of water for each panel per month. It is estimated that water demand from the IID canal for panel washing and domestic use will not exceed 80 acre-feet per year for CSF-I as a whole (split between phases roughly in proportion to their respective acreages). A total of approximately 20,000 to 70,000 gallons of water for CSF-I as a whole (split between phases roughly in proportion to their respective acreages) will be stored in steel tank(s) placed above ground onsite at the water treatment area, under a metal shade structure. 10,000 gallons of water for each O&M building will be exclusively dedicated for O&M firefighting purposes, i.e., to protect the O&M building only. The Applicant intends to also order and obtain a portion of the landlords' agricultural water allocations (roughly 7,000 acre-feet) from the IID to irrigate and maintain a cover crop (saltgrass or similar) on the disturbed portions of the CSF-I site; alternatively or in addition, a soil stabilizer may also be used. If a cover crop is used onsite, it is estimated that water usage to maintain that cover crop would be up to approximately 350 acre-feet per year (split between phases roughly in proportion to their respective acreages).



Operations and Maintenance (O&M) Building Area – Phase A



Operations and Maintenance (O&M) Building Area – Phase B

Access to the CSF-I is via existing paved roads (SR-98 and Brockman Road). The site will be enclosed with a low voltage, 8-foot high enhanced security fence with perimeter landscaping along public roads. The fencing will be screened with neutral colored slats (or similar) along public roads. The fence and landscaping would largely screen the project from view and beautify the project's frontages to ensure that the project would not adversely impact scenic resources or the visual character of the site and its surroundings. Each O&M building's parking lot and access driveway from will be paved (not curbed). The roads, driveways and parking lots will meet the Department of Public Works and Fire/OES Standards as well as those of the Air Pollution Control District. Alternatively, CSF-I may share the cost of a Wildland Type II (or similar) fire truck with other nearby solar projects to permit the fire department access throughout the site. Parking spaces and walkways will be concreted to meet all California Accessibility Regulations.

The solar array areas will have low lying grass and/or a soil stabilizer to control dust and storm water erosion. A small (48"x 96") metal sign will be mounted at the entrances to CSF-I that identifies the project.

As noted earlier, it is possible that one phase of CSF-I would simply feed its power to the other phase. In that scenario, CSF-I's phases would share O&M facilities and would therefore require only one set of O&M facilities (O&M building with associated parking area, water tank(s), dedicated 10,000 gallons of fire-fighting water to protect the O&M building, etc.). The other O&M

building area would instead be covered by solar panels. It is also possible that CSF-I would share another legal entity's O&M facilities. In that scenario, CSF-I's own onsite O&M facility needs c/would therefore be reduced or eliminated, and any unused O&M building area depicted in the Site Layout c/would instead be covered by solar panels.

TECHNICAL STUDIES[1]

Hazardous Materials (Phase I Environmental Site Assessment)

A Phase I Environmental Site Assessment was completed for the CSF-I site by GS Lyon Consultants, Inc. in July 2011. The assessment did not reveal any Recognized Environmental Conditions (RECs) in connection with the property.

A technical memo noted that developing the project in more than one phase does not change the conclusions reached.

Geotechnical and GeoHazards Study

A geologic hazards survey was completed for the CSF-I site by Landmark Consultants, Inc. (El Centro, CA) in April 2011. No geologic hazards exist on or within the near vicinity of the site.

A technical memo noted that developing the project in more than one phase does not change the conclusions reached.

Transportation Impact Analysis

In July 2011, Linscott, Law & Greenspan, Engineers completed a Traffic Impact Analysis to assess the impact of the construction and operation of the solar farm to the roadways and intersections that will be utilized by the Project. The study estimated traffic volumes, including projected construction and operations traffic, would remain below the acceptable traffic volume thresholds identified by the County.

Visualization Study

In July 2011, Modative completed a visualization study to determine the aesthetic impacts of the proposed solar farm to the surrounding area. As shown in the visualization, the project will not damage any scenic resources or have a significant impact to the visual character of the site and its surroundings.

Glare Analysis for Ground Traffic

In July 2011, Good Company completed a reflectivity study to assess the project's potential for glare along nearby traffic corridors. The study concluded that the panels' orientation for either fixed-tilt or single-axis tracking solar panels results in angles of reflection well above the built environment and nearby traffic corridors. At the project's proposed perimeter fence, which lies 30 feet from the first solar panels, the minimum height of the reflection is already over 24 feet. At farther distances, the height of reflection is higher.

Glare Analysis for Air Traffic

In April 2011, Aztec Engineering completed a reflectivity study to assess the project's potential for glare and glint affecting air traffic to and from Calexico Airport. The study concluded that neither fixed-tilt nor tracking solar panels at CSF-I will have any relevant effect for airplanes

[1] See appendix for technical studies and reports

landing at or taking off from the airport. In the few days in the year when there is some glint produced by the project's solar panels, airplanes will also be directly facing the sun (which will render the glint effect negligible), so the panels will not have a relevant effect on airplanes' visibility, nor deteriorate the actual approaching or launching flight conditions.

Biological Survey

In May 2011, Barrett's Biological Surveys (El Centro, CA) completed a Biological Resources Technical Report for the CSF-I site. Three (3) burrowing owls and two (2) burrows were observed onsite on Phase A land. Twenty-four (24) burrowing owls and twenty-six (26) burrows were found in the buffer zone of CSF-I, which includes IID canals, drains, and roads. Of these, nineteen (19) owls and twenty-three (23) burrows were found in the buffer zone of CSF-I Phase A, while five (5) owls and three (3) burrows were found in the buffer zone of CSF-I Phase B. A cover crop could be maintained onsite, which would provide a foraging habitat for the burrowing owls.

Cultural Analysis

In July 2011, AECOM (formerly EDAW) completed a cultural literature review of the CSF-I project site and a one-mile radius around the site. A records search and literature review identified one (1) cultural resource recorded within one mile of CSF-I Phase B (but not in the project area itself): segments of the All-American Canal.

DESCRIPTION OF THE CSF-I ARRAY

The Applicant estimates that CSF-I will utilize approximately 800,000 to 1.6 million PV panels (roughly half allocated to each phase), depending on the power rating of the panels procured; this range may change somewhat as PV technology continues to change and improve. These panels will be mounted on frameworks made of galvanized steel or aluminum in continuous rows of up to 500 feet in length. The arrays are grouped to create grids of up to 500' x 500' (typ), with inverter modules and a transformer near the center of each grid. The grids produce approximately 1.1 MW to 1.4 MW direct electrical current (DC), which is converted to alternating electrical current (AC) at the inverter module. Each grid's inverter modules and transformer will be housed within an up to roughly 160 square foot container or similar structure. CSF-I will also have several electrical control containers which would look similar to inverter containers.

Typical Inverter Container

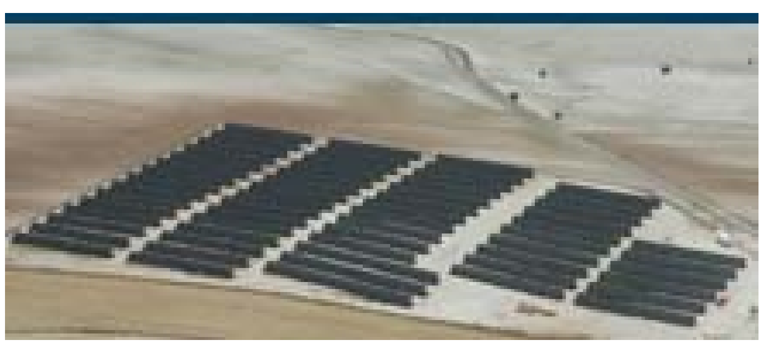
The approximate 20 kV to 70 kV output from the transformer will be transferred to each phase of CSF-I's respective onsite electrical substation (one substation is planned for each phase), which will step up the voltage to a maximum of 230 kV. The power will then be transferred to the Imperial Valley Substation using one of the methods described earlier.

Each onsite substation will be fed via buried electrical conduits, electrical conductor wires, and/or up to a maximum of 230 kV overhead electrical transmission lines that run along the CSF-I property line, roads, or parcel boundaries in some cases. Each onsite substation will occupy an area of up to 500' x 500', located in the northeast corner of Brockman Road and a private road (½ mile south of SR-98) for Phase A and the southwest corner of that same intersection for Phase B.

As noted earlier, it is possible that one phase of CSF-I would simply feed its power to the other phase; this would occur via electrical transmission facilities described above. In that scenario, CSF-I's phases would share a substation designed to accommodate both phases. The other phase would therefore not require its own substation, and this area would instead be covered by solar panels. It is also possible that CSF-I would share facilities with one or more separate legal entities. In such a scenario, CSF-I c/would either "host" a shared substation located onsite or transmit its power to a shared substation located offsite. If an offsite substation is used, the potential CSF-I onsite substation locations depicted in the Site Layout (see Appendix) c/would instead be covered by solar panels.

An up to 230 kV transmission line designed to interconnect CSF-I with other nearby solar projects may traverse CSF-I land along the edge(s) of the project, and may connect to CSF-I's onsite substation(s). Please see Site Layout in the Appendix for the location of an up to 120-foot wide corridor that could accommodate an up to 230 kV power line.

A 20-foot wide all-weather gravel road will be located within each 500 feet of solar panels to provide County fire/emergency vehicle access within the facility and to allow access to the DC to AC electrical inverter modules. Additionally, a 20-foot wide all-weather gravel road will also exist between the perimeter fence and the solar panels with additional space in the corners for turning radii for a County fire truck. Alternatively, CSF-I may share the cost of a Wildland Type II (or similar) fire truck with other nearby solar projects to permit the fire department access throughout the site.



Solar PV Power Plant Examples (Greece and Spain)

Typical Solar PV Mounting Structure

Onsite Substations

The onsite substations will occupy an area of up to 500' x 500', located in the northeast corner of Brockman Road and a private road (½ mile south of SR-98) for Phase A and the southwest corner of that same intersection for Phase B. The onsite substations will have breakers, step-up transformers, and other necessary electrical equipment such as an electrical control container. The substation areas will be secured separately by an additional 8-foot high enhanced security chain-link fence.

As noted earlier, it is possible that one phase of CSF-I would simply feed its power to the other phase; this would occur via electrical transmission facilities described earlier. In that scenario, CSF-I's phases would share a substation designed to accommodate both phases. The other phase would therefore not require its own substation, and this area would instead be covered by solar panels. It is also possible that CSF-I would share facilities with one or more separate legal entities. In such a scenario, CSF-I would either "host" a shared substation located onsite or transmit its power to a shared substation located offsite. If an offsite substation is used, the potential CSF-I onsite substation locations depicted in the Site Layout (see Appendix) c/would instead be covered by solar panels

In the event that one phase "hosts" an onsite substation to be shared by one or more nearby solar projects, the substation's equipment would be designed to accommodate up to 230 kV electrical output from each of those projects. A 230 kV gen-tie line designed to interconnect CSF-I with other nearby solar projects may traverse CSF-I land along the edge(s) of the project or parcel boundaries and may connect to CSF-I's onsite substation(s). Please see Site Layout in the Appendix for the location of an up to 120-foot wide corridor that could accommodate an up to 230 kV transmission line.

Typical Substation Design

Typical Substation Design (Midway Substation)

Annual Production and In-Service-Date

The CSF-I facility will provide maximum electrical output during daylight hours. Peak electricity demand in California corresponds with air conditioning use on summer afternoons when ambient temperatures are high. CSF-I's peak generating capacity corresponds to this time-period when the peak solar energy, solar insulation value, is highest. There is no generating capacity between sunset and sunrise due to the lack of solar energy.

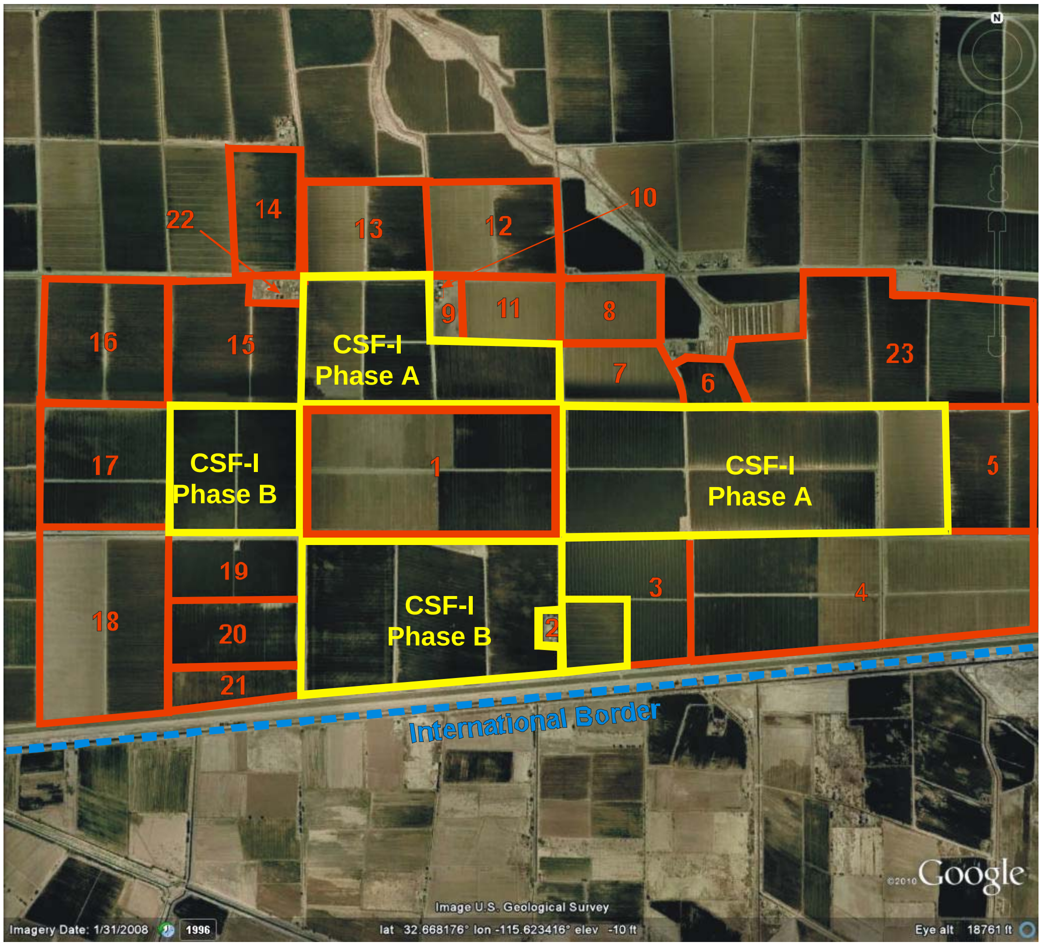
CSF-I as a whole will have a total power output of up to 200 MW AC (up to 100 MW planned for each of two phases) with an annual production of up to approximately 480,000 MWh per year. Construction of CSF-I will be phased in blocks as interconnection becomes available, with the full 200 MW capacity scheduled to be available by 2013 to 2014 ("In-Service-Date"). The In-Service-Date assumes that, permitting, financing, power purchase agreement ("PPA") negotiations and interconnection and transmission availability are in accordance with the project schedule.

SURROUNDING PROPERTIES

CSF-I abuts mostly agricultural land uses to the north, south, east, and west, with the exception of isolated residential and/or commercial structures. In addition, the US-Mexico border is located just beyond the southern boundary of the project, and SR-98 runs along the northern boundary of the project. The project is located approximately four miles west of the city of Calexico.

Adjacent Owners List/APN List

Number	Assessor's Parcel No.	Owner	Owner's Address
1	052-210-016	Calexico West Inc	5540 Ruffin Rd #A, San Diego, CA 92123
2	052-210-040	Michael & Julie Kemp	105 Rockwood Rd, Calexico, CA 92231
3	052-210-019	W & H Brundy & T Brundy	PO Box 845 Seeley, CA 92273
4	052-210-020	John Strobel	1798 W. Main St, El Centro, CA 92243
5	052-210-013	Calexico West, Inc.	9590 Chesapeake Dr, San Diego, CA 92123
6	052-210-032	C. Branbarger & A. Payne	903 W. HWY 98, Calexico, CA 92231
7	052-210-029	C. Branbarger & A. Payne	903 W. HWY 98, Calexico, CA 92231
8	052-210-026	R&S Brandenberg & C&M Seitz	903 W. HWY 98, Calexico, CA 92231
9	052-210-022	Juan Lopez	123 Grant St. #C, Calexico, CA 92231
10	052-210-023	Hega Construction	1212 P. Rashid St, Calexico, CA 92231
11	052-210-025	William & Kathy Brandenberg	903 W. HWY 98, Calexico, CA 92231
12	052-180-032	Dean Chen	225 N. Del Mar Ave, San Gabriel, CA 91775
13	052-180-033	Frank & Daphne Yang	701 Owhanee Rd. Ct., Freemont, CA 94539
14	052-170-035	Katherine Bishop	573 Drew Rd, Calexico, CA 92231
15	052-190-010	LS Power Development	5000 Hopyard Rd #480, Pleasanton, CA 94588
16	052-190-009	LS Power Development	5000 Hopyard Rd #480, Pleasanton, CA 94588
17	052-190-012	Calexico West Inc	5540 Ruffin Rd #A, San Diego, CA 92123
18	052-190-023	Curtis & Julie Corda	1941 Pepper Dr, El Centro, CA 92243
19	052-190-024	Montecito Land	PO Box 360, El Centro, CA 92244
20	052-190-025	W&M Brundy & T&K Brundy	PO Box 845, Seeley, CA 92273
21	052-190-026	IID Trust Lands	PO Box 937, Imperial, CA 92251
22	052-203-003	F. Gastelum Jr. & Sandra Martinez	1201 W. HWY 98, Calexico, CA 92231
23	052-210-036	Calexico West, Inc.	9590 Chesapeake Dr, San Diego, CA 92123

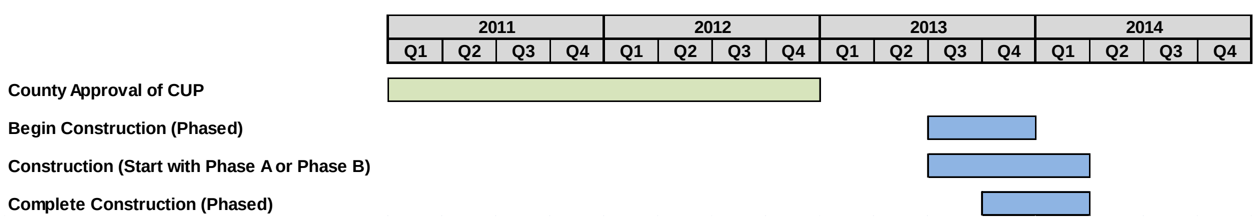


Adjacent Owners Map

No roadways will be affected by CSF-I, except during the project's 6 to 9 month construction (for the project as a whole). Construction truck traffic will reach CSF-I via SR-98 and Brockman Road. Despite the increased traffic during construction of the proposed project (inclusive of Phase A and Phase B combined), a Traffic Impact Analysis found that the traffic volumes on these roads are still below the volume thresholds identified by the County.

DEVELOPMENT SCHEDULE

It is anticipated that permitting, construction, and operation of the CSF-I facility will generally adhere to the following schedule:



Note that either Phase A or Phase B may be constructed first.

PUBLIC UTILITIES AND SERVICES

The CSF-I is expected to be serviced as follows:

1) *Refuse* – Allied Waste Management/Palo Verde Valley Disposal
2) *Sewer* – On-site Septic System
3) *Water* – IID supply/onsite treatment
4) *Police* – Imperial County Sheriff Department
5) *Fire* – Imperial County Fire Station
6) *Electric* – Imperial Irrigation District
7) *Telephone* – AT&T

PROJECT FEATURES AND BEST MANAGEMENT PRACTICES (BMPs)

The following sections describe standard project features and best management practices that will be applied during construction and long-term operation of CSF-I in an effort to avoid negative environmental impacts.

Aesthetics

The project will have an enhanced security perimeter fence no less than 8 feet high, and will be screened with neutral colored (desert sand) PVC slats (or similar) along each public road. Perimeter landscaping will be provided along each public road.

Erosion Control and Storm Water Drainage

Earthmoving activities will be limited to the construction of the access road, O&M building, the electrical substation and any storm water protection or storage (detention) facilities. Final grading may include revegetation with low lying grass or applying earth-binding materials to disturbed areas.

Site Drainage during Construction and Operation

To the extent possible and economically feasible, site drainage during construction will follow predevelopment flow patterns. Ultimate site discharge will be at the low corners of the project parcels. The incremental storm water run-off attributed to construction of foundations for solar panel mounting frames, foundations within the substations, inverter modules, control containers, and the O&M building area will be contained by ditches, drains, and/or elevated roadways at the low corner of the project parcels, which will prevent offsite migration of storm water and allow sedimentation and absorption with ultimate discharge at the low corner of the project parcels. Designs will be based upon the State's Construction General Permit (2009-0009DWQ) for erosion and sediment control. All storm water storage areas will be designed to absorb or discharge within 72 hours (mosquito abatement measure). CSF-I intends avoid any existing tile drainage, if possible.

Temporary Erosion and Sedimentation Control Measures

Temporary erosion and sedimentation control measures to be used during construction will be designed to prevent sediments from being displaced and carried offsite by storm water runoff.

Prior to beginning excavation activities, a silt fence, straw bales, or other BMP will be installed where appropriate where minor runoff to offsite areas could occur. The silt fence will filter sediments from construction runoff. During construction, the extent of earth disturbances will be minimized as much as practical. Temporary BMP control measures will be maintained as necessary throughout the construction period. A sediment trap will be constructed for the major site runoff discharge. The sediment trap will be located immediately upstream of the site boundary.

Waste and Hazardous Materials Management

The CSF-I will have minimal levels of materials on site that have been defined as hazardous under 40CFR, Part 261. The following materials will be used during the construction, operation, and long term maintenance of CSF-I:

- Insulating oil – used for electrical equipment
- Lubricating oil – used for maintenance vehicles
- Various solvents/detergents – equipment cleaning
- Gasoline – used for maintenance vehicles

Wastes will be managed in accordance with applicable regulations of the approved CSF-I facility as follows:

- Any hazardous wastes will be maintained at quantities below the threshold requiring a Hazardous Material Management Program (HMMP) (one 55 gallon drum per phase, if operated separately).
- All waste drums will be stored in accordance with good practice and applicable regulations, and will be protected from environmental conditions, including rain, wind, and direct heat and physical hazards such as vehicle traffic and sources of heat and impact.
- Waste lubricating oils will be recovered and reclaimed by a waste oil-recycling contractor.
- Spent lubricating oil filters from vehicles will be disposed at an authorized waste disposal facility.
- Batteries will be reclaimed and recycled by authorized facilities.
- Any hazardous waste generation, handling, and storage areas will be inspected and monitored on a regular basis.
- California-authorized and certified hazardous waste haulers will transport hazardous wastes to registered waste treatment, storage, disposal, and recycling facilities.
- Emergency response and reporting will be performed per written procedures that follow government and industry requirements and standards.
- Workers will be trained to handle hazardous wastes generated at the site.
- If 55 gallons of hazardous waste or more should accumulate onsite, storage of such hazardous waste will at no time exceed 90 days from the date of initial accumulation exceeding 55 gallons, and a HMMP shall be developed as described below.

The storage, use, and handling of any hazardous materials will be in accordance with applicable regulations and will include the following items:

- Facility personnel will be trained in hazardous materials and hazardous waste awareness, handling, and management as required for their level of responsibility.
- Bulk chemicals will be stored in the original shipping container provided by and returned to the chemical provider.
- Chemical storage areas and feed/transfer areas will be equipped with secondary containment sufficient in size to contain the volume of the largest container or tank including an allowance for rainwater.
- Small-quantity chemicals used for maintenance tasks will be kept in appropriate flammable material or corrosive material storage lockers following applicable regulations.
- Periodic inspections will ensure that all containers are secure and properly marked.
- Sanitary wastewater generated at the facility cannot be conveyed to an existing sewage public treatment facility. There are no public entities that manage sanitary wastewater flows for locations in the vicinity of the project site.

Should onsite storage of hazardous materials exceed one 55 gallon drum per phase, if operated separately, CSF-I will implement a Hazardous Materials Management Program (HMMP) developed for the CSF-I construction and operation stages, and will include, at a minimum, procedures for:

1. Hazardous materials handling, use and storage,
2. Emergency response,
3. Spill control and prevention,
4. Employee training,
5. Record keeping and reporting.

The HMMP (if required) will be developed and implemented prior to start of construction or prior to the storage on-site of an excess of 55 gallons of hazardous materials per phase. The program will be revised and updated as required in a timely manner. Employees will be trained and the program implemented prior to the start of commercial operation. The procedures outlined in the HMMP will be in accordance with all applicable regulations.

Spill Prevention and Containment

Spill prevention and containment for construction and operation of CSF-I will adhere as follows to EPA's guidance on Spill Prevention Control and Countermeasures (SPCC) as any hazardous materials stored onsite will be in quantities of less than 55 gallons per phase, if operated separately.

> *Regularly scheduled inspections, evaluations, and testing by qualified personnel are critical parts of discharge prevention. Their purpose is to prevent, predict, and readily detect discharges. They are conducted not only on containers, but also on associated piping, valves, and appurtenances, and on other equipment and components that could be a source or cause of an oil release.*

Waste Water/Septic System

A standard onsite septic tank and leach field will be used for each project phase (unless the phases share O&M facilities, or CSF-I shares another legal entity's O&M facilities) to dispose sanitary wastewater, designed to meet operation and maintenance guidelines required by Imperial County laws, ordinances, regulations and standards. Any necessary replacement leach field will be adjacent to the primary field.

Inert Solids

Inert solid wastes resulting from construction activities may include recyclable items such as paper, cardboard, solid concrete and block, metals, wire, glass, type 1-4 plastics, drywall, wood, and lubricating oils. Non-recyclable items include insulation, other plastics, food waste, vinyl flooring and base, carpeting, paint containers, packing materials, and other construction wastes. All packaging materials for components of the solar farm shall be crated and recycled offsite. No crating or packaging materials will be placed in local landfills. Management practices require recycling of contractor waste when possible, and proper storage of non-recyclable waste and debris to prevent wind dispersion, and weekly pickup of non-recyclable wastes with disposal at a local approved landfill.

Chemical storage tanks (if any) will be shop-fabricated, double-walled construction meeting applicable regulations. These tanks, as well as portable drums (if any), will be provided with appropriate anchors or cradles and placed within spill containment basins.

Any wastes classified as hazardous such as solvents, degreasing agents, concrete curing compounds, paints, adhesives, chemicals, or chemical containers will be stored (in an approved storage facility/shed/structure) and disposed of as required by local and state regulations. Material quantities of hazardous wastes are not expected.

FIRE PROTECTION

Each phase of CSF-I will have onsite fire-protection systems and will be supported by local fire protection services. Portable and fixed fire suppression equipment and systems will be included in the project. Portable fire extinguishers will be located at strategic locations throughout the project site. The fixed fire protection system will also include 10,000 gallons of dedicated water from onsite storage tank(s) and wet fire-department connection for protection of the O&M building only. Pressurized waterlines or fire department connections are not planned for the solar arrays.

As noted earlier, it is possible that one phase of CSF-I would simply feed its power to the other phase. In that scenario, CSF-I's phases would share O&M facilities and would therefore require only one O&M building area and associated water tank(s), with 10,000 gallons for the project as a whole dedicated to protecting the O&M building. The other O&M building area would instead be covered by solar panels. It is also possible that CSF-I would share another legal entity's O&M facilities. In that scenario, CSF-I's own onsite O&M facility needs c/would therefore be reduced or eliminated, and any unused O&M building area depicted in the Site Layout c/would instead be covered by solar panels

Employees will be given fire safety training including instruction in fire prevention, the use of portable fire extinguishers and the reporting of fires to the local fire department. Employees will only suppress fires in their incipient stage.

Service roads along the perimeter and within the property will be minimum 20-foot wide, all-weather gravel roads capable of supporting a 75,000 pound load imposed by a fire apparatus. Alternatively, CSF-I may share the cost of a Wildland Type II (or similar) fire truck with other nearby solar projects to permit the fire department access throughout the site. Interior roads with a minimum width of 20 feet will be spaced approximately 500 feet from each other. Each of these roads will have a turnaround area with a minimum 60’ x 60’ dimension (or 60’ x 80’ including the service road) approximately every 500 feet from each other or the perimeter fire service road.

If a cover crop (saltgrass or similar) is used onsite, it will be maintained at a reasonably low height to avoid the potential for a fire incident.

SITE SECURITY AND FENCING

An onsite security system will be installed. Controlled access gates will be maintained at the entrances to CSF-I.

Perimeter security fencing and access gates will be provided for CSF-I. The security fencing will be low voltage and provided with warning reflective signage. Regular site security vehicular patrols will be conducted to provide additional site security. Site access will be provided to offsite emergency response teams that respond in the event of an “after-hours” emergency. Access to the property will either be via swinging or sliding gates with a minimum width of 20 feet. Entry into CSF-I by fire department or emergency units will be handled on a manual override basis. If the gates are manual, a key for the gate will be provided in a key box at the gate location.

HEALTH AND SAFETY

Safety precautions and emergency systems will be implemented as part of the design and construction of the CSF-I facility to ensure safe and reliable operation. Administrative controls will include classroom and hands-on training in operating and maintenance procedures, general safety items, and a planned maintenance program. These will work with the system design and monitoring features to enhance safety and reliability.

All employees shall be provided with communication devices, cell phones, or walkie-talkies, to aid in the event of an emergency situation onsite.

Safety, Auxiliary and Emergency Systems

Safety, auxiliary, and emergency systems will consist of lighting, grounding, backup UPS systems and diesel power generators, fire and hazardous materials safety systems, security systems, chemical safety systems, and emergency response teams. The O&M building will include its own utilities and services, such as emergency power, fire suppression, and treated water systems.

CSF-I will implement programs to assure compliance with federal and state occupational safety and health program requirements. In addition to compliance with these programs, CSF-I will identify and implement plant-specific programs that effectively assess potential hazards and mitigate them on a routine basis.

As discussed above, hazardous materials may be stored and used at CSF-I during construction and operation, but will be restricted to less than one 55 gallon drum per phase (if operated separately). The design and construction of any hazardous materials storage and dispensing systems will be in accordance with applicable regulations. Hazardous materials storage areas will be designed with curbs or other containment measures like double-walled storage tanks, if applicable, to contain spills and leaks. If hazardous materials exceed 55 gallons, a Hazardous Material Management Program will be developed as described above.

Emergency eyewashes and showers (if required by fire or safety codes) will be provided at appropriate locations. Appropriate Personal Protective Equipment (PPE) will be provided during both construction and operation of the CSF-I facility.

Emergency Response Plan

CSF-I will have an Emergency Response Plan (ERP). The ERP will address potential emergencies including chemical releases, fires, and injuries. The ERP will describe emergency response equipment and equipment locations, evacuation routes, procedures for reporting to local emergency response agencies, responsibilities for emergency response, and other required actions to be taken in the event of an emergency.

Employee response to an emergency will be limited to an immediate response to minimize the risk of escalation of the accident or injury. Employees will be trained to respond to fires, spills, earthquakes, and injuries. A first aid facility with adequate first-aid supplies and personnel qualified in first aid treatment will be onsite.

ADDITIONAL INFORMATION

Project Construction

Construction of the CSF-I as a whole will require approximately 6 to 9 months. This section describes major components during the design, layout, and construction processes.

Project Engineering, Procurement, Construction, and Compliance

The engineering, procurement, and construction of the CSF-I will be accomplished as follows:

1. AES Solar has been selected to provide detailed engineering, preparation of drawings and specifications for permitting. The Applicant will provide project management. Long lead equipment will be procured by AES Solar in advance of the start of construction.
2. A Construction Manager Contractor at Risk (CMAR) for site preparation, buildings, services, power collection, and transmission will be identified in advance of the start of construction for value engineering input, construction preparation, and procurement.
3. A Prime Equipment Supplier (PES) or Suppliers will be identified for the manufacturing, assembly, and installation of the PV arrays and inverters.

The overall detailed construction schedule will be prepared and coordinated through the prime CMAR contractor with input from the Applicant. Detailed construction operating plans will be included in the Project Execution Plan (PEP) as follows:

1. A project specific Occupational Safety and Health Plan will be developed to specify worker safety procedures and the Applicant's and CMAR's responsibilities in order to prevent incidents involving personnel on the project site.
2. The PEP will address roles, responsibilities and identify primary contacts, procedures, and actions required during the design, procurement, and construction stages of the work.
3. A project specific Quality Assurance / Control Plan will be developed by the CMAR Contractor(s)' QA/QC Departments with input from appropriate representatives of the Contractor(s)' Project Team, the Applicant, and major equipment suppliers.
4. During construction, construction trades personnel parking will be located within the lay-down area. The parking area will be fenced and controlled by security personnel during normal work hours.
5. A temporary gravel area of minimum two acres will be located adjacent to each O&M building. This area will be located near the southeast corner of Brockman Road and SR-98 for Phase A and near the southeast corner of Brockman Road and Anza Road for Phase B. It will be devoted to equipment and materials lay-down, storage, parking of construction equipment, small fabrication areas and office trailers. If any O&M building is not necessary due to sharing of O&M facilities, the associated temporary lay-down area c/would instead be covered by solar panels.
6. The CMAR contractor(s) will have at least one Safety Coordinator who will prepare a site-specific safety plan. Emergency services will be coordinated with the nearby fire department.
7. All contractors, subcontractors, and consultants will participate in comprehensive health, safety, environmental, HMMP (if required), and emergency procedures training prior to any initial site activities.

Site Preparation, Surveying and Staking

Site preparation, surveying, and staking of the project site will begin following the Applicant's receipt of Imperial County's approval to implement CSF-I. Activities that will be included in this phase include:

1. Land surveying activities (including benchmarks),
2. Staking of construction limits (lay-down yards, access roads, temporary use areas),
3. Briefing of contractors.

Temporary Lay Down Yard

A minimum two-acre lay down yard will be required for PV panel offloading and steel frame assembly. It is assumed that the PV panel arrays will be assembled in parallel with the construction of the O&M building and the electrical substation. Upon completion of the project, the lay down yard will be revegetated in low lying grass or with a soil stabilizer, and the area will be filled with solar panels as shown in the Site Layout. If CSF-I's phases share O&M, a single lay down yard may be used for the entire CSF-I project. If CSF-I shares another legal entity's facilities, a separate lay down yard may not be needed for CSF-I; alternatively, the lay down yard area needed may be reduced.

Site Clearing

The proposed project will be designed in such a manner to minimize ground disturbances and resulting environmental impacts.

PV Panel Mounting Frames Installation

Foundations for mounting frames typically consist of a 12 to 15 inch diameter drilled pier extending 3 to 7 feet below ground surface.

PV Solar Array Field

To the extent possible and economically feasible, the site layout will attempt to maintain predevelopment drainage patterns. Discharge from the site will be at the low corners of the project parcels. If an onsite O&M building is constructed, the 20-foot wide paved entry road will be designed to convey nuisance runoff to drainage channels/swales. It is expected that storm water runoff will flow over the crown of any paved roadway, which is typically less than six inches from swale flow line to crown at centerline of roadway, thus allowing drainage during storms. Interior access roads (e.g., between PV panel grids) will be all-weather gravel roads, as noted earlier. Alternatively, CSF-I may share the cost of a Wildland Type II (or similar) fire truck with other nearby solar projects to permit the fire department access throughout the site. Unpaved access areas between PV panel rows may be planted with saltgrass (or similar), which would be watered infrequently, thus not requiring mowing or cutting, yet maintaining binding of the soil with the grass root system. As an alternative to the cover crop, a permeable soil stabilizing polymer may be used as a dust suppressant.

It is anticipated that specialized trades and higher skill level construction personnel will commute to the CSF-I construction site(s) on a daily basis from within the Imperial Valley area

and, in the case of those travelling from longer distances, may stay in temporary housing or apartments during the week for the duration of construction of the proposed project.

Heavy construction will be scheduled to occur between 6:00 am and 5:00 pm, Monday through Friday. Additional hours may be necessary to make up schedule deficiencies or to complete critical construction activities. There is estimated to be up to 60 workers per day during the construction of the project.

Some activities may continue 24 hours per day, seven days per week. These activities include, but are not limited to, refueling equipment, staging material for the following day's construction activities, quality assurance/control, and commissioning.

Materials and supplies will be delivered to the site by truck. Truck deliveries will normally occur during daylight hours. However, there will be offloading and/or transporting to the site on weekends and during evening hours.

O&M Building

It is anticipated that an O&M Building (up to approximately 320 square feet, or 40' x 80') will be required for each phase of CSF-I. The O&M buildings will include:

1. Office
2. Repair Building/Parts Storage
3. Electrical/Array Control Room
4. Restrooms
5. Water Treatment Facility

As noted earlier, it is possible that one phase of CSF-I would simply feed its power to the other phase. In that scenario, CSF-I's phases would share O&M facilities and would therefore require only one O&M building area with associated parking area, which would be sized appropriately to accommodate both phases. The other O&M building area would instead be covered by solar panels. It is also possible that CSF-I would share another legal entity's O&M facilities. In that scenario, CSF-I's own onsite O&M facility needs c/would therefore be reduced or eliminated, and any unused O&M building area depicted in the Site Layout c/would instead be covered by solar panels

Work Force

It is expected that CSF-I will be operated with a staff of up to twelve (12) full-time employees for both phases combined (split roughly evenly between phases). The facility will operate seven days per week, generating electricity during normal daylight hours when the solar energy is available. Maintenance activities will occur seven days a week, 24 hours a day to ensure PV Panel output when solar energy is available. As noted earlier, these employees may be shared by both phases, in which case the number of staff would be reduced to approximately ten (10). It is also possible that CSF-I would share another legal entity's O&M facilities. In that scenario, CSF-I c/would also share personnel with that legal entity, thereby reducing or eliminating the onsite staff required for CSF-I.

Project Lighting

The project will be compliant with the Imperial County Zoning Ordinance. Day lighting will supplement energy-efficient fluorescent lighting in the O&M building(s). Emergency egress identification and path lighting will be provided per building code requirements.

Electrical Grounding

The facility will be designed in accordance with National Electrical Code requirements including MAG amendments. The electrical system may experience unit ground potential rise due to ground fault, lightning strike, or switching surges. A grounding system will be installed to permit dissipation of ground fault currents and minimize ground potential rise.

The grounding grid will be designed with adequate capacity to dissipate heat produced by ground current under fault conditions and be designed to maintain safe voltage gradients. Ground resistivity testing and calculations will be performed during detailed design to determine the number and type of grounding electrodes and the grid spacing necessary to ensure safe step and touch potentials under fault conditions. Each PV panel string within the solar field will be bonded to the foundation to provide localized grounding of each string.

Within project buildings, grounding conductors will bond building structural steel, metallic piping, and non-energized metallic parts of electrical equipment to the building grounding systems. Isolated grounding conductors will connect sensitive control systems to the building grounding systems.

If required, a cathodic protection system will be designed and installed to control electrochemical corrosion of exterior surfaces of underground carbon steel, copper, aluminum, and stainless steel. Bottoms of soil- or sand-pad-mounted steel tanks and exterior surfaces of underground ductile or cast-iron pipe will be protected against corrosion. The type of cathodic protection system (galvanic or impressed current) will be based on soil characteristics, the amount of material to be protected, and the interference effects of any nearby cathodic protection systems.

Lightning protection will follow the National Fire Protection Association (NFPA) 780 guidelines and will be provided where required for project structures and pumps.

Heating, Ventilation, and Air-Conditioning

Heating, ventilation, and air-conditioning (HVAC) will consist of heat pump ground-mounted units with code-required fresh make-up air capabilities for the office and control area of the O&M building(s). Mechanical ventilation will be provided for the maintenance areas.

Temperature control will be provided for both personnel and equipment areas, and humidity control will be provided in the control and communications equipment rooms.

Operations and Maintenance

Operation and Facility Maintenance Needs

Once CSF-I is constructed, minimal maintenance needs are required and are generally limited to the following:

1. Washing of PV panels
2. Monitoring electricity generation
3. Providing site security
4. Facility maintenance (e.g., replacing or repairing PV modules, wiring, control equipment and inverters)
5. Site maintenance, including but not limited to:
    a. Cover crop (if any) c/would be maintained via periodic flood irrigation
    b. Landscaping will be maintained via drip irrigation, sprinklers, and/or bubblers, as appropriate

Maintenance Activities

PV panel washing, operations dust control, domestic water use, and water treatment under regular maintenance routines will require up to 80 acre-feet (26 million gallons) of water per year for the entire CSF-I project (split between phases roughly in proportion to their respective acreages). Backwash water from the reverse osmosis water treatment plant will equal the clean process water volume. Backwash water will be applied to any required landscaped areas along the perimeter fence. A very low speed is anticipated for maintenance vehicles.

Access roads and solar array long-term maintenance will include:

1. Temporary soil stabilization techniques, such as scheduling construction sequences to minimize land disturbance during the rainy and non-rainy seasons and employing BMPs appropriate for the season.
2. Sediment control techniques, such as using silt fences, straw bales, and/or fiber rolls to intercept and slow the flow of sediment-laden runoff such that sediment settles before runoff leaves the site.
3. Wind erosion control by maintaining low lying grass over or dust palliatives, as required, to prevent or alleviate windblown dust.
4. Other measures, as appropriate, to comply with Imperial County laws, ordinances, regulations and standards.

<u>EXISTING CONDITIONS OF PROJECT SITE</u>

CALEXICO SOLAR FARM I PHASES A & B

(88FT 8ME, LLC)

Figure 1: Satellite view (Google Earth)

Figure 2: Project phases

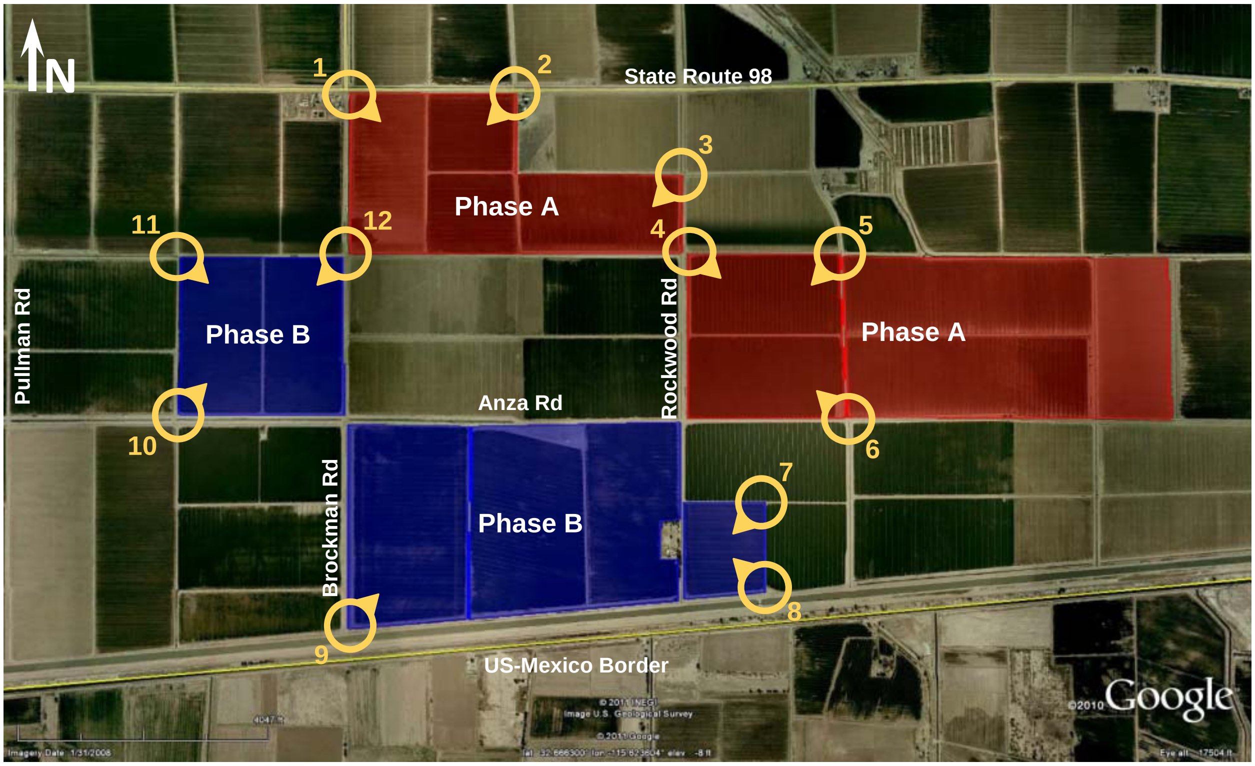


Figure 3: Photo locations

Figure 4: Phase A, location #1 looking southeast

Figure 5: Phase A, location #2 looking southwest

Figure 6: Phase A, location #3 looking southwest

Figure 7: Phase A, location #4 looking southeast

Figure 8: Phase A, location #5 looking southwest

Figure 9: Phase A, location #6 looking northwest

Figure 10: Phase B, location #7 looking southwest

Figure 11: Phase B, location #8 looking northwest

Figure 12: Phase B, location #9 looking northeast

Figure 13: Phase B, location #10 looking northeast

Figure 14: Phase B, location #11 looking southeast

Figure 15: Phase B, location #12 looking southwest

Appendix F

Land Evaluation and Site Assessment (LESA) Model

LESA ASSESSMENT
CALEXICO SOLAR FARM I
PHASE A PROJECT AREA

CALEXICO SOLAR FARM I PHASE A PROJECT

(SW/4 Section 13, S/2 Section 14, S/2 NE/4 Section 15, NW/4 Section 15, T17S, R13E, SBB&M)

IMPERIAL COUNTY, CALIFORNIA

July 2011

EMA Report No. 2175-03A

Prepared for:

88FT 8ME, LLC
10100 Santa Monica Boulevard, Suite 300
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ENVIRONMENTAL MANAGEMENT ASSOCIATES

LAND EVALUATION AND SITE ASSESSMENT MODEL

CALEXICO SOLAR FARM I PHASE A PROJECT

(SW/4 Section 13, S/2 Section 14, S/2 NE/4 Section 15, NW/4 Section 15, T17S, R13E, SBB&M)

IMPERIAL COUNTY, CALIFORNIA

The Land Evaluation and Site Assessment (LESA) model is an approach for rating the relative quality of land resources based upon specific measurable features. The LESA model was first developed by the federal Natural Resources Conservation Service (NRCS) in 1981. It was subsequently adapted in 1990 by the California Department of Conservation to evaluate land use decisions that affect the conversion of agriculture lands in California. The formulation of the California LESA Model is intended to provide lead agencies under the California Environmental Quality Act (CEQA) with an optional methodology to ensure that significant effects on the environment of agricultural land conversions are quantitatively and consistently considered in the environmental review process.

For determining the potential CEQA significance resulting from the conversion of agricultural lands to some other purpose, the California Agricultural LESA Model has developed Scoring Thresholds which are used to compare the Final LESA Score and the Weighted Factor Scores for the Project with suggested Scoring Decisions. These LESA Scores do not take into consideration any proposed mitigation measures or other factors that might affect a lead agency's determination of the significance of the agricultural lands conversion impact under CEQA.

The information provided on the following pages present documentation of the LESA assessment prepared using the California Agricultural LESA Model for the proposed Calexico Solar Farm I Phase A Project (Project) (APNs 052-210-001-000; 052-210-002-000; 052-210-014-000; and 052-210-015-000). The proposed Project would be constructed on approximately 720 acres of privately owned land located about seven miles west of the city of Calexico, California (Figure 1). The Project is bounded on the north by California State Route 98 and bounded on the south by Anza Road, an Imperial County road (Figure 2).

LESA ASSESSMENT

88FT 8ME, LLC
CALEXICO SOLAR FARM I PHASE A PROJECT
IMPERIAL COUNTY, NEVADA

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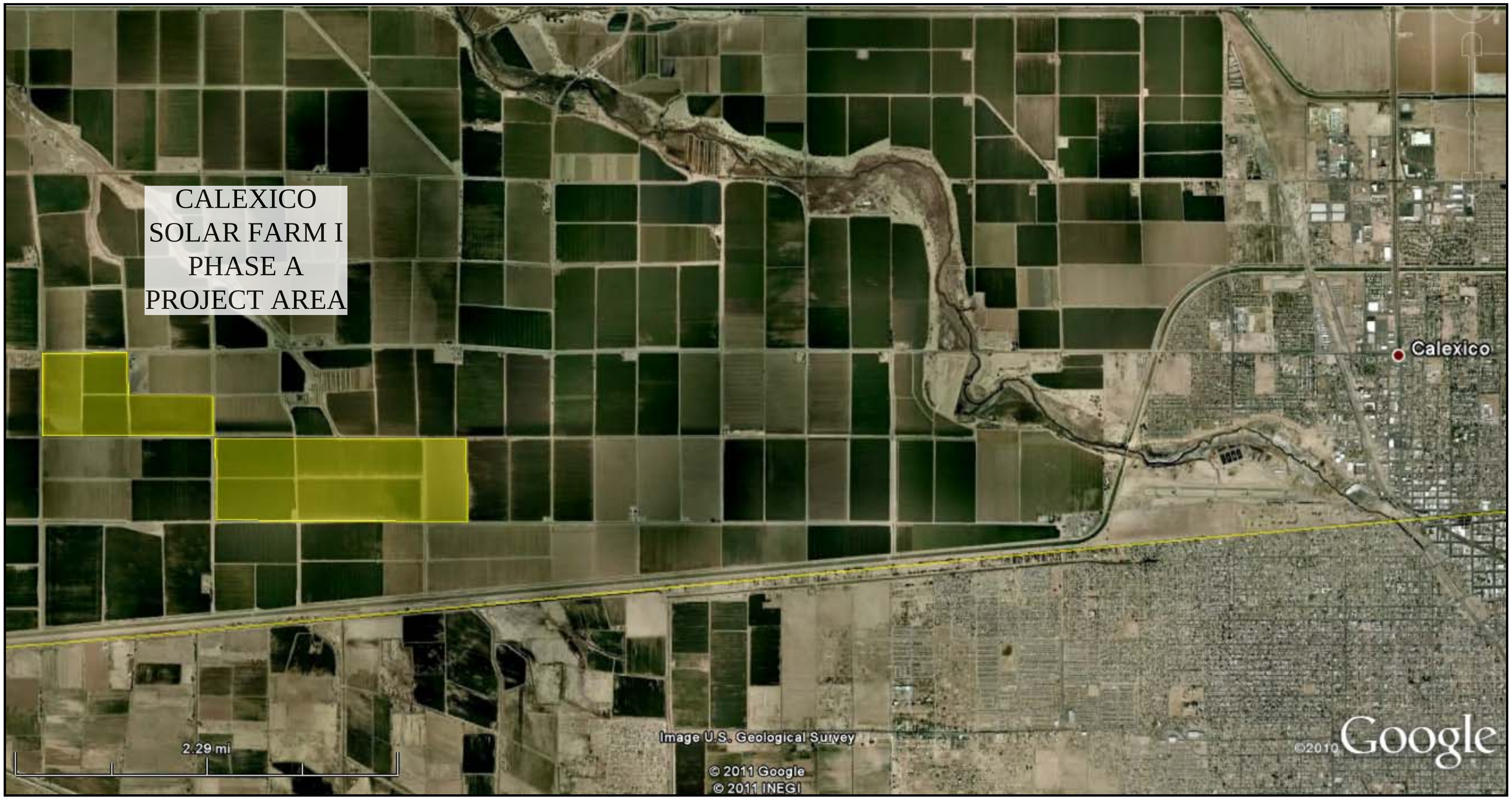

Figure 1 : Location Map

Figure 2 : Project Area on an Aerial Photographic Base

Land Evaluation Worksheet							
A	B	C	D	E	F	G	H
Soil Map Unit*	Project Acres	Proportion of Project Area	LCC** (irrigated)	LCC Rating (irrigated)***	LCC Score (C x E)	Storie Index**	Storie Index Score (C x G)
106	34.54	0.048	IIw	80	3.84	72	3.46
110	94.98	0.132	IIw	80	10.56	45	5.94
114	154.71	0.215	IIIw	60	12.90	42	9.03
115	431.74	0.600	IIIw	60	36.00	67	40.20
122	3.89	0.005	IIIw	60	0.32	44	0.24
123	0.22	0.000	IIIw	60	0.02	44	0.01
Totals	720	1.00		LCC Total Score	64	Storie Index Total Score	59
Total Project Area (acres)=	720						

* The Soil Map Unit information and acreage were determined from the current soil survey information available at the USDA Natural Resources Conservation Service website: http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx (Figure 3).

** The Land Capability Classification and Storie Index information was obtained from the current soil survey information available at the USDA Natural Resources Conservation Service website: http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx (Appendix A).

*** The LCC Rating for irrigated land was determined from the LCC Point Rating Table 2 from the LESA Instruction Manual (California Department of Conservation 1997).

Imperial County, California, Imperial Valley Area (CA683)				
Map Unit Symbol		Map Unit Name	Acres in AOI	Percent of AOI
106		GLENBAR CLAY LOAM, WET	34.4	4.8%
110		HOLTVILLE SILTY CLAY, WET	94.9	13.2%
114		IMPERIAL SILTY CLAY, WET	155.3	21.5%
115		IMPERIAL-GLENBAR SILTY CLAY LOAMS, WET, 0 TO 2 PERCENT SLOPES	433.0	60.0%
122		MELOLAND VERY FINE SANDY LOAM, WET	3.9	0.5%
123		MELOLAND AND HOLTVILLE LOAMS, WET	0.2	0.0%
Totals for Area of Interest			721.9 *	100.0%

*Adjusted to 720 acres

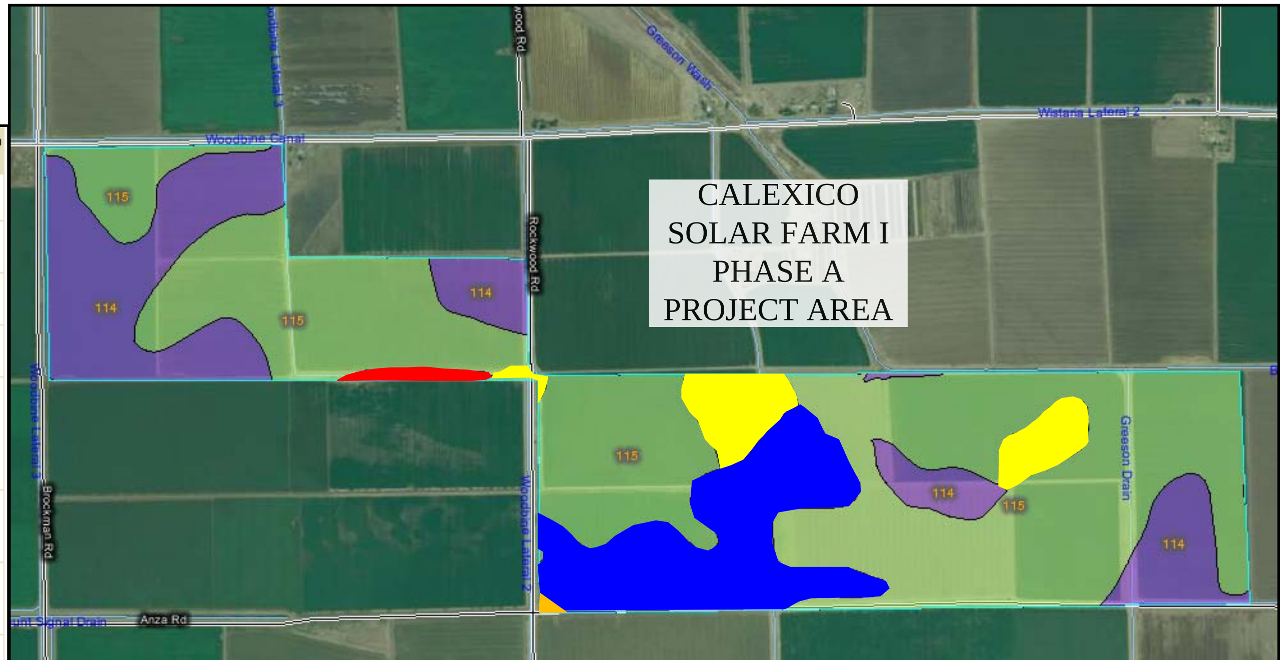

Figure 3 : Project Area Soils Map

	Site Assessment Worksheet 1		
	Project Size Score*		
	I	J	K
	LCC Class I-II	LCC Class III	LCC Class IV-VIII
Project Acres per LCC Class	34.54	154.71	
Project Acres per LCC Class	94.98	431.74	
Project Acres per LCC Class		3.89	
Project Acres per LCC Class		0.22	
Project Acres per LCC Class			
Total Project Acres per LCC Class	**130**	**591**	**0**
**** Project Size Scores***	**100**	**100**	**0**
Highest Project Size Score	**100**		

* Project Size Score was determined from the Project Size Scoring Table from the LESA Instruction Manual (California Department of Conservation 1997).

Site Assessment Worksheet 2				
Water Resources Availability				
A	**B**	**C**	**D**	**E**
Project Portion	**Water Source**	**Proportion of Project Area**	**Water Availability Score***	**Weighted Availability Score (C x D)**
1	Irrigation District Only	1.0	100	100
2				
3				
4				
5				
6				
		(Must Sum to 1.0)	***Total Water Resource Score***	100

* The Water Availability Score was determined using the Water Resources Availability Scoring Table from the LESA Instruction Manual (California Department of Conservation 1997).

Site Assessment Worksheet 3						
Surrounding Agricultural Land & Surrounding Protected Resource Land						
A	B	C	D	E	F	G
Zone of Influence*					Surrounding Agricultural Land Score (From LESA Manual Table 6)	Surrounding Protected Resource Land Score (From LESA Manual Table 7)**
Total Acres	Acres in Agriculture	Acres of Protected Resource Land	Percent in Agriculture (B/A)	Percent Protected Resource Land (C/A)		
3587.1	3455	0	96	0	100	0

* In conformance with the instructions in the LESA Instruction Manual (California Department of Conservation 1997), the Zone of Influence was determined by drawing the smallest rectangle that could completely encompass the entire Project Area. A second rectangle was then drawn which extended one quarter mile on all sides beyond the first rectangle. The Zone of Influence is represented by the entire area of all parcels with any lands inside the outer rectangle, less the area of the proposed project (Figure 4).

** The LESA Instruction Manual (California Department of Conservation 1997) describes *Protected Resource Land* as those lands with long term use restrictions that are compatible with or supportive of agricultural uses of land. Included among them are the following: Williamson Act contracted lands; Publicly owned lands maintained as park, forest, or watershed resources; and Lands with agricultural, wildlife habitat, open space, or other natural resource easements that restrict the conversion of such land to urban or industrial uses.

Surrounding Parcels***	Acres	Protected Resource Land?	Percent Protected Resource Land	Acres in Protected Land	Agricultural Land?	Percent Agricultural Land	Acres of Agriculture
052-202-002	0.3	N	0	0	N	0	0.0
052-190-010	150.7	N	0	0	Y	100	150.7
052-190-024	80.8	N	0	0	Y	100	80.8
052-210-023	1.2	N	0	0	Y	100	1.2
052-210-022	18.6	N	0	0	Y	100	18.6
052-210-025	55.5	N	0	0	Y	100	55.5
052-210-026	61.4	N	0	0	Y	100	61.4
052-210-029	73.3	N	0	0	Y	100	73.3
052-210-006	0.4	N	0	0	Y	100	0.4
052-210-019	123.5	N	0	0	Y	100	123.5
052-210-016	331.7	N	0	0	Y	100	331.7
052-201-003	0.4	N	0	0	N	0	0.0
052-201-004	0.7	N	0	0	N	0	0.0
052-203-001	0.8	N	0	0	N	0	0.0
052-203-003	4.0	N	0	0	N	0	0.0
052-201-005	0.7	N	0	0	N	0	0.0
052-201-006	0.4	N	0	0	N	0	0.0
052-202-003	0.4	N	0	0	N	0	0.0
052-202-005	0.1	N	0	0	N	0	0.0
052-202-007	0.1	N	0	0	N	0	0.0

Surrounding Parcels***	Acres	Protected Resource Land?	Percent Protected Resource Land	Acres in Protected Land	Agricultural Land?	Percent Agricultural Land	Acres of Agriculture
052-202-008	0.1	N	0	0	N	0	0.0
052-210-039	104.4	N	0	0	Y	100	104.4
052-210-038	139.0	N	0	0	Y	100	139.0
052-210-037	155.5	N	0	0	Y	100	155.5
052-190-011	166.0	N	0	0	Y	100	166.0
052-170-035	87.9	N	0	0	Y	100	87.9
052-180-033	121.1	N	0	0	Y	100	121.1
052-180-032	121.8	N	0	0	Y	100	121.8
052-180-028	71.2	N	0	0	Y	80	57.0
052-180-039	152.4	N	0	0	Y	98	149.4
052-180-027	6.9	N	0	0	N	0	0.0
052-180-049	11.8	N	0	0	N	0	0.0
052-210-027	23.9	N	0	0	Y	100	23.9
052-210-028	71.7	N	0	0	Y	40	28.7
052-210-030	0.7	N	0	0	Y	100	0.7
052-210-031	5.6	N	0	0	N	0	0.0
052-210-032	28.3	N	0	0	N	0	0.0
052-210-036	364.0	N	0	0	Y	100	364.0
052-210-020	436.0	N	0	0	Y	100	436.0
052-180-050	46.1	N	0	0	Y	100	46.1
052-180-065	2.2	N	0	0	Y	100	2.2
052-180-040	67.9	N	0	0	Y	100	67.9
052-180-064	157.7	N	0	0	Y	100	157.7
052-180-022	43.2	N	0	0	Y	100	43.2
052-180-051	89.4	N	0	0	Y	100	89.4
052-210-035	14.6	N	0	0	Y	100	14.6
052-210-034	14.3	N	0	0	Y	100	14.3
052-210-033	10.3	N	0	0	N	0	0.0
052-210-013	167.4	N	0	0	Y	100	167.4
Total	**3587.1**		**Total**	**0**		**Total**	**3455.5**

**The Imperial County Assessors website was accessed to identify the surrounding parcel numbers (http://imperialcounty.net/Assessor/index.html). The percentage of agriculture was determined from a map overlay used to estimate the proportion of land in agriculture and the California Department of Conservation Important Farmland Map Series.

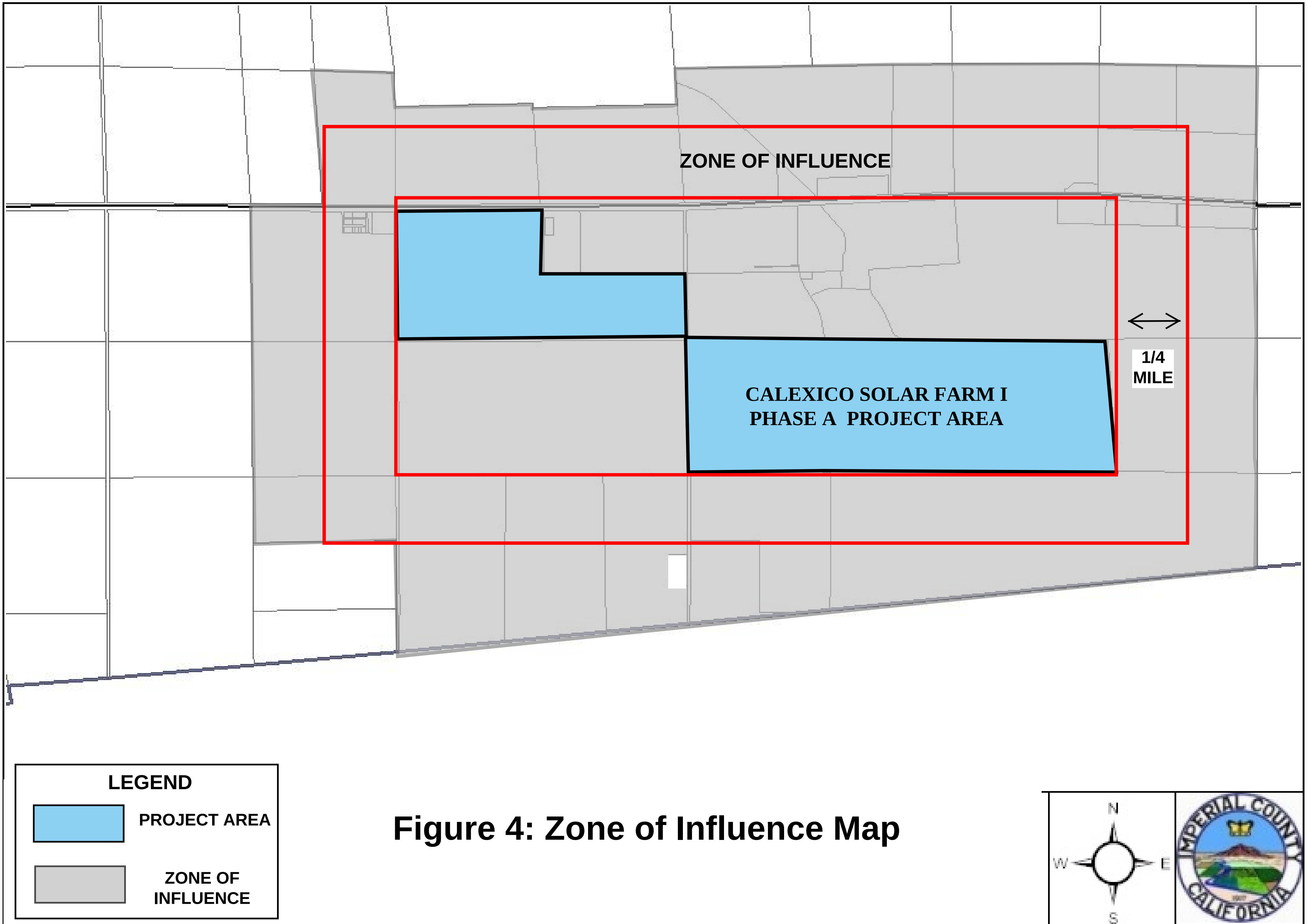

Figure 4: Zone of Influence Map

This map represents a visual display of related geographic information. Data provided hereon is not a guarantee of actual field conditions. To be sure of complete accuracy, please contact IMPERIALCOUNTY_PUBLIC staff for the most up-to-date information.

Final LESA Score Sheet			
	Factor Scores	**Factor Weight**	**Weighted Factor Scores**
LE Factors			
Land Capability Classification	63.64	0.25	15.91
Storie Index	58.88	0.25	14.72
LE subtotal		0.50	30.63
SA Factors			
Project Size	100	0.15	15.00
Water Resource Availability	100	0.15	15.00
Surrounding Agricultural Land	100	0.15	15.00
Protected Resource Land	0	0.05	0.00
SA Subtotal		0.50	45.00
		Total LESA Score	**75.63**

California LESA Model Scoring Thresholds	
Total LESA Score	**Scoring Decision**
0 to 39 Points	Not Considered Significant
40 to 59 Points	Considered Significant only if LE and SA subscores are each greater than or equal to 20 points
60 to 79 Points	Considered Significant unless either LE or SA subscore is less than 20 points
80 to 100 Points	Considered Significant

APPENDIX A: CALEXICO SOLAR FARM I PHASE A PROJECT SOILS DETAILS

Imperial County, California, Imperial Valley Area

106—GLENBAR CLAY LOAM, WET

Map Unit Setting

Elevation: -230 to 200 feet
Mean annual precipitation: 0 to 3 inches
Mean annual air temperature: 72 to 75 degrees F
Frost-free period: 300 to 350 days

Map Unit Composition

Glenbar, wet, and similar soils: 85 percent
Minor components: 15 percent

Description of Glenbar, Wet

Setting

Landform: Basin floors
Landform position (three-dimensional): Dip
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from mixed sources

Properties and qualities

Slope: 0 to 1 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 5 percent
Maximum salinity: Nonsaline to slightly saline (2.0 to 8.0 mmhos/cm)
Sodium adsorption ratio, maximum: 5.0
Available water capacity: High (about 10.8 inches)

Interpretive groups

Land capability classification (irrigated): 2w
Land capability (nonirrigated): 7w

Typical profile

0 to 13 inches: Clay loam
13 to 60 inches: Clay loam

Minor Components

Holtville

Percent of map unit: 5 percent

Meloland

Percent of map unit: 5 percent

Indio

Percent of map unit: 5 percent

Data Source Information

Soil Survey Area: Imperial County, California, Imperial Valley Area
Survey Area Data: Version 5, Jul 25, 2008

Imperial County, California, Imperial Valley Area

110—HOLTVILLE SILTY CLAY, WET

Map Unit Setting

Elevation: -230 to 200 feet
Mean annual precipitation: 0 to 3 inches
Mean annual air temperature: 72 to 75 degrees F
Frost-free period: 300 to 350 days

Map Unit Composition

Holtville, wet, and similar soils: 85 percent
Minor components: 15 percent

Description of Holtville, Wet

Setting

Landform: Basin floors
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from mixed sources

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 5 percent
Maximum salinity: Nonsaline to slightly saline (2.0 to 8.0 mmhos/cm)
Sodium adsorption ratio, maximum: 10.0
Available water capacity: Moderate (about 7.6 inches)

Interpretive groups

Land capability classification (irrigated): 2w
Land capability (nonirrigated): 7w

Typical profile

0 to 17 inches: Silty clay
17 to 24 inches: Clay
24 to 35 inches: Silt loam
35 to 60 inches: Loamy very fine sand

Minor Components

Glenbar

Percent of map unit: 5 percent

Imperial

Percent of map unit: 5 percent

Indio

Percent of map unit: 3 percent

Vint

Percent of map unit: 2 percent

Data Source Information

Soil Survey Area: Imperial County, California, Imperial Valley Area
Survey Area Data: Version 5, Jul 25, 2008

Imperial County, California, Imperial Valley Area

114—IMPERIAL SILTY CLAY, WET

Map Unit Setting

Elevation: -230 to 200 feet
Mean annual precipitation: 0 to 3 inches
Mean annual air temperature: 72 to 75 degrees F
Frost-free period: 300 to 350 days

Map Unit Composition

Imperial, wet, and similar soils: 85 percent
Minor components: 15 percent

Description of Imperial, Wet

Setting

Landform: Basin floors
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Clayey alluvium derived from mixed sources and/or clayey lacustrine deposits derived from mixed sources

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 5 percent
Maximum salinity: Very slightly saline to slightly saline (4.0 to 8.0 mmhos/cm)
Sodium adsorption ratio, maximum: 20.0
Available water capacity: Moderate (about 8.3 inches)

Interpretive groups

Land capability classification (irrigated): 3w
Land capability (nonirrigated): 7w

Typical profile

0 to 12 inches: Silty clay
12 to 60 inches: Silty clay loam

Minor Components

Glenbar

Percent of map unit: 4 percent

Meloland

Percent of map unit: 4 percent

Holtville

Percent of map unit: 4 percent

Niland

Percent of map unit: 3 percent

Data Source Information

Soil Survey Area: Imperial County, California, Imperial Valley Area
Survey Area Data: Version 5, Jul 25, 2008

Imperial County, California, Imperial Valley Area

115—IMPERIAL-GLENBAR SILTY CLAY LOAMS, WET, 0 TO 2 PERCENT SLOPES

Map Unit Setting

Elevation: -230 to 200 feet
Mean annual precipitation: 0 to 3 inches
Mean annual air temperature: 72 to 75 degrees F
Frost-free period: 300 to 350 days

Map Unit Composition

Glenbar, wet, and similar soils: 40 percent
Imperial, wet, and similar soils: 40 percent
Minor components: 20 percent

Description of Imperial, Wet

Setting

Landform: Basin floors
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Clayey alluvium derived from mixed sources and/or clayey lacustrine deposits derived from mixed sources

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 5 percent
Maximum salinity: Very slightly saline to slightly saline (4.0 to 8.0 mmhos/cm)
Sodium adsorption ratio, maximum: 20.0
Available water capacity: Moderate (about 8.6 inches)

Interpretive groups

Land capability classification (irrigated): 3w
Land capability (nonirrigated): 7w

Typical profile

0 to 12 inches: Silty clay loam
12 to 60 inches: Silty clay loam

Description of Glenbar, Wet

Setting

Landform: Basin floors
Landform position (three-dimensional): Talf

Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from mixed

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 5 percent
Maximum salinity: Nonsaline to slightly saline (2.0 to 8.0 mmhos/cm)
Sodium adsorption ratio, maximum: 15.0
Available water capacity: High (about 10.8 inches)

Interpretive groups

Land capability classification (irrigated): 3w
Land capability (nonirrigated): 7w

Typical profile

0 to 13 inches: Silty clay loam
13 to 60 inches: Clay loam

Minor Components

Holtville

Percent of map unit: 10 percent

Meloland

Percent of map unit: 10 percent

Data Source Information

Soil Survey Area: Imperial County, California, Imperial Valley Area
Survey Area Data: Version 5, Jul 25, 2008

Imperial County, California, Imperial Valley Area

122—MELOLAND VERY FINE SANDY LOAM, WET

Map Unit Setting

Elevation: -230 to 200 feet
Mean annual precipitation: 0 to 3 inches
Mean annual air temperature: 72 to 75 degrees F
Frost-free period: 300 to 350 days

Map Unit Composition

Meloland, wet, and similar soils: 85 percent
Minor components: 15 percent

Description of Meloland, Wet

Setting

Landform: Basin floors
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from mixed sources and/or eolian deposits derived from mixed sources

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 5 percent
Maximum salinity: Slightly saline to moderately saline (8.0 to 16.0 mmhos/cm)
Sodium adsorption ratio, maximum: 13.0
Available water capacity: Moderate (about 7.8 inches)

Interpretive groups

Land capability classification (irrigated): 3w
Land capability (nonirrigated): 7w

Typical profile

0 to 12 inches: Very fine sandy loam
12 to 26 inches: Stratified loamy fine sand to silt loam
26 to 71 inches: Clay

Minor Components

Imperial

Percent of map unit: 3 percent

Indio

Percent of map unit: 3 percent

Holtville

Percent of map unit: 3 percent

Glenbar

Percent of map unit: 3 percent

Vint

Percent of map unit: 3 percent

Data Source Information

Soil Survey Area: Imperial County, California, Imperial Valley Area
Survey Area Data: Version 5, Jul 25, 2008

Imperial County, California, Imperial Valley Area

123—MELOLAND AND HOLTVILLE LOAMS, WET

Map Unit Setting

Elevation: -230 to 300 feet
Mean annual precipitation: 0 to 3 inches
Mean annual air temperature: 72 to 75 degrees F
Frost-free period: 300 to 350 days

Map Unit Composition

Holtville, wet, and similar soils: 40 percent
Meloland, wet, and similar soils: 40 percent
Minor components: 20 percent

Description of Meloland, Wet

Setting

Landform: Basin floors
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from mixed sources and/or eolian deposits derived from mixed sources

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 5 percent
Maximum salinity: Slightly saline to moderately saline (8.0 to 16.0 mmhos/cm)
Sodium adsorption ratio, maximum: 13.0
Available water capacity: Moderate (about 7.4 inches)

Interpretive groups

Land capability classification (irrigated): 3w
Land capability (nonirrigated): 7w

Typical profile

0 to 12 inches: Loam
12 to 26 inches: Stratified loamy fine sand to silt loam
26 to 38 inches: Clay
38 to 60 inches: Stratified silt loam to loamy fine sand

Description of Holtville, Wet

Setting

Landform: Basin floors

Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium and/or lacustrine deposits derived from mixed

Properties and qualities
Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 5 percent
Maximum salinity: Nonsaline to slightly saline (2.0 to 8.0 mmhos/cm)
Sodium adsorption ratio, maximum: 10.0
Available water capacity: Moderate (about 7.7 inches)

Interpretive groups
Land capability classification (irrigated): 3w
Land capability (nonirrigated): 7w

Typical profile
0 to 12 inches: Loam
12 to 24 inches: Clay
24 to 36 inches: Silt loam
36 to 60 inches: Loamy very fine sand

Minor Components

Glenbar
Percent of map unit: 4 percent

Imperial
Percent of map unit: 4 percent

Indio
Percent of map unit: 4 percent

Rositas
Percent of map unit: 4 percent

Vint
Percent of map unit: 4 percent

Data Source Information

Soil Survey Area: Imperial County, California, Imperial Valley Area
Survey Area Data: Version 5, Jul 25, 2008

California Revised Storie Index Rating (CA)

The Storie Index is a soil rating based on soil properties that govern a soil's potential for cultivated agriculture in California.

The Storie Index asseses the productivity of a soil from the following four characteristics: Factor A, degree of soil profile development; factor B, texture of the surface layer; factor C, slope; and factor X, manageable features, including drainage, microrelief, fertility, acidity, erosion, and salt content. A score ranging from 0 to 100 percent is determined for each factor, and the scores are mukltiplied together to derive an index rating.

For simplification, Storie Index ratings have been combined into six grades classes as follows: Grade 1 (excellent), 100 to 80; grade 2 (good), 79 to 60; grade 3 (fair), 59 to 40; grade 4 (poor), 39 to 20; grade 5 (very poor), 19 to 10; and grade 6 (nonagricultural), less than 10.

Report—California Revised Storie Index Rating (CA)

The Storie Index is a soil rating based on soil properties that govern a soil map unit component's potential for cultivated agriculture. [Absence of an entry indicates that a Storie Index rating is not applicable or was not estimated]. For simplification, Storie Index ratings have been combined into six grades as follows: Grade 1 (Excellent): Soils that rate between 80 and 100 and which are suitable for a wide range of crops. Grade 2 (Good) Soils that rate between 60 and 79 and which are suitable for a wide range of crops. Grade 3 (Fair): Soils that range between 40 and 59. Soils in this grade may give good results with certain specialized crops. Grade 4 (Poor): Soils that rate between 20 and 39 and which have a narrow range in their agricultural potential. Grade 5 (Very Poor): Soil that rate between 10 and 19 and are of very limited agricultural use except for pasture because of adverse soil conditions. Grade 6 (Nonagricultural): Soils that rate less than 10. [The numbers in the "Limiting feature value" column range from 0.01 to 1.00. Soils with a smaller the value have a lower potential for cultivated agriculture. The table shows each of the sub-factors used to generate the Storie Index rating for each soil component].

California Revised Storie Index Rating (CA)– Imperial County, California, Imperial Valley Area				
Map symbol and soil name	Pct. of map unit	California Revised Storie Index (CA)		
		Storie index rating	Storie index grade and limiting features	Limiting feature value
106—GLENBAR CLAY LOAM, WET				
Glenbar, wet	85	72	Grade Two - Good	
			Rated Soil Order	1.00
			Profile Group	1.00
			Nearly level to gently sloping	0.98
			USDA Texture	0.95
			Wetness, flooding, ponding, drainage, erosion	0.90

California Revised Storie Index Rating (CA)– Imperial County, California, Imperial Valley Area				
Map symbol and soil name	Pct. of map unit	California Revised Storie Index (CA)		
		Storie index rating	Storie index grade and limiting features	Limiting feature value
110—HOLTVILLE SILTY CLAY, WET				
Holtville, wet	85	45	Grade Three - Fair	
			Rated Soil Order	1.00
			Profile Group	1.00
			Nearly level to gently sloping	0.98
			Wetness, flooding, ponding, drainage, erosion	0.90
			Toxicity	0.85
114—IMPERIAL SILTY CLAY, WET				
Imperial, wet	85	42	Grade Three - Fair	
			Rated Soil Order	1.00
			Profile Group	1.00
			Nearly level to gently sloping	0.98
			Wetness, flooding, ponding, drainage, erosion	0.90
			Toxicity	0.80
115—IMPERIAL-GLENBAR SILTY CLAY LOAMS, WET, 0 TO 2 PERCENT SLOPES				
Glenbar, wet	40	72	Grade Two - Good	
			Rated Soil Order	1.00
			Profile Group	1.00
			Nearly level to gently sloping	0.98
			USDA Texture	0.95
			Wetness, flooding, ponding, drainage, erosion	0.90
Imperial, wet	40	67	Grade Two - Good	
			Rated Soil Order	1.00
			Profile Group	1.00
			Nearly level to gently sloping	0.98
			USDA Texture	0.95
			Wetness, flooding, ponding, drainage, erosion	0.90

California Revised Storie Index Rating (CA)– Imperial County, California, Imperial Valley Area				
Map symbol and soil name	Pct. of map unit	California Revised Storie Index (CA)		
		Storie index rating	Storie index grade and limiting features	Limiting feature value
122—MELOLAND VERY FINE SANDY LOAM, WET				
Meloland, wet	85	44	Grade Three - Fair	
			USDA Texture	1.00
			Rated Soil Order	1.00
			Profile Group	1.00
			Nearly level to gently sloping	0.98
			Wetness, flooding, ponding, drainage, erosion	0.90
123—MELOLAND AND HOLTVILLE LOAMS, WET				
Holtville, wet	40	75	Grade Two - Good	
			USDA Texture	1.00
			Rated Soil Order	1.00
			Profile Group	1.00
			Nearly level to gently sloping	0.98
			Wetness, flooding, ponding, drainage, erosion	0.90
Meloland, wet	40	44	Grade Three - Fair	
			USDA Texture	1.00
			Rated Soil Order	1.00
			Profile Group	1.00
			Nearly level to gently sloping	0.98
			Wetness, flooding, ponding, drainage, erosion	0.90

Data Source Information

Soil Survey Area: Imperial County, California, Imperial Valley Area
Survey Area Data: Version 5, Jul 25, 2008

Agricultural Restoration Plan

Calexico Solar Farm I Phase B

NWC and SEC Anza and Brockman Roads
Calexico, California

Prepared for:

88FT 8ME, LLC
320 Hayward Avenue
Los Angeles, CA 94588

Prepared by:

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780 N. 4th Street
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(760) 337-1100

January 2012

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January 24, 2012

Mr. Tom Buttgenbach
88FT 8ME, LLC
320 Hayward Avenue
Los Angeles, CA 94588

Engineer's Estimate of Probable Costs
Agricultural Restoration Plan
Calexico Solar Farm I (Phase B)
Calexico, California
GSL Project No. GS1104

Dear Mr. Buttgenbach:

GS Lyon personnel have developed an Engineer's Estimate of Probable Costs to restore the agricultural lands to "farm ready conditions" at the Calexico Solar Farm I (Phase B) PV Solar Facility in southern Imperial County, California. The solar farm project consists of 100MW of PV solar generation and will encompass six (6) farm fields totaling approximately 497 net acres, generally located at the northwest and southeast intersections of Brockman and Anza Roads about 7 miles west of Calexico.

The restoration plan exhibits indicate current conditions of the farm fields and the proposed solar power arrays. The estimate accounts for costs restore the land to farm-ready conditions upon ceasing the power facility operation. No crop planting is included in the restoration costs since customary farm practices do not include planting prior to leasing. Crop type and planting is each individual farmer's selection. Costs are provided for replacement of concrete irrigation ditches and subsurface agricultural tile drainage pipelines, deep chiseling (sub-soiling), discing, landplaning and restoration of irrigation land slopes (land–leveling).

This report also identifies Prime Farmland and Farmland of Statewide Importance as defined by the California Department of Conservation.

GS Lyon appreciates the opportunity to provide professional services in developing the restoration plan. Please contact our office with any questions or comments.

Sincerely Yours,
GS Lyon Consultants, Inc.

REGISTERED PROFESSIONAL ENGINEER
JEFFREY O. LYON
No. 31921
EXPIRES 12-31-12
CIVIL
STATE OF CALIFORNIA

Jeffrey O. Lyon, P.E.
Principal Engineer

Table of Contents

Appendices

1.0 Introduction

The Calexico Solar Farm I (Phase B) project will occupy six (6) agricultural fields that are currently in agricultural crop production. The lands generally consist of silty clay to fat clay soil that require subsurface tile drains to maintain crop yields, normally used for growing field crops such as alfalfa, bermuda grass, sudan grass and wheat. Even though there are lands identified as “Prime Farmland” by the California Department of Conservation, the cropping patterns of all of the agricultural lands within the Calexico Solar Farm I (Phase B) have historically been “field crops”. A complete Land Evaluation and Site Assessment (LESA) Model has been prepared for the project (see **Appendix F**).

The Calexico Solar Farm I (Phase B) project is expected to consist of 100MW of PV solar generation and extend a minimum of 25 years and may extend up to 40 years (see **Appendix E –** Project Description for project specifics). Without regular crop irrigation occurring during this period, there should be no increase in salts in the field (water table is not high enough to drive salts to the surface).

This restoration plan has been prepared to document the agricultural improvements of each farm field and to provide an estimate of the work (cost) required to return the land to agricultural production upon ceasing operation of the PV solar energy generating facility.

2.0 Restoration Methods

2.1 Irrigation Ditches - During extended periods of non-use (as has occurred recently as a result of the on-farm fallowing program), it has been found that the clay soils dry and shrink away from the concrete lining. The thin concrete lining (1.5 inches thick) is prone to cracking and breakage without support of moist soil behind the lining and the amount of ditch repairs required after extended non-use is generally extensive. It is generally more cost efficient to replace the ditch and field gates than to chase the problems created by fractured ditches.

2.2 Sub-surface Tile Drains - Tile drains that currently exist below the farm fields may be punctured by installation of PV panel frame support posts. In order to insure proper operation of the tile drainage system, a new system has been planned for each farm field. Should the steel support posts not be driven to the tile system depth, then only the red clay or concrete tile portions of the tile system would need to be replaced. The plastic tile lines have been found to be relatively unaffected by extended fallowing periods.

2.3 Ground Preparation - Without agricultural tillage over the 25 to 40 year span of the PV solar energy generating facility operation, the clay soils will become compacted. In order to insure crop growth, the fields will need to be sub-soiled (plow shanks extending to 36" to 42" below ground surface), re-leveled with laser controlled drag-scrapers, manure fertilizer applied, disced (2 directions) and landplaned (or tri-planed). A minimum of six (6) soil samples have been scheduled to be collected from each field and analyzed for agronomic minerals, salts and fertilizer compounds.

3.0 Cost Estimating/Unit Pricing

3.1 Irrigation Ditches - Contractors that routinely install concrete lined irrigation ditches in the Imperial Valley were contacted to develop unit pricing of a farm ditch. The overall cost of placing and compacting a 15 ft. by 2 ft. high ditch pad (native soil from the farm field), trenching for concrete lining, placement of concrete lining, installation of jack gates, installation of outlet pipes and slide gates were included into one cost per foot of concrete ditch construction.

3.2 Subsurface Tile Drains – A specialty tile drainage installation contractor in the Imperial Valley was consulted on the installation of tile drain baselines (8-inch diameter pipelines) and laterals (4-inch pipelines) to establish unit rate pricing of the tile system installations. The lengths of the laterals and baselines were taken from the existing tile drainage maps obtained from Imperial Irrigation District records.

3.3 Ground Preparation - Pricing from local farm service providers was used to determine the unit rate pricing for ground preparation prior to placement of irrigation borders and planting. Standard agricultural practices were used for the work to be performed. Land-leveling costs were developed by consultation with an agricultural land-leveling specialty contractor in the Imperial Valley.

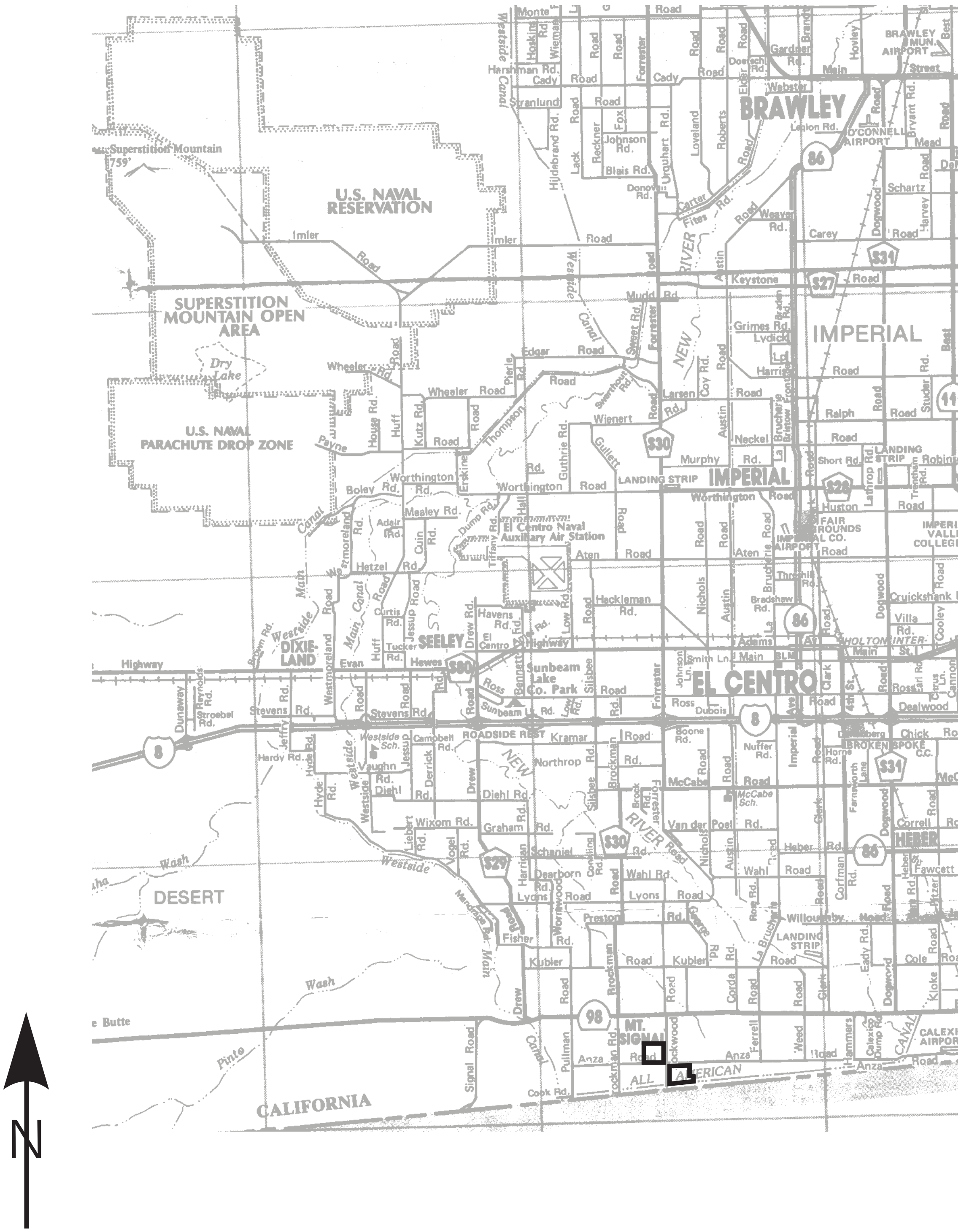
4.0 Prime Farmland and Farmland of State Importance

The California Department of Conservation has classified all agricultural lands in the Imperial Valley as identified in the FARMLAND MAPPING and MONITORING PROGRAM – 2008 Imperial County Important Farmland Map. The Soil Candidate Listing for Prime Farmland and Farmland of Statewide Importance-Imperial County (Rev. 2010) appends the Farmland Map, identifying each soil type described by the US Department of Agriculture, Natural Resources Conservation Service, Soil Survey of Imperial County, Imperial Valley Area, October 1981. The areas that make up Prime Farmland are identified as the Soil Survey Soil Mapping Units described in the Soil Candidate Listing (see **Appendix D**).

This report has identified **172 acres** within the Calexico Solar Farm I (Phase B) project site as being classified as **Prime Farmland**. Digital Google Earth™ maps overlain with Soil Survey soil mapping unit contours obtained from the USDA website were used to determine the currently farmed areas that were classified as Prime Farmland. The areas were digitally scaled using electronic mapping programs (see **Plates D4 and D5 – Appendix D**).

Appendix A

Project Location Maps and Maps of Existing Conditions

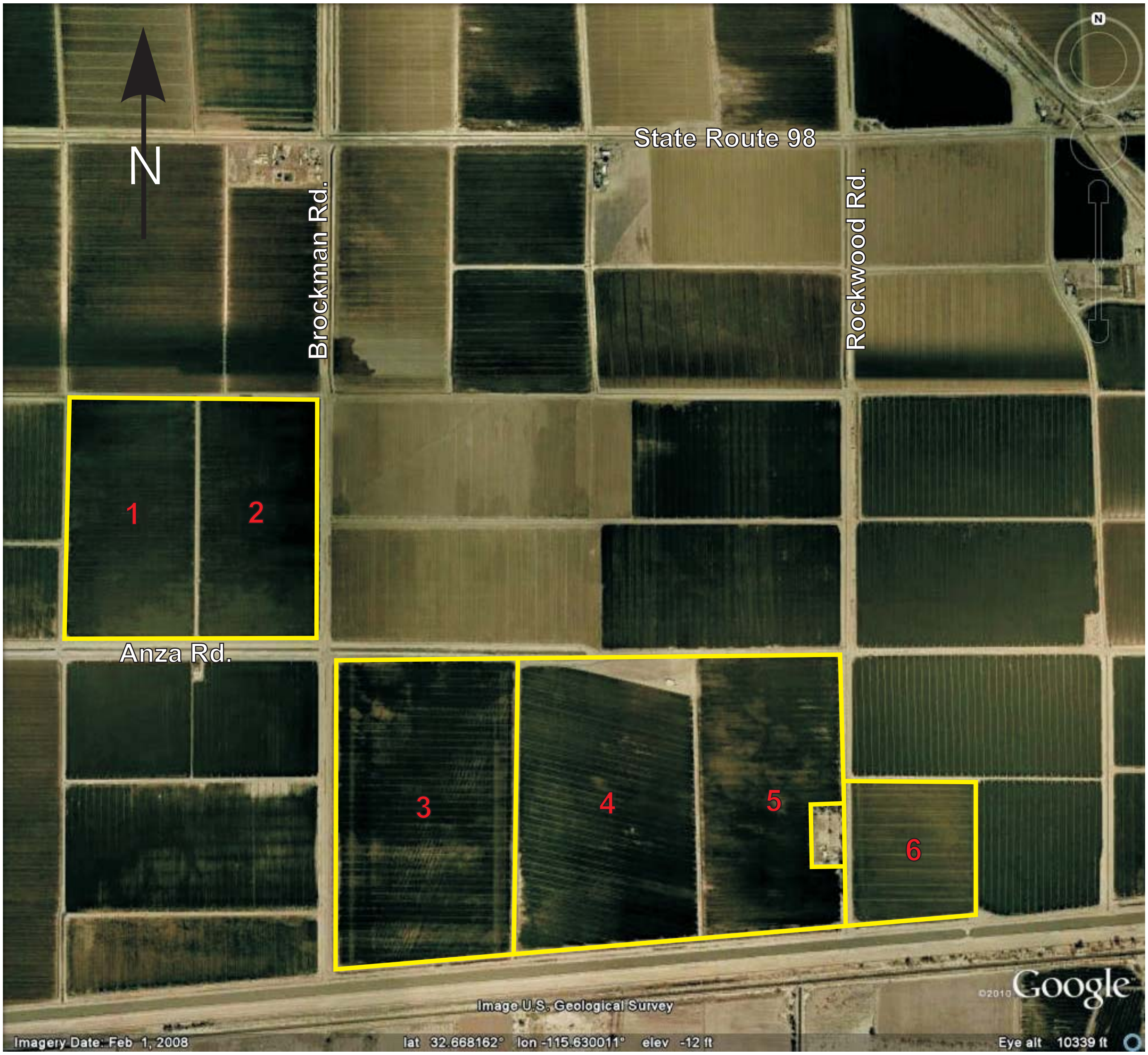


GS Lyon

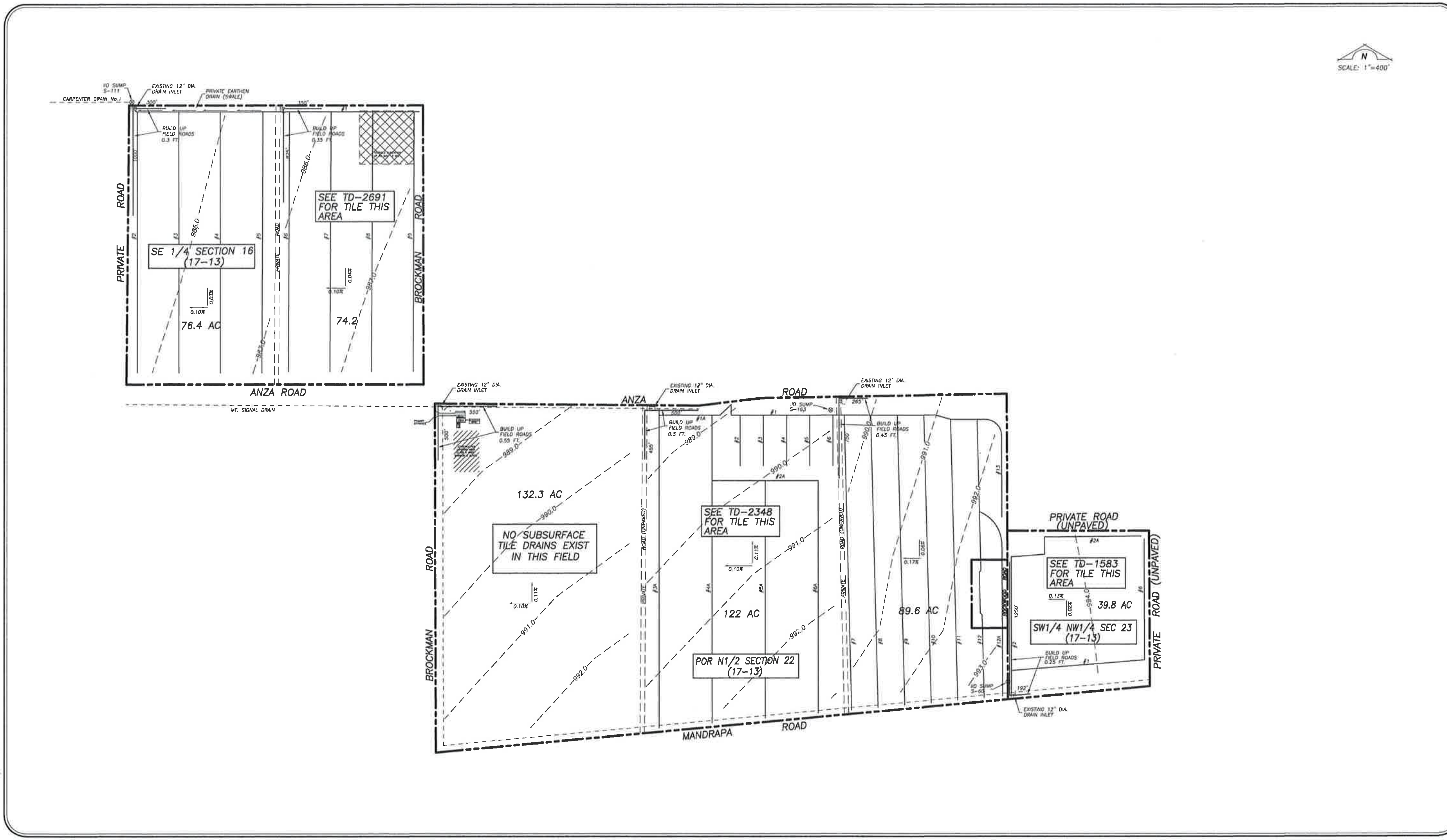
Project No.: GS1104

Calexico Solar Farm I Phase B
Vicinity Map

Plate
A-1



GS Lyon Project No.: GS1104	Calexico Solar Farm I Phase B Site Map	Plate A-2



JBL JOB No. J10071

PRINTED: 12/12/11

REV No.	REVISION	DATE

8minutenergy RENEWABLES

PREPARED UNDER THE DIRECT SUPERVISION OF:

JEFFREY O. LYON, R.C.E. 31,921 ENGINEER OF RECORD — DATE

REGISTERED PROFESSIONAL ENGINEER JEFFREY O. LYON RCE 31,921 EXP 12-31-12 CIVIL STATE OF CALIFORNIA

GS Lyon
Engineering & Construction Management
780 N. 4th Street
El Centro, CA 92243
(760) 370-3000
FAX (760) 337-8900

CALEXICO SOLAR FARM I PHASE B (88FT)

LOCATION CALEXICO, CA
SHEET TITLE EXISTING AG CONDITIONS
CLIENT 8MINUTENERGY RENEWABLES

SHEET No. 1
BY GMG
DATE 3/22/11
JOB # GS1104

Appendix B

Solar Farm Improvements

JBL JOB No. J10071

PRINTED: 1/20/12

REV No.	REVISION	DATE

8minutenergy RENEWABLES

PREPARED UNDER THE DIRECT SUPERVISION OF:

JEFFREY O. LYON, R.C.E. 31,921 — DATE
ENGINEER OF RECORD

REGISTERED PROFESSIONAL ENGINEER
JEFFREY O. LYON
RCE 31,921
EXP 12-31-12
CIVIL
STATE OF CALIFORNIA

GS Lyon
Engineering & Construction Management
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El Centro, CA 92243
(760) 370-3000
FAX (760) 337-8900

CALEXICO SOLAR FARM I PHASE B (88FT)

LOCATION CALEXICO, CA
SHEET TITLE OVERALL SITE PLAN
CLIENT 8MINUTENERGY RENEWABLES

SHEET No. 1
BY GMG
DATE 3/22/11
JOB # GS1104

Appendix C

Restoration Cost Summary

Calexico Solar Farm I Phase B (88FT)

Field No. 1 - 052-190-011 (West Field) (74.7 ac)

Subsurface Tile Drainage System - Baseline	1,350	LF	$	7.65	$	10,327.50
Subsurface Tile Drainage System - Laterals	9,754	LF	$	2.25	$	21,946.50
Irrigation Ditch/Pad and Outlets/Gates/Slide Gates	2,485	LF	$	62.25	$	154,691.25
Land Leveling	74.7	ac	$	150.00	$	11,205.00
Ground Work (Subsoil/ Stubble Disc/Landplane)	74.7	ac	$	130.00	$	9,711.00
Manure Application	74.7	ac	$	75.00	$	5,602.50
Agronomic Soil Sampling	1	LS	$	800.00	$	800.00
			Total		**$**	**214,283.75**
			Cost/Ac.		**$**	**2,868.59**

Field No. 2 - 052-190-011 (East Field) (70 ac)

Subsurface Tile Drainage System - Baseline	1,350	LF	$	7.65	$	10,327.50
Subsurface Tile Drainage System - Laterals	9,732	LF	$	2.25	$	21,897.00
Irrigation Ditch/Pad and Outlets/Gates/Slide Gates	2,450	LF	$	62.25	$	152,512.50
Land Leveling	70.0	ac	$	150.00	$	10,500.00
Ground Work (Subsoil/ Stubble Disc/Landplane)	70.0	ac	$	130.00	$	9,100.00
Manure Application	70.0	ac	$	75.00	$	5,250.00
Agronomic Soil Sampling	1	LS	$	800.00	$	800.00
			Total		**$**	**210,387.00**
			Cost/Ac.		**$**	**3,005.53**

Field No. 3 - 052-210-037 (119.7 ac)

Subsurface Tile Drainage System - Baseline	0	LF	$	7.65	$	-
Subsurface Tile Drainage System - Laterals	0	LF	$	2.25	$	-
Irrigation Ditch/Pad and Outlets/Gates/Slide Gates	2,965	LF	$	62.25	$	184,571.25
Land Leveling	119.7	ac	$	150.00	$	17,955.00
Ground Work (Subsoil/ Stubble Disc/Landplane)	119.7	ac	$	130.00	$	15,561.00
Manure Application	119.7	ac	$	75.00	$	8,977.50
Agronomic Soil Sampling	1	LS	$	800.00	$	800.00
			Total		**$**	**227,864.75**
			Cost/Ac.		**$**	**1,903.63**

Field No. 4 - 052-210-038 (114.2 ac)

Subsurface Tile Drainage System - Baseline	2,631	LF	$	7.65	$	20,127.15
Subsurface Tile Drainage System - Laterals	12,111	LF	$	2.25	$	27,249.75
Irrigation Ditch/Pad and Outlets/Gates/Slide Gates	2,434	LF	$	62.25	$	151,516.50
Land Leveling	114.2	ac	$	150.00	$	17,130.00
Ground Work (Subsoil/ Stubble Disc/Landplane)	114.2	ac	$	130.00	$	14,846.00
Manure Application	114.2	ac	$	75.00	$	8,565.00
Agronomic Soil Sampling	1	LS	$	800.00	$	800.00
			Total		**$**	**240,234.40**
			Cost/Ac.		**$**	**2,103.63**

Field No. 5 - 052-210-039 (82.7 ac)

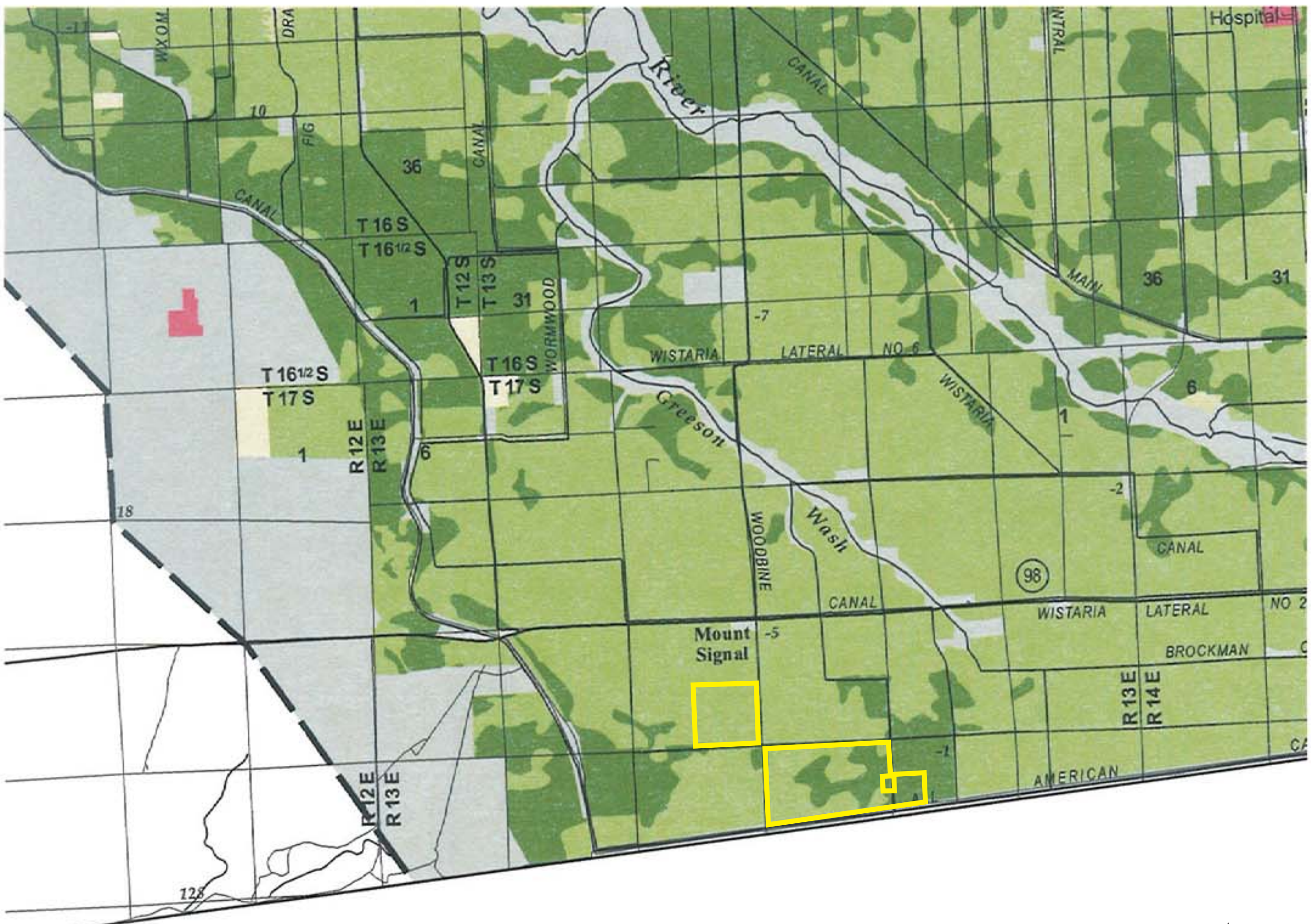
Subsurface Tile Drainage System - Baseline	1,366	LF	$	7.65	$	10,449.90
Subsurface Tile Drainage System - Laterals	19,233	LF	$	2.25	$	43,274.25
Irrigation Ditch/Pad and Outlets/Gates/Slide Gates	3,333	LF	$	62.25	$	207,479.25
Land Leveling	82.7	ac	$	150.00	$	12,405.00
Ground Work (Subsoil/ Stubble Disc/Landplane)	82.7	ac	$	130.00	$	10,751.00
Manure Application	82.7	ac	$	75.00	$	6,202.50
Agronomic Soil Sampling	1	LS	$	800.00	$	800.00
			Total		**$**	**291,361.90**
			Cost/Ac.		**$**	**3,523.12**

Field No. 6 - 052-210-018 (36.1 ac)

Subsurface Tile Drainage System - Baseline	1,406	LF	$	7.65	$	10,755.90
Subsurface Tile Drainage System - Laterals	3,569	LF	$	2.25	$	8,030.25
Irrigation Ditch (Common with Field No. 5)	1,427	LF	$	62.25	$	88,830.75
Land Leveling	36.1	ac	$	150.00	$	5,415.00
Ground Work (Subsoil/ Stubble Disc/Landplane)	36.1	ac	$	130.00	$	4,693.00
Manure Application	36.1	ac	$	75.00	$	2,707.50
Agronomic Soil Sampling	1	LS	$	800.00	$	800.00
			Total		**$**	**121,232.40**
			Cost/Ac.		**$**	**3,358.24**
			TOTAL		**$**	**1,305,364.20**

Appendix D

Prime Farmland and Farmland of Statewide Importance



*Legend on following page

N

GS Lyon

Project No.: GS1104

Calexico Solar Farm I Phase B
Imperial County Important Farmland 2010

Plate
D-1

PRIME FARMLAND - 195,589 acres

PRIME FARMLAND HAS THE BEST COMBINATION OF PHYSICAL AND CHEMICAL FEATURES ABLE TO SUSTAIN LONG-TERM AGRICULTURAL PRODUCTION. THIS LAND HAS THE SOIL QUALITY, GROWING SEASON, AND MOISTURE SUPPLY NEEDED TO PRODUCE SUSTAINED HIGH YIELDS. LAND MUST HAVE BEEN USED FOR IRRIGATED AGRICULTURAL PRODUCTION AT SOME TIME DURING THE FOUR YEARS PRIOR TO THE MAPPING DATE.

FARMLAND OF STATEWIDE IMPORTANCE - 311,048 acres

FARMLAND OF STATEWIDE IMPORTANCE IS SIMILAR TO PRIME FARMLAND BUT WITH MINOR SHORTCOMINGS, SUCH AS GREATER SLOPES OR LESS ABILITY TO STORE SOIL MOISTURE. LAND MUST HAVE BEEN USED FOR IRRIGATED AGRICULTURAL PRODUCTION AT SOME TIME DURING THE FOUR YEARS PRIOR TO THE MAPPING DATE.

UNIQUE FARMLAND - 2,196 acres

UNIQUE FARMLAND CONSISTS OF LESSER QUALITY SOILS USED FOR THE PRODUCTION OF THE STATE'S LEADING AGRICULTURAL CROPS. THIS LAND IS USUALLY IRRIGATED, BUT MAY INCLUDE NONIRRIGATED ORCHARDS OR VINEYARDS AS FOUND IN SOME CLIMATIC ZONES IN CALIFORNIA. LAND MUST HAVE BEEN CROPPED AT SOME TIME DURING THE FOUR YEARS PRIOR TO THE MAPPING DATE.

FARMLAND OF LOCAL IMPORTANCE - 32,109 acres

UNIRRIGATED AND UNCULTIVATED LANDS WITH PRIME AND STATEWIDE SOILS.

URBAN AND BUILT-UP LAND - 27,709 acres

URBAN AND BUILT-UP LAND IS OCCUPIED BY STRUCTURES WITH A BUILDING DENSITY OF AT LEAST 1 UNIT TO 1.5 ACRES, OR APPROXIMATELY 6 STRUCTURES TO A 10-ACRE PARCEL. COMMON EXAMPLES INCLUDE RESIDENTIAL, INDUSTRIAL, COMMERCIAL, INSTITUTIONAL FACILITIES, CEMETERIES, AIRPORTS, GOLF COURSES, SANITARY LANDFILLS, SEWAGE TREATMENT, AND WATER CONTROL STRUCTURES.

OTHER LAND - 458,829 acres

OTHER LAND IS LAND NOT INCLUDED IN ANY OTHER MAPPING CATEGORY. COMMON EXAMPLES INCLUDE LOW DENSITY RURAL DEVELOPMENTS, BRUSH, TIMBER, WETLAND, AND RIPARIAN AREAS NOT SUITABLE FOR LIVESTOCK GRAZING, CONFINED LIVESTOCK, POULTRY, OR AQUACULTURE FACILITIES, STRIP MINES, BORROW PITS, AND WATER BODIES SMALLER THAN 40 ACRES. VACANT AND NONAGRICULTURAL LAND SURROUNDED ON ALL SIDES BY URBAN DEVELOPMENT AND GREATER THAN 40 ACRES IS MAPPED AS OTHER LAND.

WATER - 1,029 acres

PERENNIAL WATER BODIES WITH AN EXTENT OF AT LEAST 40 ACRES.

(All acreages are totals for Imperial County)

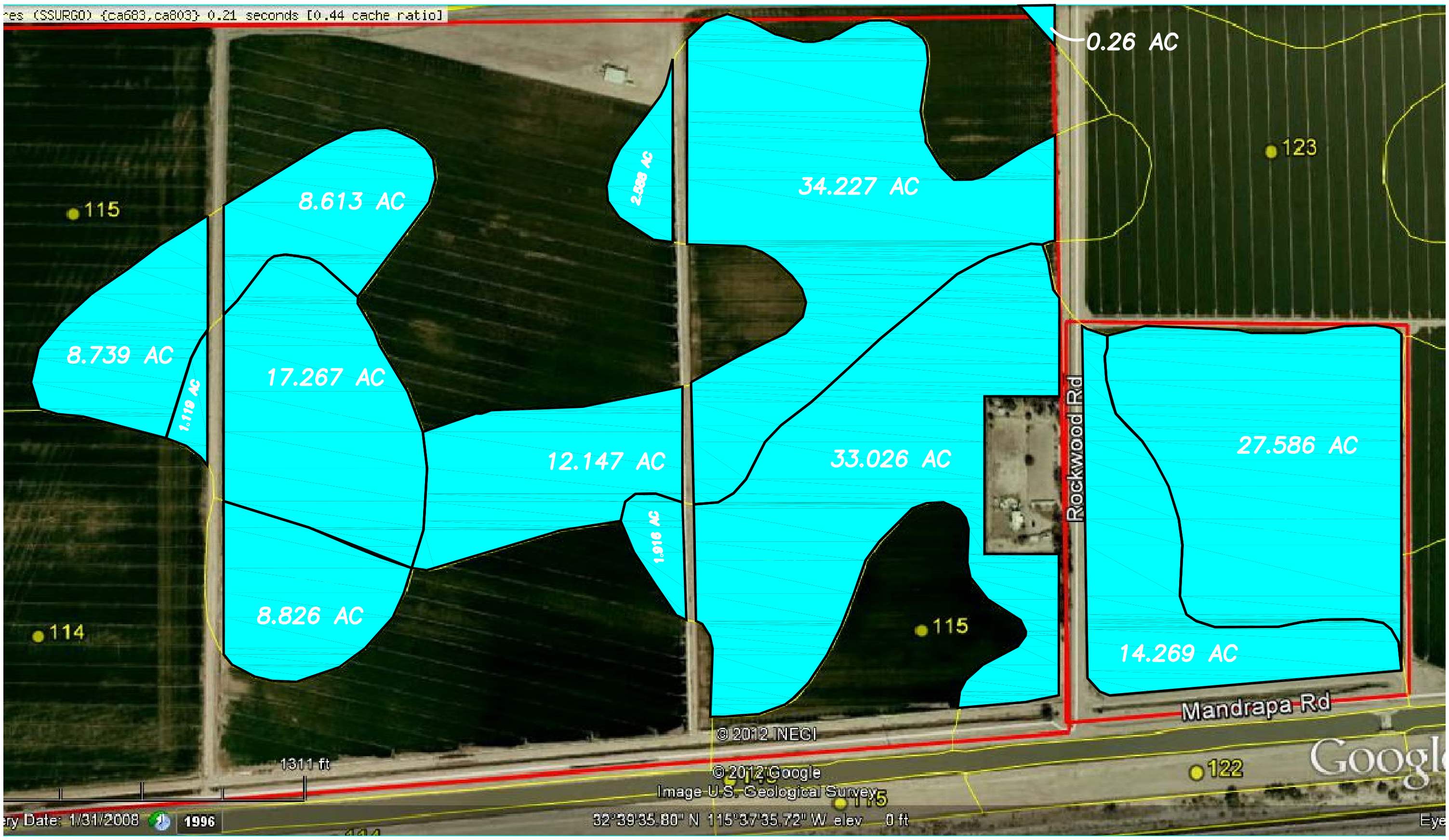
GS Lyon Project No.: GS1104	Calexico Solar Farm I Phase B I.C. Important Farmland 2010 Legend	Plate D-2

GS Lyon

Project No.: GS1104

Calexico Solar Farm I Phase B
Soil Survey Map

Plate
D-3



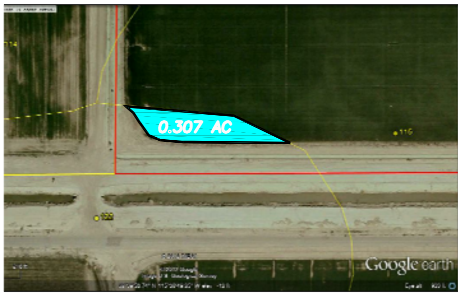
Prime Farmland Area - 170.32 Acres

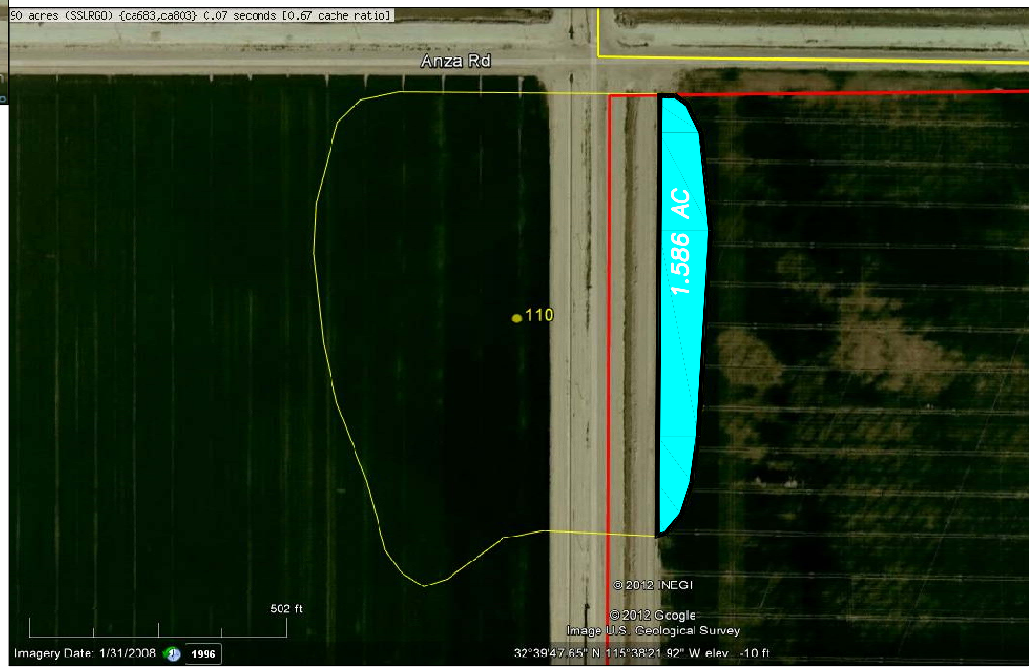
GS Lyon

Project No.: GS1023

Calexico Solar Farm I (88FT Phase B)
Prime Farmland Area

Plate
D-4





Prime Farmland Area - 1.89 Acres

GS Lyon Project No.: GS1023	Calexico Solar Farm I (88FT Phase B) Prime Farmland Area	Plate D-5

California Department of Conservation

FARMLAND MAPPING AND MONITORING PROGRAM

SOIL CANDIDATE LISTING

for

PRIME FARMLAND AND FARMLAND OF STATEWIDE IMPORTANCE

IMPERIAL COUNTY

U.S. Department of Agriculture, Natural Resources Conservation Service, soil surveys for Imperial County include:

Soil Survey of Imperial County, California, Imperial Valley Area, October 1981

Soil Survey of Yuma-Wellton Area: Parts of Yuma County, Arizona, and Imperial County, California, December 1980

Soil Survey of Palo Verde Area, California, September 1974

Beginning in 2002, SSURGO digital soil information has been incorporated into the Imperial County Important Farmland Map. Prior versions of the map have not been modified.

The SSURGO data includes Imperial County, Imperial Valley Area (published 3/22/2004), Yuma-Wellton Area (published 08/11/2004) and Palo Verde Area (published 4/20/2004). The digital surveys contain additional soil units beyond those published in the original paper surveys. Soils on the Prime and Statewide lists that only occur in the SSURGO data are appended to this list in italics.

For more information on the NRCS SSURGO data, please see: http://soils.usda.gov/survey/geography/ssurgo/

7/12/95, updated 06/02/2010

IMPERIAL COUNTY
PRIME FARMLAND SOILS

U.S. DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE
DAVIS, CALIFORNIA 95616

THESE SOIL MAPPING UNITS MEET THE CRITERIA FOR PRIME FARMLAND AS OUTLINED IN THE U.S. DEPARTMENT OF AGRICULTURE'S LAND INVENTORY AND MONITORING (LIM) PROJECT FOR THE IMPERIAL VALLEY AREA, YUMA-WELLTON AREA (WINTERHAVEN), AND PALO VERDE AREA SOIL SURVEYS.

IMPERIAL VALLEY AREA

Symbol	Name
100	Antho loamy fine sand
101*	Antho-Superstition complex
105	Glenbar clay loam
106[#]	Glenbar clay loam, wet
108	Holtville loam
109	Holtville silty clay
110[#]	Holtville silty clay, wet
117	Indio loam
118[#]	Indio loam, wet
119	Indio-Vint complex
120	Laveen loam
122[#]	Meloland very fine sandy loam, wet
123[#]	Meloland and Holtville loams, wet
137	Rositas silt loam, 0 to 2 percent slopes
139*	Superstition loamy fine sand
142[#]	Vint loamy very fine sand, wet

IMPERIAL VALLEY AREA Continued

Symbol	Name
143	Vint fine sandy loam
144[#]	Vint and Indio very fine sandy loams, wet

---

[*] Prime Farmland is managed so that in all horizons within a depth of 40 inches (1 meter), during part of each year the conductivity of the saturation extract is less than 4 mmhos/cm and the exchangeable sodium percentage (ESP) is less than 15.

[#] Prime Farmland if drained

Note: Soils 107 (Glenbar complex), 132 (Rositas fine sand, 0 to 2 percent slopes), 133 (Rositas fine sand, 2 to 5 percent slopes), 135 (Rositas fine sand, wet, 0 to 2 percent slopes), 136 (Rositas loamy fine sand, 0 to 2 percent slopes) and 138 (Rositas and Superstition loamy fine sands) have been moved from the Prime Farmland list to the Farmland of Statewide Importance list per NRCS in 1995.

YUMA-WELLTON AREA (Imperial County portion)

Symbol	Name
8#	Gadsden clay
10#	Glenbar silty clay loam
12#	Holtville clay
13#	Indio silt loam
17	Kofa clay
24	Ripley silt loam

Prime Farmland if reclaimed of excess salts and sodium.

Notes: *Soil 8* (Gadsden clay) was moved from the Farmland of Statewide Importance list to the Prime Farmland list per AZ NRCS letter of September 27, 2004.
Soil 19 (Lagunita silt loam) was removed from the Prime Farmland list per AZ NRCS letter of September 27, 2004.

PALO VERDE AREA

Symbol	Name
Ac	Aco gravelly loamy sand
Af	Aco sandy loam
Gb	Gilman fine sandy loam
Gc	Gilman silty clay loam
Ge	Glenbar silty clay loam
Hb*	Holtville fine sandy loam
Hc*	Holtville silty clay
Id*	Indio very fine sandy loam
Ie*	Indio silty clay loam
Oc*	Orita fine sand
Og*	Orita gravelly loamy sand
Or*	Orita gravelly fine sandy loam
Rb*	Ripley very fine sandy loam
Rc*	Ripley silty clay loam
RoA	Rositas fine sand, 0 to 2 percent slopes
RoB	Rositas fine sand, 2 to 9 percent slopes
RtA	Rositas silty clay loam, 0 to 2 percent slopes
9#	*Gadsden clay*

PALO VERDE AREA Continued

Symbol	Name
9A#	*Gadsden loam*
36#	*Indio silt loam*

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* Prime Farmland if reclaimed of excess salts and sodium.

Prime Farmland if either protected from flooding or not frequently flooded during the growing season.

U.S. DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE
DAVIS, CALIFORNIA 95616

THESE SOIL MAPPING UNITS MEET THE CRITERIA FOR FARMLAND OF STATEWIDE IMPORTANCE AS OUTLINED IN THE U.S. DEPARTMENT OF AGRICULTURE'S LAND INVENTORY AND MONITORING (LIM) PROJECT FOR THE IMPERIAL VALLEY AREA, YUMA-WELLTON AREA (WINTERHAVEN), AND PALO VERDE AREA SOIL SURVEYS.

IMPERIAL VALLEY AREA

Symbol	Name
107	Glenbar complex
111	Holtville-Imperial silty clay loams
112	Imperial silty clay
113	Imperial silty clay, saline
114	Imperial silty clay, wet
115	Imperial-Glenbar silty clay loams, wet, 0 to 2 percent slopes
116	Imperial-Glenbar silty clay loams, 2 to 5 percent slopes
121	Meloland fine sand
124	Niland gravelly sand
125	Niland gravelly sand, wet
126	Niland fine sand
127	Niland loamy fine sand
128	Niland-Imperial complex, wet
130	Rositas sand, 0 to 2 percent slopes

IMPERIAL VALLEY AREA Continued

Symbol	Name
131	Rositas sand, 2 to 5 percent slopes
132	Rositas fine sand, 0 to 2 percent slopes
133	Rositas fine sand, 2 to 9 percent slopes
135	Rositas fine sand, wet, 0 to 2 percent slopes
136	Rositas loamy fine sand, 0 to 2 percent slopes
138	Rositas-Superstition loamy fine sands

YUMA-WELLTON AREA (Imperial County Portion)

Symbol	Name
14*	Indio silt loam, saline
16*	Indio-Lagunita-Ripley complex
18*	Lagunita loamy sand
25*	Rositas sand

* Due to insufficient documentation of qualifying criteria, these units were dropped from the Farmland of Statewide Importance list per the Arizona office of NRCS (September 27, 2004).

Note: *Soil 8* (Gadsden Clay) was moved to the Prime Farmland list from the Farmland of Statewide Importance list per AZ NRCS letter of September 27, 2004.

PALO VERDE AREA

Symbol	Name
Co	Cibola fine sandy loam
Cs	Cibola silty clay loam
Ib	Imperial fine sandy loam
Ic	Imperial silty clay
Md	Meloland fine sandy loam
Me	Meloland silty clay loam
RsA	Rositas gravelly loamy sand, 0 to 2 percent slopes

Appendix E

Project Description

Calexico Solar Farm I Phases A and B

PROJECT DESCRIPTION

88FT 8ME, LLC
Sponsor: 8minutenergy Renewables LLC
10100 Santa Monica Boulevard, Suite 300
Los Angeles, CA 90067
(213) 281-9771

With Technical Assistance By:
GS Lyon Consultants, Inc.
780 North 4th Street
El Centro, CA 92243
(760) 337-1100

July 2011

Table of Contents

PROJECT INFORMATION

Project Name: Calexico Solar Farm I

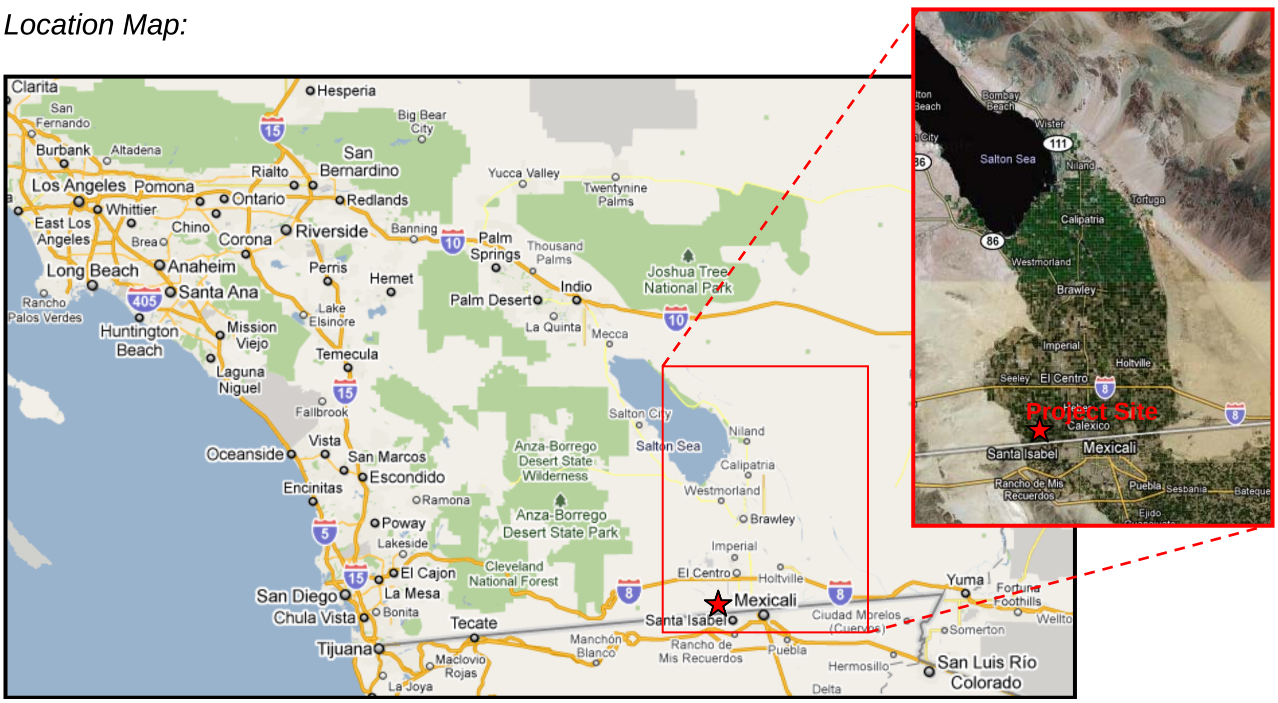
General Location: The project will be located approximately four miles west of Calexico, California in southern Imperial County. The project comprises several agricultural parcels totaling approximately 1,300 acres, generally located between State Route 98 to the north and the US-Mexico border to the south, and between a private road to the west (½ mile east of Pullman Rd) and a private road to the east (½ west of Ferrell Road). The land used by the project is owned by several land owners. Agricultural lands lie to the immediate north, south, east, and west of the project, with the exception of isolated residential and/or commercial structures.

Calexico Solar Farm I comprises two phases (Phase A and Phase B), each requesting approval of a separate CUP.

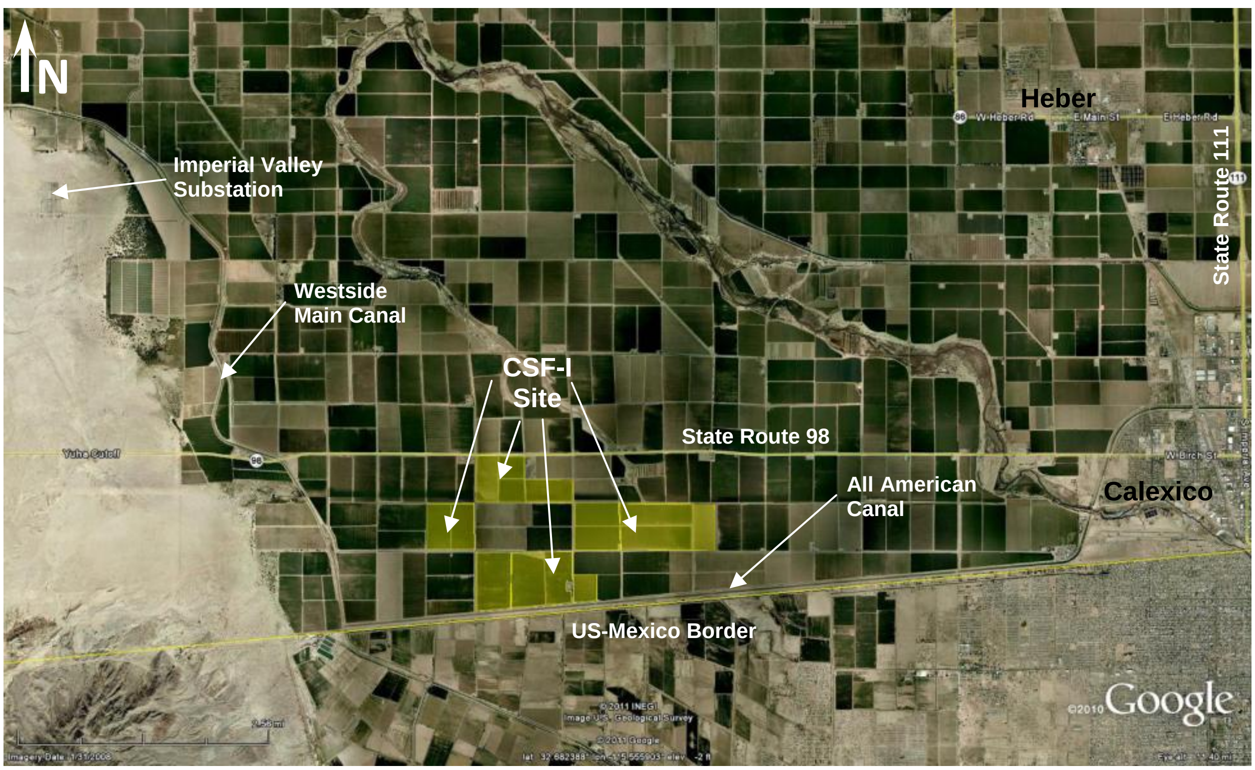
Assessor's Parcel Numbers:

- Phase A (~720 AC): 052-210-001, 052-210-002, 052-210-015, 052-210-14
- Phase B (~610 AC): 052-190-011, 052-210-037, 052-210-038, 052-210-039, 052-210-018

Location Map:



Vicinity Map:



DESCRIPTION OF PROPOSED PROJECT

88FT 8ME, LLC and 8minutenergy Renewables LLC (the "Applicant") are seeking approval of two Conditional Use Permits (CUP) from Imperial County for the development of an up to 200 MW Calexico Solar Farm I ("CSF-I") solar farm located west of Calexico (see "Vicinity Map" above). The Applicant plans to develop this project in two phases: Phase A and Phase B, each with a separate CUP, and each intended to generate up to 100 MW. The Applicant further intends for each phase to have its own O&M building and onsite substation.

Project Phases

An interconnection application process for the entire CSF-I project with the California Independent System Operator (CAISO) has been initiated, and a queue position with CAISO has been secured for a total of 200 MW, which will be shared by the two phases of the CSF-I project. The Applicant intends for each CUP application of the project's two phases to produce up to 100 MW. However, each phase and CUP may produce up to 200 MW if the other phase and CUP either does not get built at all or does not get built for its full 100 MW share. The total output of both CUPs and phases combined will not exceed a total of 200 MW in any scenario.

The land requirements of a solar farm can vary significantly depending on the mounting structures used (e.g., fixed-tilt vs. tracking) and the efficiency of the modules selected. In general, on a per-MW basis, less land is required for higher efficiency modules (which may not be available cost effectively at the time of construction) with fixed-tilt mounts than for lower efficiency modules with tracking mounts. Thus, by using high efficiency modules and fixed-tilt mounts, a single phase and CUP of CSF-I could accommodate up to 200 MW itself. It is entirely possible that each phase and CUP ends up with a mix of fixed tilt and/or tracking mounts and different module efficiencies.

Therefore, the Applicant requests the approval of two CUPs for the CSF-I project: one CUP for Phase A, and a second CUP for Phase B. The CUP term requested for each phase and CUP is 40 years. The Applicant proposes to construct, own, operate, and fund the CSF-I project. The Applicant expects both phases of the CSF-I project to produce power by 2013 to 2014.

CSF-I's interconnection will occur at the 230 kV side of the SDG&E Imperial Valley (IV) Substation, located approximately 5 miles northwest of the project site. The Applicant intends to interconnect via 230 kV transmission facilities shared with one or more solar projects in the vicinity; several suitable transmission facilities are currently planned in CSF-I's immediate area. CSF-I intends to transfer electrical power from both of its onsite substations (one each on Phase A and Phase B land) to IV Substation via an offsite shared substation and transmission facility constructed, owned, operated, and funded by Mount Signal Solar Farm I (82LV 8me, LLC), which has a Right-of-Way (ROW) application being processed by the Bureau of Land Management (BLM). Alternatively, CSF-I may:

1. Build a single onsite substation located in one of CSF-I's phases, which would collect power generated by both phases of CSF-I and transmit that power to IV Substation via the method described above; or

2. "Host" a shared substation onsite in one of CSF-I's phases, which c/would receive power from the other phase as well as from another nearby solar project(s). Power would then be transmitted to IV Substation via shared transmission facilities constructed, owned, operated, and funded by a separate legal entity; or

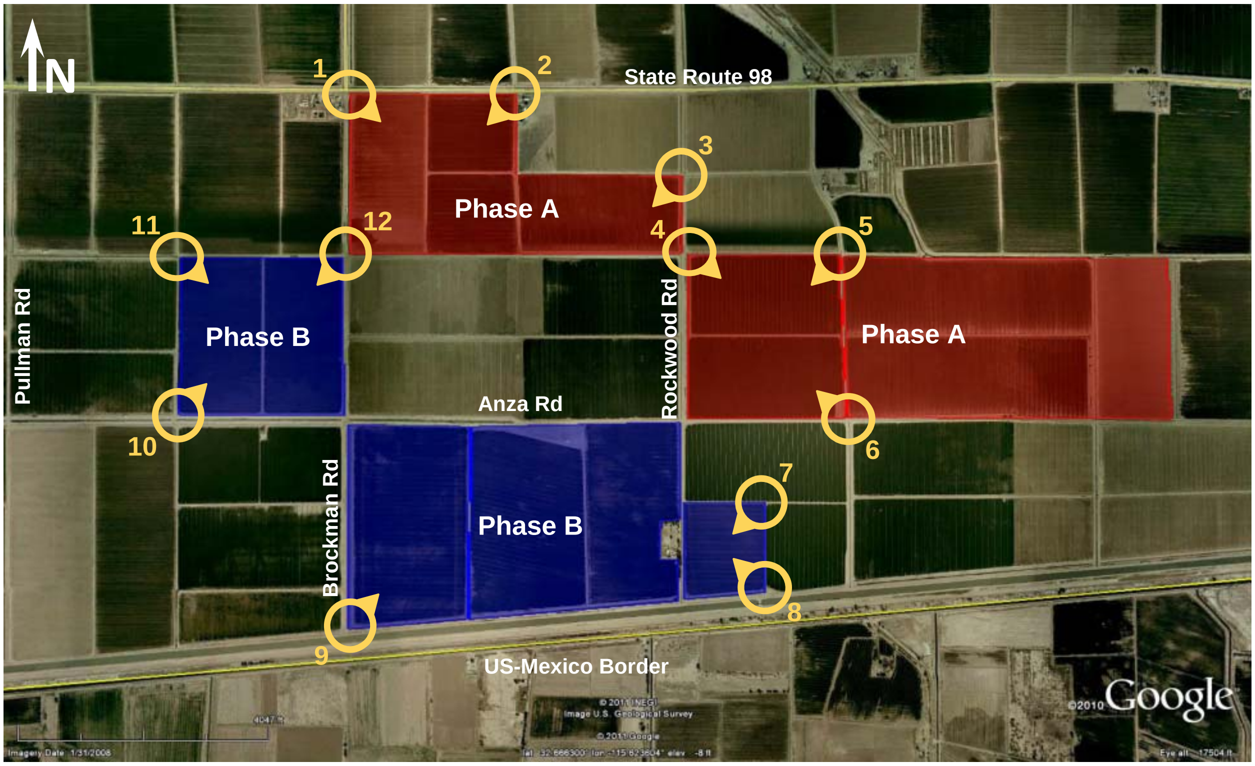
3. Utilize the transmission, substation, and/or O&M facilities of another legal entity(ies) other than those of Mount Signal Solar Farm I, such as another neighboring solar project or a Special Purpose Vehicle (SPV) created to accommodate multiple solar projects' shared transmission, substation, and/or O&M facilities.

In the above alternative scenarios, CSF-I's onsite transmission, substation, and/or O&M facilities c/would be reduced or eliminated, and those areas c/would instead by covered with solar panels.

Any necessary authorization or agreement to share facilities would be obtained from the appropriate legal entity(ies) prior to CSF-I's construction.

The Applicant has considered the following in its selection of the CSF-I site for detailed evaluation:

- Land availability (approximately 1,300 acres);
- Zoning (the CSF-I will be sited on land currently zoned "A-2" General Agriculture, "A-2-R" General Agriculture Rural Zone, and "A3" Heavy Agriculture);
- Minimal environmental consequences (CSF-I will be located on disturbed land currently used for agriculture);
- Water availability (no water wells required);
- Primarily (75%+) low production agricultural land (Farmland of Statewide Importance);
- Long-term land lease (25-year lease commencing with entitlements with a 15-year extension for a total of 40 years)



Map of CSF-I Photo Locations


#1 Looking SE


#2 Looking SW

#3 Looking SW

#4 Looking SE

#5 Looking SW

#6 Looking NW

#7 Looking SW

#8 Looking NW

#9 Looking NE

#10 Looking NE

#11 Looking SE

#12 Looking SW

Up to twelve (12) full time employees will operate the entire CSF-I project (split roughly evenly between phases, and between daytime and nighttime shifts). Typically, up to six (6) staff total for both phases combined will work during the day shift (sunrise to sunset), and the remainder during the night shifts and weekend. As noted earlier, it is possible that one phase of CSF-I would simply feed its power to the other phase. In that scenario, CSF-I's phases would share personnel, thereby reducing the staff required for CSF-I as a whole to a total of approximately ten (10) staff. It is also possible that CSF-I would share another legal entity's O&M facilities. In that scenario, CSF-I c/would also share personnel with that legal entity, thereby reducing or eliminating the onsite staff required for CSF-I.

CSF-I will export and sell the generated electricity via the CAISO grid. After the useful life of the project (up to 40 years) the panels will be disassembled from the steel mounting frames and the site restored to its pre-development condition. CSF-I as a whole is planned to generate up to 200 MW AC of electricity during peak daylight hours (up to 100 MW planned for each phase, or up to 200 MW if technology permits or is available; total for CSF-I as a whole would not exceed 200 MW in either case).

CSF-I will utilize non-reflective photovoltaic (PV) panels (or modules) to convert sunlight directly into electricity. Individual panels will be installed on either fixed-tilt or tracker mount systems, which will stand up to 15 feet high (depending on the mount) while either flat or tilted up to approximately 40 degrees from horizontal. The solar array field will be arranged in grids, and each grid will include an inverter container and a pad-mounted transformer near the center. CSF-I will also have several electrical control containers throughout the project. CSF-I as a whole will require the installation of up to 1.6 million photovoltaic panels to generate up to 200 MW AC (direct current ("DC") nameplate capacity of approximately 264 MW DC). The initial energy production of CSF-I as a whole will be up to approximately 480,000 MWh per year, sufficient to power over 68,000 homes and displacing over 270,000 tons of CO_2 emissions per year when compared to a gas-fired power plant or 540,000 tons when compared to a coal-fired power plant. This displacement of CO_2 emissions is equivalent to planting approximately 11 to 22 million trees or removing approximately 50,000 to 100,000 cars from the roads, respectively.

Fixed-tilt solar panels

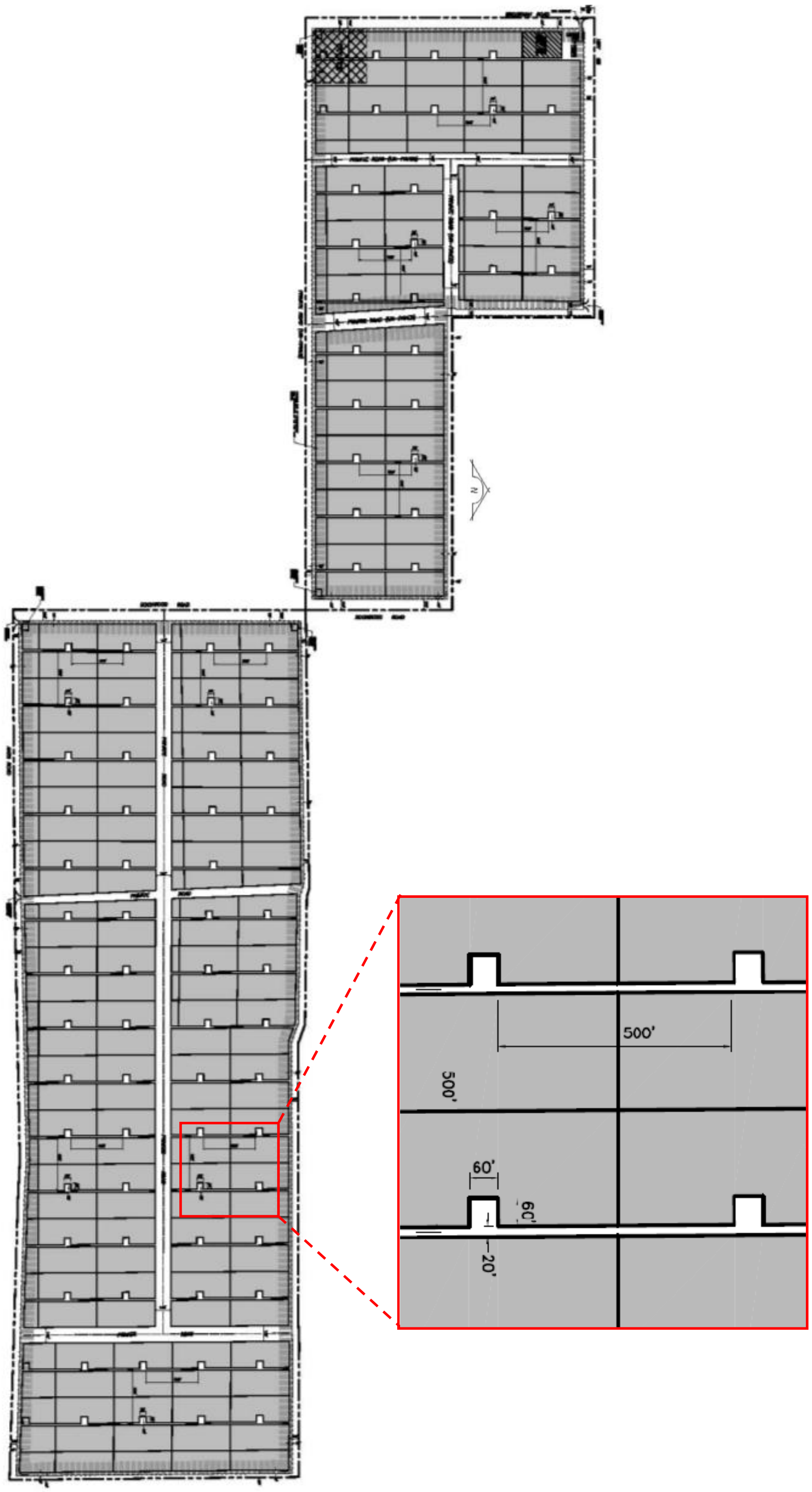
Typical fixed-tilt solar panel rows

Typical single-axis tracking solar panels

Typical single-axis tracking solar panel rows

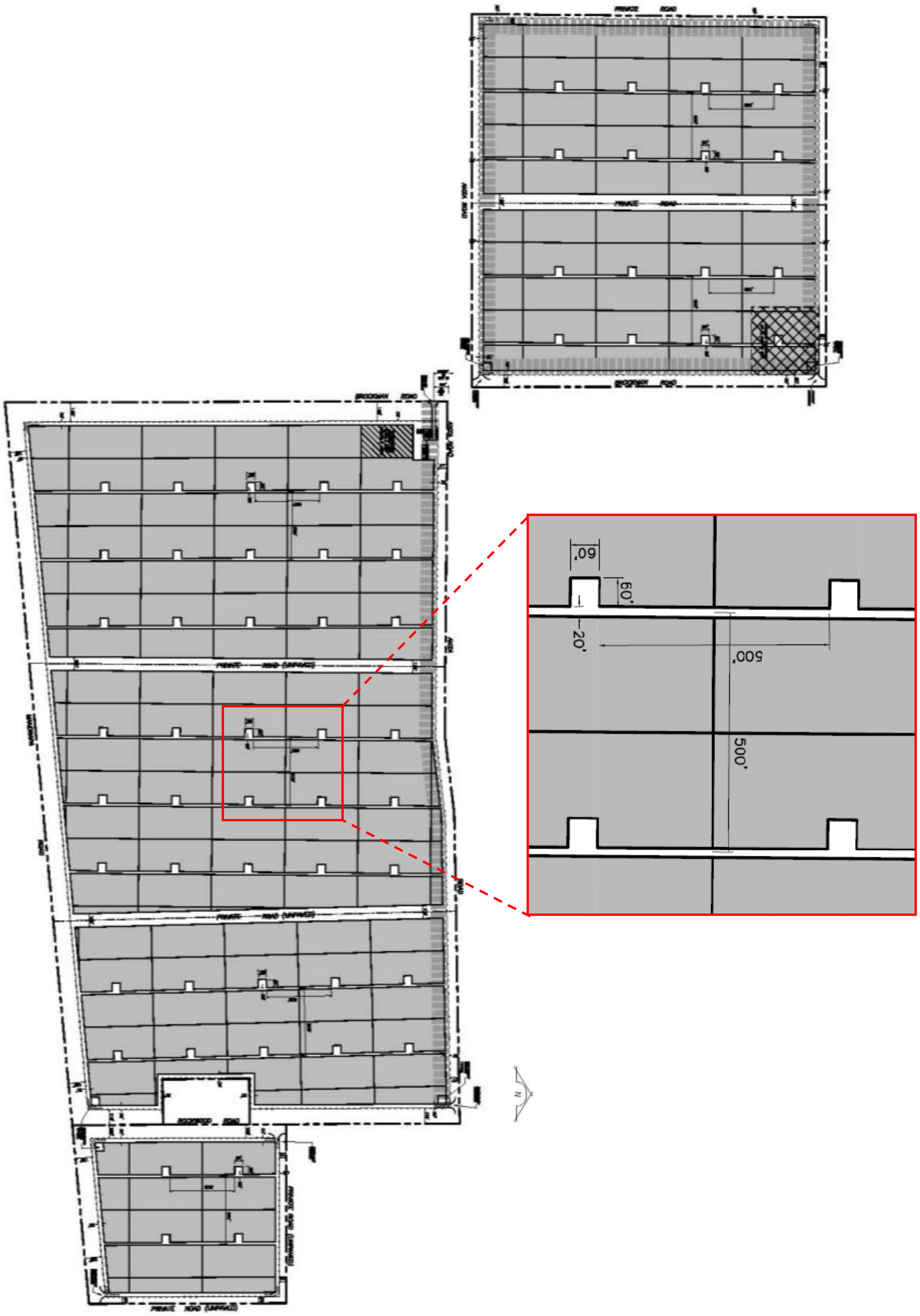
Typical single-axis tracking solar panel rows

Typical azimuth tracking solar panel rows



Project Site Layout – Phase A[1]

[1] See Appendix for enlarged version



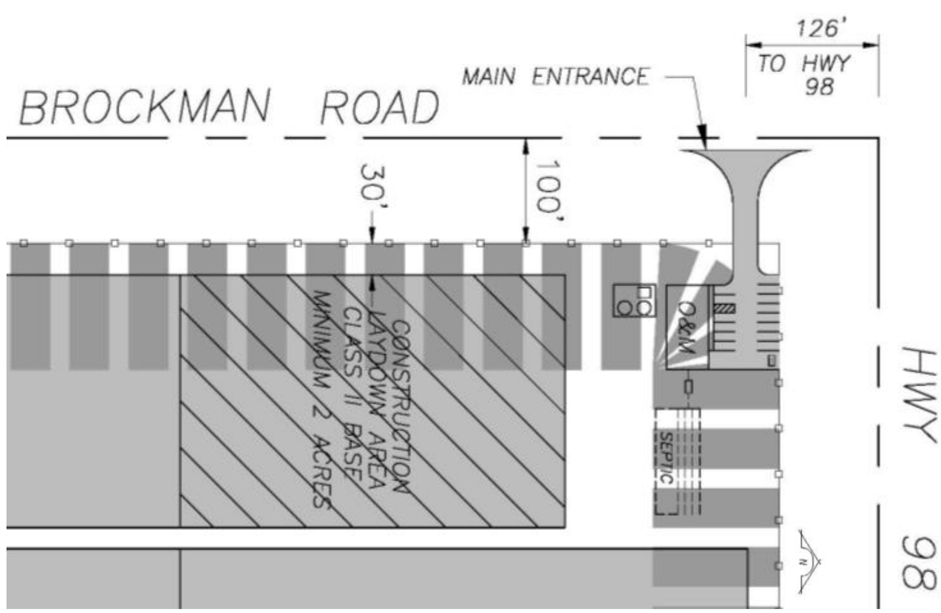
Project Site Layout – Phase B[1]

[1] See Appendix for enlarged version

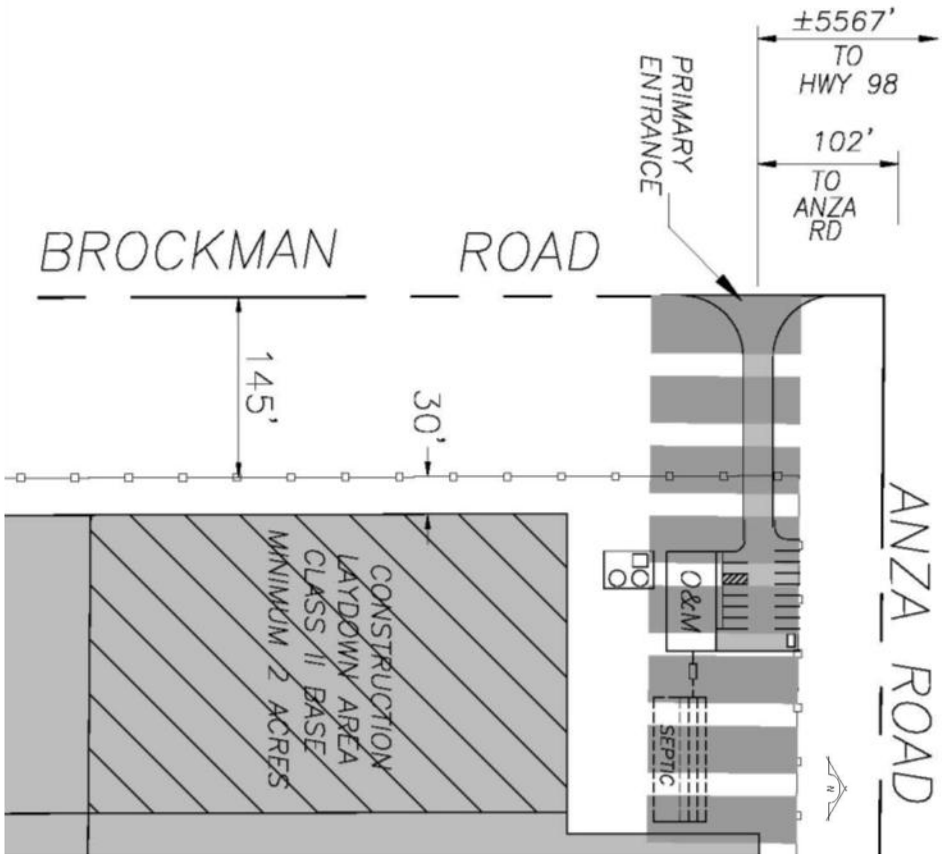
The Applicant proposes to situate the solar array on agricultural lands generally located between State Route 98 to the north and the US-Mexico border to the south, and between a private road to the west (½ mile east of Pullman Rd) and a private road to the east (½ west of Ferrell Road). Any Imperial Irrigation District (IID) irrigation canals and drains will remain in place, including maintenance access roads as per IID easements.

The Applicant intends for each phase of CSF-I to have a separate operations and maintenance ("O&M") building (up to approximately 320 square feet each, or 40' x 80' each), with associated parking, which will be constructed near the southeast corner of Brockman Road and SR-98 for Phase A and the southeast corner of Brockman Road and Anza Road for Phase B (see Site Plan in the Appendix). The O&M buildings will be steel framed, with metal siding and roof panels, painted to match the surrounding setting (desert sand). Each O&M building site will have a septic tank and leach field for wastewater disposal. A water system and small water treatment plant will be placed at each O&M building to provide onsite de-ionized water for panel washing.

Panel washing requires about one quart of water for each panel per month. It is estimated that water demand from the IID canal for panel washing and domestic use will not exceed 80 acre-feet per year for CSF-I as a whole (split between phases roughly in proportion to their respective acreages). A total of approximately 20,000 to 70,000 gallons of water for CSF-I as a whole (split between phases roughly in proportion to their respective acreages) will be stored in steel tank(s) placed above ground onsite at the water treatment area, under a metal shade structure. 10,000 gallons of water for each O&M building will be exclusively dedicated for O&M firefighting purposes, i.e., to protect the O&M building only. The Applicant intends to also order and obtain a portion of the landlords' agricultural water allocations (roughly 7,000 acre-feet) from the IID to irrigate and maintain a cover crop (saltgrass or similar) on the disturbed portions of the CSF-I site; alternatively or in addition, a soil stabilizer may also be used. If a cover crop is used onsite, it is estimated that water usage to maintain that cover crop would be up to approximately 350 acre-feet per year (split between phases roughly in proportion to their respective acreages).



Operations and Maintenance (O&M) Building Area – Phase A



Operations and Maintenance (O&M) Building Area – Phase B

Access to the CSF-I is via existing paved roads (SR-98 and Brockman Road). The site will be enclosed with a low voltage, 8-foot high enhanced security fence with perimeter landscaping along public roads. The fencing will be screened with neutral colored slats (or similar) along public roads. The fence and landscaping would largely screen the project from view and beautify the project's frontages to ensure that the project would not adversely impact scenic resources or the visual character of the site and its surroundings. Each O&M building's parking lot and access driveway from will be paved (not curbed). The roads, driveways and parking lots will meet the Department of Public Works and Fire/OES Standards as well as those of the Air Pollution Control District. Alternatively, CSF-I may share the cost of a Wildland Type II (or similar) fire truck with other nearby solar projects to permit the fire department access throughout the site. Parking spaces and walkways will be concreted to meet all California Accessibility Regulations.

The solar array areas will have low lying grass and/or a soil stabilizer to control dust and storm water erosion. A small (48"x 96") metal sign will be mounted at the entrances to CSF-I that identifies the project.

As noted earlier, it is possible that one phase of CSF-I would simply feed its power to the other phase. In that scenario, CSF-I's phases would share O&M facilities and would therefore require only one set of O&M facilities (O&M building with associated parking area, water tank(s), dedicated 10,000 gallons of fire-fighting water to protect the O&M building, etc.). The other O&M

building area would instead be covered by solar panels. It is also possible that CSF-I would share another legal entity’s O&M facilities. In that scenario, CSF-I’s own onsite O&M facility needs c/would therefore be reduced or eliminated, and any unused O&M building area depicted in the Site Layout c/would instead be covered by solar panels.

TECHNICAL STUDIES[1]

Hazardous Materials (Phase I Environmental Site Assessment)

A Phase I Environmental Site Assessment was completed for the CSF-I site by GS Lyon Consultants, Inc. in July 2011. The assessment did not reveal any Recognized Environmental Conditions (RECs) in connection with the property.

A technical memo noted that developing the project in more than one phase does not change the conclusions reached.

Geotechnical and GeoHazards Study

A geologic hazards survey was completed for the CSF-I site by Landmark Consultants, Inc. (El Centro, CA) in April 2011. No geologic hazards exist on or within the near vicinity of the site.

A technical memo noted that developing the project in more than one phase does not change the conclusions reached.

Transportation Impact Analysis

In July 2011, Linscott, Law & Greenspan, Engineers completed a Traffic Impact Analysis to assess the impact of the construction and operation of the solar farm to the roadways and intersections that will be utilized by the Project. The study estimated traffic volumes, including projected construction and operations traffic, would remain below the acceptable traffic volume thresholds identified by the County.

Visualization Study

In July 2011, Modative completed a visualization study to determine the aesthetic impacts of the proposed solar farm to the surrounding area. As shown in the visualization, the project will not damage any scenic resources or have a significant impact to the visual character of the site and its surroundings.

Glare Analysis for Ground Traffic

In July 2011, Good Company completed a reflectivity study to assess the project's potential for glare along nearby traffic corridors. The study concluded that the panels' orientation for either fixed-tilt or single-axis tracking solar panels results in angles of reflection well above the built environment and nearby traffic corridors. At the project's proposed perimeter fence, which lies 30 feet from the first solar panels, the minimum height of the reflection is already over 24 feet. At farther distances, the height of reflection is higher.

Glare Analysis for Air Traffic

In April 2011, Aztec Engineering completed a reflectivity study to assess the project's potential for glare and glint affecting air traffic to and from Calexico Airport. The study concluded that neither fixed-tilt nor tracking solar panels at CSF-I will have any relevant effect for airplanes

[1] See appendix for technical studies and reports

landing at or taking off from the airport. In the few days in the year when there is some glint produced by the project's solar panels, airplanes will also be directly facing the sun (which will render the glint effect negligible), so the panels will not have a relevant effect on airplanes' visibility, nor deteriorate the actual approaching or launching flight conditions.

Biological Survey

In May 2011, Barrett's Biological Surveys (El Centro, CA) completed a Biological Resources Technical Report for the CSF-I site. Three (3) burrowing owls and two (2) burrows were observed onsite on Phase A land. Twenty-four (24) burrowing owls and twenty-six (26) burrows were found in the buffer zone of CSF-I, which includes IID canals, drains, and roads. Of these, nineteen (19) owls and twenty-three (23) burrows were found in the buffer zone of CSF-I Phase A, while five (5) owls and three (3) burrows were found in the buffer zone of CSF-I Phase B. A cover crop could be maintained onsite, which would provide a foraging habitat for the burrowing owls.

Cultural Analysis

In July 2011, AECOM (formerly EDAW) completed a cultural literature review of the CSF-I project site and a one-mile radius around the site. A records search and literature review identified one (1) cultural resource recorded within one mile of CSF-I Phase B (but not in the project area itself): segments of the All-American Canal.

DESCRIPTION OF THE CSF-I ARRAY

The Applicant estimates that CSF-I will utilize approximately 800,000 to 1.6 million PV panels (roughly half allocated to each phase), depending on the power rating of the panels procured; this range may change somewhat as PV technology continues to change and improve. These panels will be mounted on frameworks made of galvanized steel or aluminum in continuous rows of up to 500 feet in length. The arrays are grouped to create grids of up to 500' x 500' (typ), with inverter modules and a transformer near the center of each grid. The grids produce approximately 1.1 MW to 1.4 MW direct electrical current (DC), which is converted to alternating electrical current (AC) at the inverter module. Each grid's inverter modules and transformer will be housed within an up to roughly 160 square foot container or similar structure. CSF-I will also have several electrical control containers which would look similar to inverter containers.

Typical Inverter Container

The approximate 20 kV to 70 kV output from the transformer will be transferred to each phase of CSF-I's respective onsite electrical substation (one substation is planned for each phase), which will step up the voltage to a maximum of 230 kV. The power will then be transferred to the Imperial Valley Substation using one of the methods described earlier.

Each onsite substation will be fed via buried electrical conduits, electrical conductor wires, and/or up to a maximum of 230 kV overhead electrical transmission lines that run along the CSF-I property line, roads, or parcel boundaries in some cases. Each onsite substation will occupy an area of up to 500' x 500', located in the northeast corner of Brockman Road and a private road (½ mile south of SR-98) for Phase A and the southwest corner of that same intersection for Phase B.

As noted earlier, it is possible that one phase of CSF-I would simply feed its power to the other phase; this would occur via electrical transmission facilities described above. In that scenario, CSF-I's phases would share a substation designed to accommodate both phases. The other phase would therefore not require its own substation, and this area would instead be covered by solar panels. It is also possible that CSF-I would share facilities with one or more separate legal entities. In such a scenario, CSF-I c/would either "host" a shared substation located onsite or transmit its power to a shared substation located offsite. If an offsite substation is used, the potential CSF-I onsite substation locations depicted in the Site Layout (see Appendix) c/would instead be covered by solar panels.

An up to 230 kV transmission line designed to interconnect CSF-I with other nearby solar projects may traverse CSF-I land along the edge(s) of the project, and may connect to CSF-I's onsite substation(s). Please see Site Layout in the Appendix for the location of an up to 120-foot wide corridor that could accommodate an up to 230 kV power line.

A 20-foot wide all-weather gravel road will be located within each 500 feet of solar panels to provide County fire/emergency vehicle access within the facility and to allow access to the DC to AC electrical inverter modules. Additionally, a 20-foot wide all-weather gravel road will also exist between the perimeter fence and the solar panels with additional space in the corners for turning radii for a County fire truck. Alternatively, CSF-I may share the cost of a Wildland Type II (or similar) fire truck with other nearby solar projects to permit the fire department access throughout the site.

Solar PV Power Plant Examples (Greece and Spain)

Typical Solar PV Mounting Structure

Onsite Substations

The onsite substations will occupy an area of up to 500’ x 500’, located in the northeast corner of Brockman Road and a private road (½ mile south of SR-98) for Phase A and the southwest corner of that same intersection for Phase B. The onsite substations will have breakers, step-up transformers, and other necessary electrical equipment such as an electrical control container. The substation areas will be secured separately by an additional 8-foot high enhanced security chain-link fence.

As noted earlier, it is possible that one phase of CSF-I would simply feed its power to the other phase; this would occur via electrical transmission facilities described earlier. In that scenario, CSF-I’s phases would share a substation designed to accommodate both phases. The other phase would therefore not require its own substation, and this area would instead be covered by solar panels. It is also possible that CSF-I would share facilities with one or more separate legal entities. In such a scenario, CSF-I would either “host” a shared substation located onsite or transmit its power to a shared substation located offsite. If an offsite substation is used, the potential CSF-I onsite substation locations depicted in the Site Layout (see Appendix) c/would instead be covered by solar panels

In the event that one phase “hosts” an onsite substation to be shared by one or more nearby solar projects, the substation’s equipment would be designed to accommodate up to 230 kV electrical output from each of those projects. A 230 kV gen-tie line designed to interconnect CSF-I with other nearby solar projects may traverse CSF-I land along the edge(s) of the project or parcel boundaries and may connect to CSF-I’s onsite substation(s). Please see Site Layout in the Appendix for the location of an up to 120-foot wide corridor that could accommodate an up to 230 kV transmission line.

Typical Substation Design

Typical Substation Design (Midway Substation)

Annual Production and In-Service-Date

The CSF-I facility will provide maximum electrical output during daylight hours. Peak electricity demand in California corresponds with air conditioning use on summer afternoons when ambient temperatures are high. CSF-I's peak generating capacity corresponds to this time-period when the peak solar energy, solar insulation value, is highest. There is no generating capacity between sunset and sunrise due to the lack of solar energy.

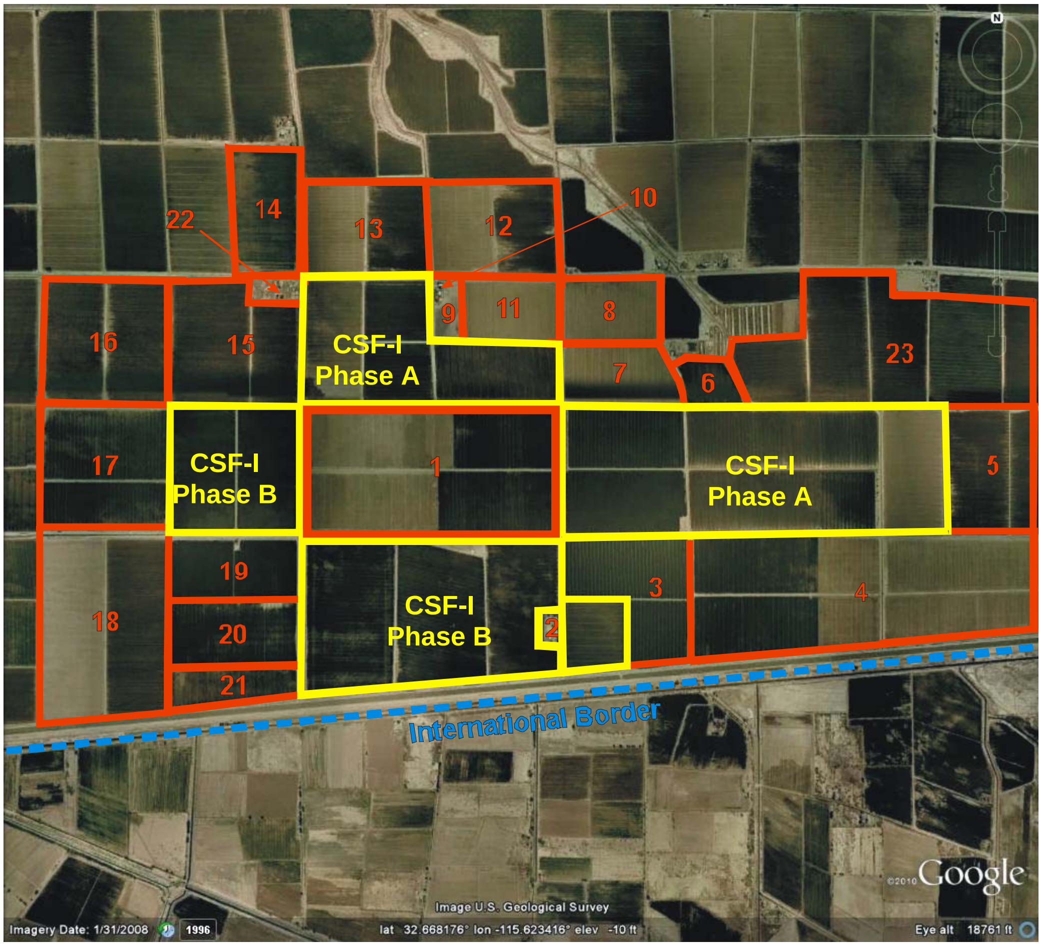
CSF-I as a whole will have a total power output of up to 200 MW AC (up to 100 MW planned for each of two phases) with an annual production of up to approximately 480,000 MWh per year. Construction of CSF-I will be phased in blocks as interconnection becomes available, with the full 200 MW capacity scheduled to be available by 2013 to 2014 ("In-Service-Date"). The In-Service-Date assumes that, permitting, financing, power purchase agreement ("PPA") negotiations and interconnection and transmission availability are in accordance with the project schedule.

SURROUNDING PROPERTIES

CSF-I abuts mostly agricultural land uses to the north, south, east, and west, with the exception of isolated residential and/or commercial structures. In addition, the US-Mexico border is located just beyond the southern boundary of the project, and SR-98 runs along the northern boundary of the project. The project is located approximately four miles west of the city of Calexico.

Adjacent Owners List/APN List

Number	Assessor's Parcel No.	Owner	Owner's Address
1	052-210-016	Calexico West Inc	5540 Ruffin Rd #A, San Diego, CA 92123
2	052-210-040	Michael & Julie Kemp	105 Rockwood Rd, Calexico, CA 92231
3	052-210-019	W & H Brundy & T Brundy	PO Box 845 Seeley, CA 92273
4	052-210-020	John Strobel	1798 W. Main St, El Centro, CA 92243
5	052-210-013	Calexico West, Inc.	9590 Chesapeake Dr, San Diego, CA 92123
6	052-210-032	C. Branbarger & A. Payne	903 W. HWY 98, Calexico, CA 92231
7	052-210-029	C. Branbarger & A. Payne	903 W. HWY 98, Calexico, CA 92231
8	052-210-026	R&S Brandenberg & C&M Seitz	903 W. HWY 98, Calexico, CA 92231
9	052-210-022	Juan Lopez	123 Grant St. #C, Calexico, CA 92231
10	052-210-023	Hega Construction	1212 P. Rashid St, Calexico, CA 92231
11	052-210-025	William & Kathy Brandenberg	903 W. HWY 98, Calexico, CA 92231
12	052-180-032	Dean Chen	225 N. Del Mar Ave, San Gabriel, CA 91775
13	052-180-033	Frank & Daphne Yang	701 Owhanee Rd. Ct., Freemont, CA 94539
14	052-170-035	Katherine Bishop	573 Drew Rd, Calexico, CA 92231
15	052-190-010	LS Power Development	5000 Hopyard Rd #480, Pleasanton, CA 94588
16	052-190-009	LS Power Development	5000 Hopyard Rd #480, Pleasanton, CA 94588
17	052-190-012	Calexico West Inc	5540 Ruffin Rd #A, San Diego, CA 92123
18	052-190-023	Curtis & Julie Corda	1941 Pepper Dr, El Centro, CA 92243
19	052-190-024	Montecito Land	PO Box 360, El Centro, CA 92244
20	052-190-025	W&M Brundy & T&K Brundy	PO Box 845, Seeley, CA 92273
21	052-190-026	IID Trust Lands	PO Box 937, Imperial, CA 92251
22	052-203-003	F. Gastelum Jr. & Sandra Martinez	1201 W. HWY 98, Calexico, CA 92231
23	052-210-036	Calexico West, Inc.	9590 Chesapeake Dr, San Diego, CA 92123

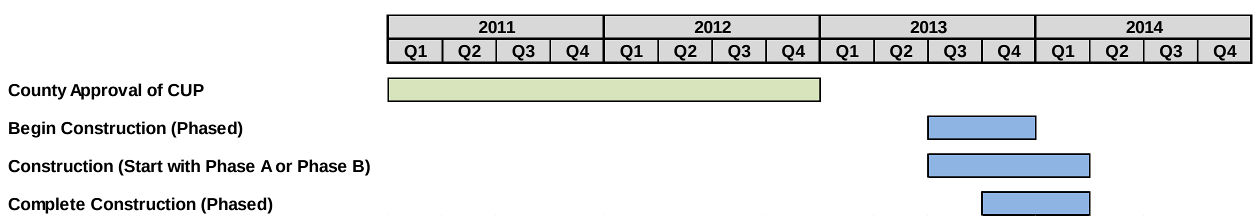


Adjacent Owners Map

No roadways will be affected by CSF-I, except during the project's 6 to 9 month construction (for the project as a whole). Construction truck traffic will reach CSF-I via SR-98 and Brockman Road. Despite the increased traffic during construction of the proposed project (inclusive of Phase A and Phase B combined), a Traffic Impact Analysis found that the traffic volumes on these roads are still below the volume thresholds identified by the County.

DEVELOPMENT SCHEDULE

It is anticipated that permitting, construction, and operation of the CSF-I facility will generally adhere to the following schedule:



Note that either Phase A or Phase B may be constructed first.

PUBLIC UTILITIES AND SERVICES

The CSF-I is expected to be serviced as follows:

1) *Refuse* – Allied Waste Management/Palo Verde Valley Disposal
2) *Sewer* – On-site Septic System
3) *Water* – IID supply/onsite treatment
4) *Police* – Imperial County Sheriff Department
5) *Fire* – Imperial County Fire Station
6) *Electric* – Imperial Irrigation District
7) *Telephone* – AT&T

PROJECT FEATURES AND BEST MANAGEMENT PRACTICES (BMPs)

The following sections describe standard project features and best management practices that will be applied during construction and long-term operation of CSF-I in an effort to avoid negative environmental impacts.

Aesthetics

The project will have an enhanced security perimeter fence no less than 8 feet high, and will be screened with neutral colored (desert sand) PVC slats (or similar) along each public road. Perimeter landscaping will be provided along each public road.

Erosion Control and Storm Water Drainage

Earthmoving activities will be limited to the construction of the access road, O&M building, the electrical substation and any storm water protection or storage (detention) facilities. Final grading may include revegetation with low lying grass or applying earth-binding materials to disturbed areas.

Site Drainage during Construction and Operation

To the extent possible and economically feasible, site drainage during construction will follow predevelopment flow patterns. Ultimate site discharge will be at the low corners of the project parcels. The incremental storm water run-off attributed to construction of foundations for solar panel mounting frames, foundations within the substations, inverter modules, control containers, and the O&M building area will be contained by ditches, drains, and/or elevated roadways at the low corner of the project parcels, which will prevent offsite migration of storm water and allow sedimentation and absorption with ultimate discharge at the low corner of the project parcels. Designs will be based upon the State's Construction General Permit (2009-0009DWQ) for erosion and sediment control. All storm water storage areas will be designed to absorb or discharge within 72 hours (mosquito abatement measure). CSF-I intends avoid any existing tile drainage, if possible.

Temporary Erosion and Sedimentation Control Measures

Temporary erosion and sedimentation control measures to be used during construction will be designed to prevent sediments from being displaced and carried offsite by storm water runoff.

Prior to beginning excavation activities, a silt fence, straw bales, or other BMP will be installed where appropriate where minor runoff to offsite areas could occur. The silt fence will filter sediments from construction runoff. During construction, the extent of earth disturbances will be minimized as much as practical. Temporary BMP control measures will be maintained as necessary throughout the construction period. A sediment trap will be constructed for the major site runoff discharge. The sediment trap will be located immediately upstream of the site boundary.

Waste and Hazardous Materials Management

The CSF-I will have minimal levels of materials on site that have been defined as hazardous under 40CFR, Part 261. The following materials will be used during the construction, operation, and long term maintenance of CSF-I:

- Insulating oil – used for electrical equipment
- Lubricating oil – used for maintenance vehicles
- Various solvents/detergents – equipment cleaning
- Gasoline – used for maintenance vehicles

Wastes will be managed in accordance with applicable regulations of the approved CSF-I facility as follows:

- Any hazardous wastes will be maintained at quantities below the threshold requiring a Hazardous Material Management Program (HMMP) (one 55 gallon drum per phase, if operated separately).
- All waste drums will be stored in accordance with good practice and applicable regulations, and will be protected from environmental conditions, including rain, wind, and direct heat and physical hazards such as vehicle traffic and sources of heat and impact.
- Waste lubricating oils will be recovered and reclaimed by a waste oil-recycling contractor.
- Spent lubricating oil filters from vehicles will be disposed at an authorized waste disposal facility.
- Batteries will be reclaimed and recycled by authorized facilities.
- Any hazardous waste generation, handling, and storage areas will be inspected and monitored on a regular basis.
- California-authorized and certified hazardous waste haulers will transport hazardous wastes to registered waste treatment, storage, disposal, and recycling facilities.
- Emergency response and reporting will be performed per written procedures that follow government and industry requirements and standards.
- Workers will be trained to handle hazardous wastes generated at the site.
- If 55 gallons of hazardous waste or more should accumulate onsite, storage of such hazardous waste will at no time exceed 90 days from the date of initial accumulation exceeding 55 gallons, and a HMMP shall be developed as described below.

The storage, use, and handling of any hazardous materials will be in accordance with applicable regulations and will include the following items:

- Facility personnel will be trained in hazardous materials and hazardous waste awareness, handling, and management as required for their level of responsibility.
- Bulk chemicals will be stored in the original shipping container provided by and returned to the chemical provider.
- Chemical storage areas and feed/transfer areas will be equipped with secondary containment sufficient in size to contain the volume of the largest container or tank including an allowance for rainwater.
- Small-quantity chemicals used for maintenance tasks will be kept in appropriate flammable material or corrosive material storage lockers following applicable regulations.
- Periodic inspections will ensure that all containers are secure and properly marked.
- Sanitary wastewater generated at the facility cannot be conveyed to an existing sewage public treatment facility. There are no public entities that manage sanitary wastewater flows for locations in the vicinity of the project site.

Should onsite storage of hazardous materials exceed one 55 gallon drum per phase, if operated separately, CSF-I will implement a Hazardous Materials Management Program (HMMP) developed for the CSF-I construction and operation stages, and will include, at a minimum, procedures for:

1. Hazardous materials handling, use and storage,
2. Emergency response,
3. Spill control and prevention,
4. Employee training,
5. Record keeping and reporting.

The HMMP (if required) will be developed and implemented prior to start of construction or prior to the storage on-site of an excess of 55 gallons of hazardous materials per phase. The program will be revised and updated as required in a timely manner. Employees will be trained and the program implemented prior to the start of commercial operation. The procedures outlined in the HMMP will be in accordance with all applicable regulations.

Spill Prevention and Containment

Spill prevention and containment for construction and operation of CSF-I will adhere as follows to EPA's guidance on Spill Prevention Control and Countermeasures (SPCC) as any hazardous materials stored onsite will be in quantities of less than 55 gallons per phase, if operated separately.

> *Regularly scheduled inspections, evaluations, and testing by qualified personnel are critical parts of discharge prevention. Their purpose is to prevent, predict, and readily detect discharges. They are conducted not only on containers, but also on associated piping, valves, and appurtenances, and on other equipment and components that could be a source or cause of an oil release.*

Waste Water/Septic System

A standard onsite septic tank and leach field will be used for each project phase (unless the phases share O&M facilities, or CSF-I shares another legal entity's O&M facilities) to dispose sanitary wastewater, designed to meet operation and maintenance guidelines required by Imperial County laws, ordinances, regulations and standards. Any necessary replacement leach field will be adjacent to the primary field.

Inert Solids

Inert solid wastes resulting from construction activities may include recyclable items such as paper, cardboard, solid concrete and block, metals, wire, glass, type 1-4 plastics, drywall, wood, and lubricating oils. Non-recyclable items include insulation, other plastics, food waste, vinyl flooring and base, carpeting, paint containers, packing materials, and other construction wastes. All packaging materials for components of the solar farm shall be crated and recycled offsite. No crating or packaging materials will be placed in local landfills. Management practices require recycling of contractor waste when possible, and proper storage of non-recyclable waste and debris to prevent wind dispersion, and weekly pickup of non-recyclable wastes with disposal at a local approved landfill.

Chemical storage tanks (if any) will be shop-fabricated, double-walled construction meeting applicable regulations. These tanks, as well as portable drums (if any), will be provided with appropriate anchors or cradles and placed within spill containment basins.

Any wastes classified as hazardous such as solvents, degreasing agents, concrete curing compounds, paints, adhesives, chemicals, or chemical containers will be stored (in an approved storage facility/shed/structure) and disposed of as required by local and state regulations. Material quantities of hazardous wastes are not expected.

FIRE PROTECTION

Each phase of CSF-I will have onsite fire-protection systems and will be supported by local fire protection services. Portable and fixed fire suppression equipment and systems will be included in the project. Portable fire extinguishers will be located at strategic locations throughout the project site. The fixed fire protection system will also include 10,000 gallons of dedicated water from onsite storage tank(s) and wet fire-department connection for protection of the O&M building only. Pressurized waterlines or fire department connections are not planned for the solar arrays.

As noted earlier, it is possible that one phase of CSF-I would simply feed its power to the other phase. In that scenario, CSF-I's phases would share O&M facilities and would therefore require only one O&M building area and associated water tank(s), with 10,000 gallons for the project as a whole dedicated to protecting the O&M building. The other O&M building area would instead be covered by solar panels. It is also possible that CSF-I would share another legal entity's O&M facilities. In that scenario, CSF-I's own onsite O&M facility needs c/would therefore be reduced or eliminated, and any unused O&M building area depicted in the Site Layout c/would instead be covered by solar panels

Employees will be given fire safety training including instruction in fire prevention, the use of portable fire extinguishers and the reporting of fires to the local fire department. Employees will only suppress fires in their incipient stage.

Service roads along the perimeter and within the property will be minimum 20-foot wide, all-weather gravel roads capable of supporting a 75,000 pound load imposed by a fire apparatus. Alternatively, CSF-I may share the cost of a Wildland Type II (or similar) fire truck with other nearby solar projects to permit the fire department access throughout the site. Interior roads with a minimum width of 20 feet will be spaced approximately 500 feet from each other. Each of these roads will have a turnaround area with a minimum 60' x 60' dimension (or 60' x 80' including the service road) approximately every 500 feet from each other or the perimeter fire service road.

If a cover crop (saltgrass or similar) is used onsite, it will be maintained at a reasonably low height to avoid the potential for a fire incident.

SITE SECURITY AND FENCING

An onsite security system will be installed. Controlled access gates will be maintained at the entrances to CSF-I.

Perimeter security fencing and access gates will be provided for CSF-I. The security fencing will be low voltage and provided with warning reflective signage. Regular site security vehicular patrols will be conducted to provide additional site security. Site access will be provided to offsite emergency response teams that respond in the event of an "after-hours" emergency. Access to the property will either be via swinging or sliding gates with a minimum width of 20 feet. Entry into CSF-I by fire department or emergency units will be handled on a manual override basis. If the gates are manual, a key for the gate will be provided in a key box at the gate location.

HEALTH AND SAFETY

Safety precautions and emergency systems will be implemented as part of the design and construction of the CSF-I facility to ensure safe and reliable operation. Administrative controls will include classroom and hands-on training in operating and maintenance procedures, general safety items, and a planned maintenance program. These will work with the system design and monitoring features to enhance safety and reliability.

All employees shall be provided with communication devices, cell phones, or walkie-talkies, to aid in the event of an emergency situation onsite.

Safety, Auxiliary and Emergency Systems

Safety, auxiliary, and emergency systems will consist of lighting, grounding, backup UPS systems and diesel power generators, fire and hazardous materials safety systems, security systems, chemical safety systems, and emergency response teams. The O&M building will include its own utilities and services, such as emergency power, fire suppression, and treated water systems.

CSF-I will implement programs to assure compliance with federal and state occupational safety and health program requirements. In addition to compliance with these programs, CSF-I will identify and implement plant-specific programs that effectively assess potential hazards and mitigate them on a routine basis.

As discussed above, hazardous materials may be stored and used at CSF-I during construction and operation, but will be restricted to less than one 55 gallon drum per phase (if operated separately). The design and construction of any hazardous materials storage and dispensing systems will be in accordance with applicable regulations. Hazardous materials storage areas will be designed with curbs or other containment measures like double-walled storage tanks, if applicable, to contain spills and leaks. If hazardous materials exceed 55 gallons, a Hazardous Material Management Program will be developed as described above.

Emergency eyewashes and showers (if required by fire or safety codes) will be provided at appropriate locations. Appropriate Personal Protective Equipment (PPE) will be provided during both construction and operation of the CSF-I facility.

Emergency Response Plan

CSF-I will have an Emergency Response Plan (ERP). The ERP will address potential emergencies including chemical releases, fires, and injuries. The ERP will describe emergency response equipment and equipment locations, evacuation routes, procedures for reporting to local emergency response agencies, responsibilities for emergency response, and other required actions to be taken in the event of an emergency.

Employee response to an emergency will be limited to an immediate response to minimize the risk of escalation of the accident or injury. Employees will be trained to respond to fires, spills, earthquakes, and injuries. A first aid facility with adequate first-aid supplies and personnel qualified in first aid treatment will be onsite.

ADDITIONAL INFORMATION

Project Construction

Construction of the CSF-I as a whole will require approximately 6 to 9 months. This section describes major components during the design, layout, and construction processes.

Project Engineering, Procurement, Construction, and Compliance

The engineering, procurement, and construction of the CSF-I will be accomplished as follows:

1. AES Solar has been selected to provide detailed engineering, preparation of drawings and specifications for permitting. The Applicant will provide project management. Long lead equipment will be procured by AES Solar in advance of the start of construction.
2. A Construction Manager Contractor at Risk (CMAR) for site preparation, buildings, services, power collection, and transmission will be identified in advance of the start of construction for value engineering input, construction preparation, and procurement.
3. A Prime Equipment Supplier (PES) or Suppliers will be identified for the manufacturing, assembly, and installation of the PV arrays and inverters.

The overall detailed construction schedule will be prepared and coordinated through the prime CMAR contractor with input from the Applicant. Detailed construction operating plans will be included in the Project Execution Plan (PEP) as follows:

1. A project specific Occupational Safety and Health Plan will be developed to specify worker safety procedures and the Applicant's and CMAR's responsibilities in order to prevent incidents involving personnel on the project site.
2. The PEP will address roles, responsibilities and identify primary contacts, procedures, and actions required during the design, procurement, and construction stages of the work.
3. A project specific Quality Assurance / Control Plan will be developed by the CMAR Contractor(s)' QA/QC Departments with input from appropriate representatives of the Contractor(s)' Project Team, the Applicant, and major equipment suppliers.
4. During construction, construction trades personnel parking will be located within the lay-down area. The parking area will be fenced and controlled by security personnel during normal work hours.
5. A temporary gravel area of minimum two acres will be located adjacent to each O&M building. This area will be located near the southeast corner of Brockman Road and SR-98 for Phase A and near the southeast corner of Brockman Road and Anza Road for Phase B. It will be devoted to equipment and materials lay-down, storage, parking of construction equipment, small fabrication areas and office trailers. If any O&M building is not necessary due to sharing of O&M facilities, the associated temporary lay-down area c/would instead be covered by solar panels.
6. The CMAR contractor(s) will have at least one Safety Coordinator who will prepare a site-specific safety plan. Emergency services will be coordinated with the nearby fire department.
7. All contractors, subcontractors, and consultants will participate in comprehensive health, safety, environmental, HMMP (if required), and emergency procedures training prior to any initial site activities.

Site Preparation, Surveying and Staking

Site preparation, surveying, and staking of the project site will begin following the Applicant's receipt of Imperial County's approval to implement CSF-I. Activities that will be included in this phase include:

1. Land surveying activities (including benchmarks),
2. Staking of construction limits (lay-down yards, access roads, temporary use areas),
3. Briefing of contractors.

Temporary Lay Down Yard

A minimum two-acre lay down yard will be required for PV panel offloading and steel frame assembly. It is assumed that the PV panel arrays will be assembled in parallel with the construction of the O&M building and the electrical substation. Upon completion of the project, the lay down yard will be revegetated in low lying grass or with a soil stabilizer, and the area will be filled with solar panels as shown in the Site Layout. If CSF-I's phases share O&M, a single lay down yard may be used for the entire CSF-I project. If CSF-I shares another legal entity's facilities, a separate lay down yard may not be needed for CSF-I; alternatively, the lay down yard area needed may be reduced.

Site Clearing

The proposed project will be designed in such a manner to minimize ground disturbances and resulting environmental impacts.

PV Panel Mounting Frames Installation

Foundations for mounting frames typically consist of a 12 to 15 inch diameter drilled pier extending 3 to 7 feet below ground surface.

PV Solar Array Field

To the extent possible and economically feasible, the site layout will attempt to maintain predevelopment drainage patterns. Discharge from the site will be at the low corners of the project parcels. If an onsite O&M building is constructed, the 20-foot wide paved entry road will be designed to convey nuisance runoff to drainage channels/swales. It is expected that storm water runoff will flow over the crown of any paved roadway, which is typically less than six inches from swale flow line to crown at centerline of roadway, thus allowing drainage during storms. Interior access roads (e.g., between PV panel grids) will be all-weather gravel roads, as noted earlier. Alternatively, CSF-I may share the cost of a Wildland Type II (or similar) fire truck with other nearby solar projects to permit the fire department access throughout the site. Unpaved access areas between PV panel rows may be planted with saltgrass (or similar), which would be watered infrequently, thus not requiring mowing or cutting, yet maintaining binding of the soil with the grass root system. As an alternative to the cover crop, a permeable soil stabilizing polymer may be used as a dust suppressant.

It is anticipated that specialized trades and higher skill level construction personnel will commute to the CSF-I construction site(s) on a daily basis from within the Imperial Valley area

and, in the case of those travelling from longer distances, may stay in temporary housing or apartments during the week for the duration of construction of the proposed project.

Heavy construction will be scheduled to occur between 6:00 am and 5:00 pm, Monday through Friday. Additional hours may be necessary to make up schedule deficiencies or to complete critical construction activities. There is estimated to be up to 60 workers per day during the construction of the project.

Some activities may continue 24 hours per day, seven days per week. These activities include, but are not limited to, refueling equipment, staging material for the following day's construction activities, quality assurance/control, and commissioning.

Materials and supplies will be delivered to the site by truck. Truck deliveries will normally occur during daylight hours. However, there will be offloading and/or transporting to the site on weekends and during evening hours.

O&M Building

It is anticipated that an O&M Building (up to approximately 320 square feet, or 40' x 80') will be required for each phase of CSF-I. The O&M buildings will include:

1. Office
2. Repair Building/Parts Storage
3. Electrical/Array Control Room
4. Restrooms
5. Water Treatment Facility

As noted earlier, it is possible that one phase of CSF-I would simply feed its power to the other phase. In that scenario, CSF-I's phases would share O&M facilities and would therefore require only one O&M building area with associated parking area, which would be sized appropriately to accommodate both phases. The other O&M building area would instead be covered by solar panels. It is also possible that CSF-I would share another legal entity's O&M facilities. In that scenario, CSF-I's own onsite O&M facility needs c/would therefore be reduced or eliminated, and any unused O&M building area depicted in the Site Layout c/would instead be covered by solar panels

Work Force

It is expected that CSF-I will be operated with a staff of up to twelve (12) full-time employees for both phases combined (split roughly evenly between phases). The facility will operate seven days per week, generating electricity during normal daylight hours when the solar energy is available. Maintenance activities will occur seven days a week, 24 hours a day to ensure PV Panel output when solar energy is available. As noted earlier, these employees may be shared by both phases, in which case the number of staff would be reduced to approximately ten (10). It is also possible that CSF-I would share another legal entity's O&M facilities. In that scenario, CSF-I c/would also share personnel with that legal entity, thereby reducing or eliminating the onsite staff required for CSF-I.

Project Lighting

The project will be compliant with the Imperial County Zoning Ordinance. Day lighting will supplement energy-efficient fluorescent lighting in the O&M building(s). Emergency egress identification and path lighting will be provided per building code requirements.

Electrical Grounding

The facility will be designed in accordance with National Electrical Code requirements including MAG amendments. The electrical system may experience unit ground potential rise due to ground fault, lightning strike, or switching surges. A grounding system will be installed to permit dissipation of ground fault currents and minimize ground potential rise.

The grounding grid will be designed with adequate capacity to dissipate heat produced by ground current under fault conditions and be designed to maintain safe voltage gradients. Ground resistivity testing and calculations will be performed during detailed design to determine the number and type of grounding electrodes and the grid spacing necessary to ensure safe step and touch potentials under fault conditions. Each PV panel string within the solar field will be bonded to the foundation to provide localized grounding of each string.

Within project buildings, grounding conductors will bond building structural steel, metallic piping, and non-energized metallic parts of electrical equipment to the building grounding systems. Isolated grounding conductors will connect sensitive control systems to the building grounding systems.

If required, a cathodic protection system will be designed and installed to control electrochemical corrosion of exterior surfaces of underground carbon steel, copper, aluminum, and stainless steel. Bottoms of soil- or sand-pad-mounted steel tanks and exterior surfaces of underground ductile or cast-iron pipe will be protected against corrosion. The type of cathodic protection system (galvanic or impressed current) will be based on soil characteristics, the amount of material to be protected, and the interference effects of any nearby cathodic protection systems.

Lightning protection will follow the National Fire Protection Association (NFPA) 780 guidelines and will be provided where required for project structures and pumps.

Heating, Ventilation, and Air-Conditioning

Heating, ventilation, and air-conditioning (HVAC) will consist of heat pump ground-mounted units with code-required fresh make-up air capabilities for the office and control area of the O&M building(s). Mechanical ventilation will be provided for the maintenance areas.

Temperature control will be provided for both personnel and equipment areas, and humidity control will be provided in the control and communications equipment rooms.

Operations and Maintenance

Operation and Facility Maintenance Needs

Once CSF-I is constructed, minimal maintenance needs are required and are generally limited to the following:

1. Washing of PV panels
2. Monitoring electricity generation
3. Providing site security
4. Facility maintenance (e.g., replacing or repairing PV modules, wiring, control equipment and inverters)
5. Site maintenance, including but not limited to:
    a. Cover crop (if any) c/would be maintained via periodic flood irrigation
    b. Landscaping will be maintained via drip irrigation, sprinklers, and/or bubblers, as appropriate

Maintenance Activities

PV panel washing, operations dust control, domestic water use, and water treatment under regular maintenance routines will require up to 80 acre-feet (26 million gallons) of water per year for the entire CSF-I project (split between phases roughly in proportion to their respective acreages). Backwash water from the reverse osmosis water treatment plant will equal the clean process water volume. Backwash water will be applied to any required landscaped areas along the perimeter fence. A very low speed is anticipated for maintenance vehicles.

Access roads and solar array long-term maintenance will include:

1. Temporary soil stabilization techniques, such as scheduling construction sequences to minimize land disturbance during the rainy and non-rainy seasons and employing BMPs appropriate for the season.
2. Sediment control techniques, such as using silt fences, straw bales, and/or fiber rolls to intercept and slow the flow of sediment-laden runoff such that sediment settles before runoff leaves the site.
3. Wind erosion control by maintaining low lying grass over or dust palliatives, as required, to prevent or alleviate windblown dust.
4. Other measures, as appropriate, to comply with Imperial County laws, ordinances, regulations and standards.

EXISTING CONDITIONS OF PROJECT SITE

CALEXICO SOLAR FARM I PHASES A & B

(88FT 8ME, LLC)

Figure 1: Satellite view (Google Earth)

Figure 2: Project phases

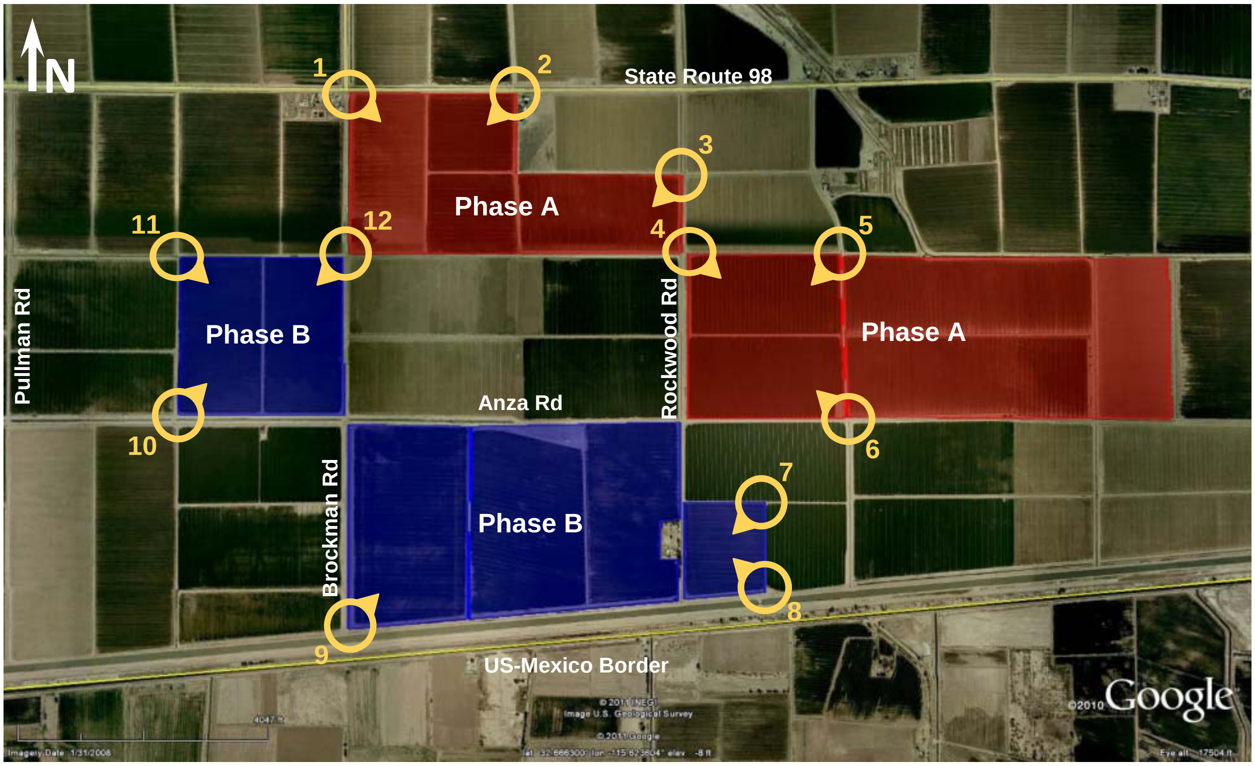


Figure 3: Photo locations

Figure 4: Phase A, location #1 looking southeast

Figure 5: Phase A, location #2 looking southwest

Figure 6: Phase A, location #3 looking southwest

Figure 7: Phase A, location #4 looking southeast

Figure 8: Phase A, location #5 looking southwest

Figure 9: Phase A, location #6 looking northwest

Figure 10: Phase B, location #7 looking southwest

Figure 11: Phase B, location #8 looking northwest

Figure 12: Phase B, location #9 looking northeast

Figure 13: Phase B, location #10 looking northeast

Figure 14: Phase B, location #11 looking southeast

Figure 15: Phase B, location #12 looking southwest

Appendix F

Land Evaluation and Site Assessment (LESA) Model

LESA ASSESSMENT
CALEXICO SOLAR FARM I
PHASE B PROJECT AREA

CALEXICO SOLAR FARM I PHASE B PROJECT

(N/4 Section 22, W/2 NE/4 Section 22, NE/4 NE/4 Section 22,
SE/4 NE/4 (portion) Section 22, Lot 1, 2, 3 and 4 (portion) Section 22,
SW/4 SW/4 Section 23, Lot 1 (portion) Section 23, T17S, R13E, SBB&M)

IMPERIAL COUNTY, CALIFORNIA

April 2011

EMA Report No. 2175-02B

Prepared for:

88FT 8ME, LLC
10100 Santa Monica Boulevard, Suite 300
Los Angeles, California 90067

ENVIRONMENTAL MANAGEMENT ASSOCIATES

LAND EVALUATION AND SITE ASSESSMENT MODEL

CALEXICO SOLAR FARM I PHASE B PROJECT

(N/4 Section 22, W/2 NE/4 Section 22, NE/4 NE/4 Section 22, SE/4 NE/4 (portion) Section 22, Lot 1, 2, 3 and 4 (portion) Section 22, SW/4 SW/4 Section 23, Lot 1 (portion) Section 23, T17S, R13E, SBB&M)

IMPERIAL COUNTY, CALIFORNIA

The Land Evaluation and Site Assessment (LESA) model is an approach for rating the relative quality of land resources based upon specific measurable features. The LESA model was first developed by the federal Natural Resources Conservation Service (NRCS) in 1981. It was subsequently adapted in 1990 by the California Department of Conservation to evaluate land use decisions that affect the conversion of agriculture lands in California. The formulation of the California LESA Model is intended to provide lead agencies under the California Environmental Quality Act (CEQA) with an optional methodology to ensure that significant effects on the environment of agricultural land conversions are quantitatively and consistently considered in the environmental review process.

For determining the potential CEQA significance resulting from the conversion of agricultural lands to some other purpose, the California Agricultural LESA Model has developed Scoring Thresholds which are used to compare the Final LESA Score and the Weighted Factor Scores for the Project with suggested Scoring Decisions. These LESA Scores do not take into consideration any proposed mitigation measures or other factors that might affect a lead agency's determination of the significance of the agricultural lands conversion impact under CEQA.

The information provided on the following pages present documentation of the LESA assessment prepared using the California Agricultural LESA Model for the proposed Calexico Solar Farm I Phase B Project (Project) (APNs 052-190-011-000; 052-210-018-000; 052-210-037-000; 052-210-038-000; and 052-210-039-000). The proposed Project would be constructed on approximately 613 acres of privately owned land located about eight miles west of the city of Calexico, California (Figure 1). The Project is bounded on the south by Mandrapa Road, an Imperial County road (Figure 2). The international border with Mexico is located immediately south of Mandrapa Road.

LESA ASSESSMENT

88FT 8ME, LLC
CALEXICO SOLAR FARM I PHASE B PROJECT

IMPERIAL COUNTY, NEVADA

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Figure 1 : Location Map

Figure 2 : Project Area on an Aerial Photographic Base

Land Evaluation Worksheet							
A	B	C	D	E	F	G	H
Soil Map Unit*	**Project Acres**	**Proportion of Project Area**	**LCC** (irrigated)**	**LCC Rating (irrigated)*****	**LCC Score (C x E)**	**Storie Index****	**Storie Index Score (C x G)**
110	98.66	0.161	IIw	80	12.88	45	7.25
114	130.52	0.213	IIIw	60	12.78	42	8.95
115	293.53	0.479	IIIw	60	28.74	67	32.09
118	2.45	0.004	IIw	80	0.32	86	0.34
122	66.18	0.108	IIIw	60	6.48	44	4.75
123	2.45	0.004	IIIw	60	0.24	44	0.18
142	19.00	0.031	IIw	80	2.48	72	2.23
Totals	613	1.000		**LCC Total Score**	64	**Storie Index Total Score**	56
Total Project Area (acres)=	613						

* The Soil Map Unit information and acreage were determined from the current soil survey information available at the USDA Natural Resources Conservation Service website: http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx (Figure 3).

** The Land Capability Classification and Storie Index information was obtained from the current soil survey information available at the USDA Natural Resources Conservation Service website: http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx (Appendix A).

*** The LCC Rating for irrigated land was determined from the LCC Point Rating Table 2 from the LESA Instruction Manual (California Department of Conservation 1997).

Imperial County, California, Imperial Valley Area (CA683)				
Map Unit Symbol		Map Unit Name	Acres in AOI	Percent of AOI
110		HOLTVILLE SILTY CLAY, WET	99.2	16.1%
114		IMPERIAL SILTY CLAY, WET	130.8	21.3%
115		IMPERIAL-GLENBAR SILTY CLAY LOAMS, WET, 0 TO 2 PERCENT SLOPES	294.5	47.9%
118		INDIO LOAM, WET	2.3	0.4%
122		MELOLAND VERY FINE SANDY LOAM, WET	66.3	10.8%
123		MELOLAND AND HOLTVILLE LOAMS, WET	2.4	0.4%
142		VINT LOAMY VERY FINE SAND, WET	19.3	3.1%
Totals for Area of Interest			614.7	100.0%

*Adjusted to 613 acres

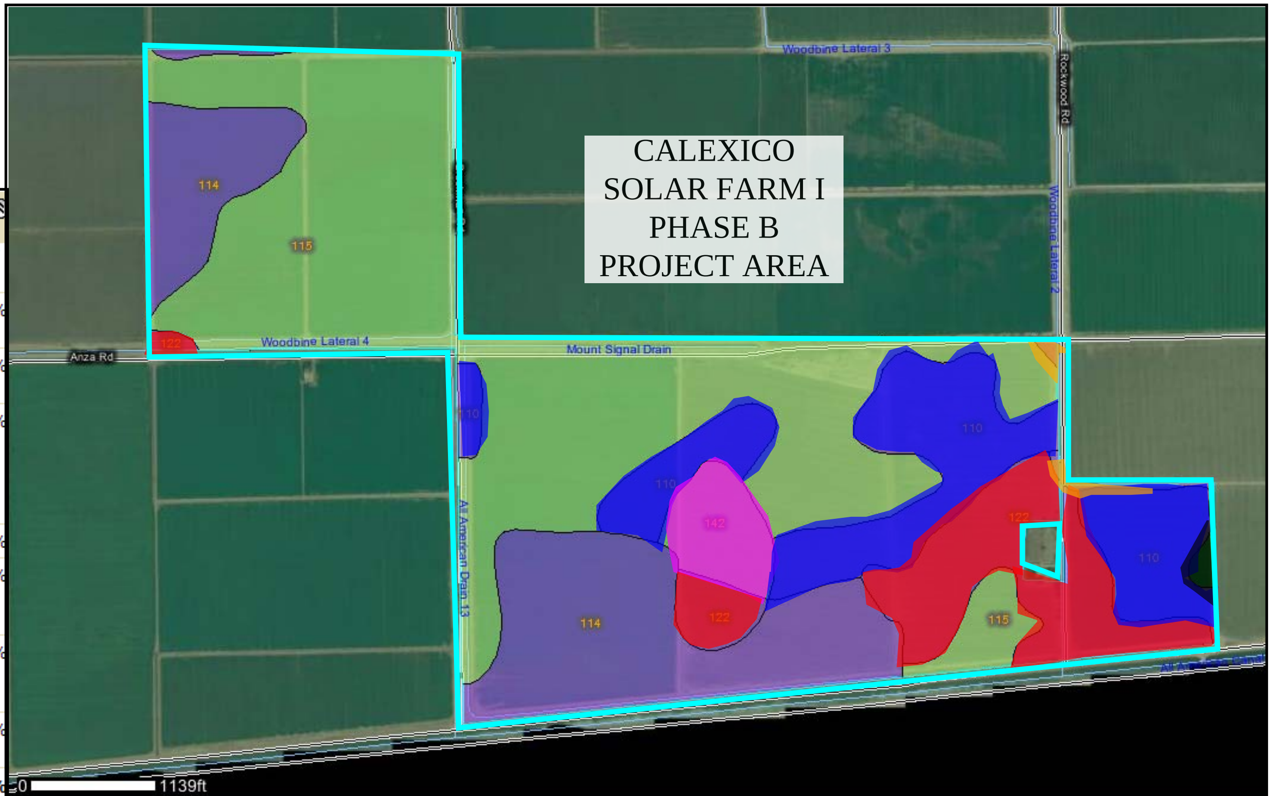

Figure 3 : Project Area Soils Map

	Site Assessment Worksheet 1 Project Size Score*		
	I	J	K
	LCC Class I-II	LCC Class III	LCC Class IV-VIII
Project Acres per LCC Class	98.66	130.52	
Project Acres per LCC Class	2.45	293.53	
Project Acres per LCC Class	19.00	66.18	
Project Acres per LCC Class		2.45	
Project Acres per LCC Class			
Total Project Acres per LCC Class	**120**	**493**	**0**
**** Project Size Scores***	**100**	**100**	**0**
Highest Project Size Score	**100**		

* Project Size Score was determined from the Project Size Scoring Table from the LESA Instruction Manual (California Department of Conservation 1997).

Site Assessment Worksheet 2				
Water Resources Availability				
A	**B**	**C**	**D**	**E**
Project Portion	**Water Source**	**Proportion of Project Area**	**Water Availability Score***	**Weighted Availability Score (C x D)**
1	Irrigation District Only	1.0	100	100
2				
3				
4				
5				
6				
		(Must Sum to 1.0)	***Total Water Resource Score***	100

* The Water Availability Score was determined using the Water Resources Availability Scoring Table from the LESA Instruction Manual (California Department of Conservation 1997).

Site Assessment Worksheet 3						
Surrounding Agricultural Land & Surrounding Protected Resource Land						
A	B	C	D	E	F	G
Zone of Influence*					Surrounding Agricultural Land Score (From LESA Manual Table 6)	Surrounding Protected Resource Land Score (From LESA Manual Table 7)**
Total Acres	Acres in Agriculture	Acres of Protected Resource Land	Percent in Agriculture (B/A)	Percent Protected Resource Land (C/A)		
2232.4	2194	0	98	0	100	0

* In conformance with the instructions in the LESA Instruction Manual (California Department of Conservation 1997), the Zone of Influence was determined by drawing the smallest rectangle that could completely encompass the entire Project Area. A second rectangle was then drawn which extended one quarter mile on all sides beyond the first rectangle. The Zone of Influence is represented by the entire area of all parcels with any lands inside the outer rectangle, less the area of the proposed project (Figure 4).

** The LESA Instruction Manual (California Department of Conservation 1997) describes *Protected Resource Land* as those lands with long term use restrictions that are compatible with or supportive of agricultural uses of land. Included among them are the following: Williamson Act contracted lands; Publicly owned lands maintained as park, forest, or watershed resources; and Lands with agricultural, wildlife habitat, open space, or other natural resource easements that restrict the conversion of such land to urban or industrial uses.

Surrounding Parcels***	Acres	Protected Resource Land?	Percent Protected Resource Land	Acres in Protected Land	Agricultural Land?	Percent Agricultural Land	Acres of Agriculture
052-190-010	150.7	N	0	0	Y	100	150.7
052-190-024	80.8	N	0	0	Y	100	80.8
052-190-025	83.9	N	0	0	Y	100	83.9
052-190-026	60.0	N	0	0	Y	100	60.0
052-210-001	203.7	N	0	0	Y	100	203.7
052-210-002	41.3	N	0	0	Y	100	41.3
052-210-015	156.0	N	0	0	Y	100	156.0
052-210-029	73.3	N	0	0	Y	100	73.3
052-210-006	0.4	N	0	0	Y	100	0.4
052-210-019	123.5	N	0	0	Y	100	123.5
052-210-016	331.7	N	0	0	Y	100	331.7
052-190-023	240.0	N	0	0	Y	100	240.0
052-190-012	167.3	N	0	0	Y	100	167.3
052-190-009	161.5	N	0	0	Y	100	161.5
052-210-030	0.7	N	0	0	Y	100	0.7

Surrounding Parcels***	Acres	Protected Resource Land?	Percent Protected Resource Land	Acres in Protected Land	Agricultural Land?	Percent Agricultural Land	Acres of Agriculture
052-210-031	5.6	N	0	0	N	0	0.0
052-210-032	28.3	N	0	0	N	0	0.0
052-210-014	318.5	N	0	0	Y	100	318.5
052-210-040	4.8	N	0	0	N	0	0.0
Total	**2232.4**		**Total**	**0**		**Total**	**2193.6**

**The Imperial County Assessors website was accessed to identify the surrounding parcel numbers (http://imperialcounty.net/Assessor/index.html). The percentage of agriculture was determined from a map overlay used to estimate the proportion of land in agriculture and the California Department of Conservation Important Farmland Map Series.

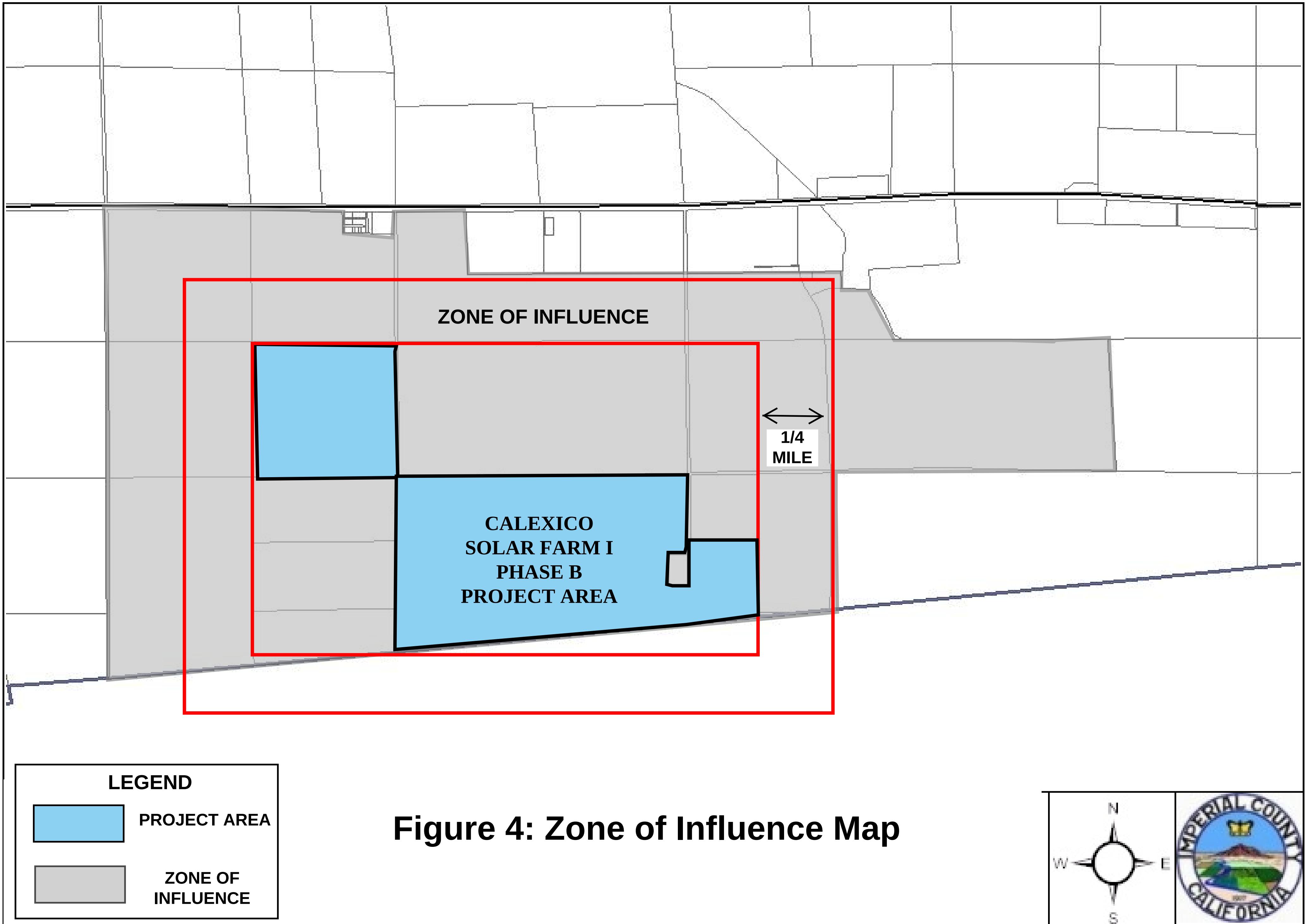

Figure 4: Zone of Influence Map

This map represents a visual display of related geographic information. Data provided hereon is not a guarantee of actual field conditions. To be sure of complete accuracy, please contact IMPERIALCOUNTY_PUBLIC staff for the most up-to-date information.

Final LESA Score Sheet			
	Factor Scores	Factor Weight	Weighted Factor Scores
LE Factors			
Land Capability Classification	63.92	0.25	15.98
Storie Index	55.79	0.25	13.95
LE subtotal		0.50	29.93
SA Factors			
Project Size	100	0.15	15.00
Water Resource Availability	100	0.15	15.00
Surrounding Agricultural Land	100	0.15	15.00
Protected Resource Land	0	0.05	0.00
SA Subtotal		0.50	45.00
		Total LESA Score	**74.93**

California LESA Model Scoring Thresholds	
Total LESA Score	Scoring Decision
0 to 39 Points	Not Considered Significant
40 to 59 Points	Considered Significant only if LE and SA subscores are each greater than or equal to 20 points
60 to 79 Points	Considered Significant unless either LE or SA subscore is less than 20 points
80 to 100 Points	Considered Significant

APPENDIX A: CALEXICO SOLAR FARM I PHASE B PROJECT SOILS DETAILS

Imperial County, California, Imperial Valley Area

110—HOLTVILLE SILTY CLAY, WET

Map Unit Setting

Elevation: -230 to 200 feet
Mean annual precipitation: 0 to 3 inches
Mean annual air temperature: 72 to 75 degrees F
Frost-free period: 300 to 350 days

Map Unit Composition

Holtville, wet, and similar soils: 85 percent
Minor components: 15 percent

Description of Holtville, Wet

Setting

Landform: Basin floors
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from mixed sources

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 5 percent
Maximum salinity: Nonsaline to slightly saline (2.0 to 8.0 mmhos/cm)
Sodium adsorption ratio, maximum: 10.0
Available water capacity: Moderate (about 7.6 inches)

Interpretive groups

Land capability classification (irrigated): 2w
Land capability (nonirrigated): 7w

Typical profile

0 to 17 inches: Silty clay
17 to 24 inches: Clay
24 to 35 inches: Silt loam
35 to 60 inches: Loamy very fine sand

Minor Components

Glenbar

Percent of map unit: 5 percent

Imperial

Percent of map unit: 5 percent

Indio

Percent of map unit: 3 percent

Vint

Percent of map unit: 2 percent

Data Source Information

Soil Survey Area: Imperial County, California, Imperial Valley Area
Survey Area Data: Version 5, Jul 25, 2008

Imperial County, California, Imperial Valley Area

114—IMPERIAL SILTY CLAY, WET

Map Unit Setting

Elevation: -230 to 200 feet
Mean annual precipitation: 0 to 3 inches
Mean annual air temperature: 72 to 75 degrees F
Frost-free period: 300 to 350 days

Map Unit Composition

Imperial, wet, and similar soils: 85 percent
Minor components: 15 percent

Description of Imperial, Wet

Setting

Landform: Basin floors
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Clayey alluvium derived from mixed sources and/or clayey lacustrine deposits derived from mixed sources

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 5 percent
Maximum salinity: Very slightly saline to slightly saline (4.0 to 8.0 mmhos/cm)
Sodium adsorption ratio, maximum: 20.0
Available water capacity: Moderate (about 8.3 inches)

Interpretive groups

Land capability classification (irrigated): 3w
Land capability (nonirrigated): 7w

Typical profile

0 to 12 inches: Silty clay
12 to 60 inches: Silty clay loam

Minor Components

Glenbar

Percent of map unit: 4 percent

Meloland

Percent of map unit: 4 percent

Holtville

Percent of map unit: 4 percent

Niland

Percent of map unit: 3 percent

Data Source Information

Soil Survey Area: Imperial County, California, Imperial Valley Area
Survey Area Data: Version 5, Jul 25, 2008

Imperial County, California, Imperial Valley Area

115—IMPERIAL-GLENBAR SILTY CLAY LOAMS, WET, 0 TO 2 PERCENT SLOPES

Map Unit Setting

Elevation: -230 to 200 feet
Mean annual precipitation: 0 to 3 inches
Mean annual air temperature: 72 to 75 degrees F
Frost-free period: 300 to 350 days

Map Unit Composition

Glenbar, wet, and similar soils: 40 percent
Imperial, wet, and similar soils: 40 percent
Minor components: 20 percent

Description of Imperial, Wet

Setting

Landform: Basin floors
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Clayey alluvium derived from mixed sources and/or clayey lacustrine deposits derived from mixed sources

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 5 percent
Maximum salinity: Very slightly saline to slightly saline (4.0 to 8.0 mmhos/cm)
Sodium adsorption ratio, maximum: 20.0
Available water capacity: Moderate (about 8.6 inches)

Interpretive groups

Land capability classification (irrigated): 3w
Land capability (nonirrigated): 7w

Typical profile

0 to 12 inches: Silty clay loam
12 to 60 inches: Silty clay loam

Description of Glenbar, Wet

Setting

Landform: Basin floors
Landform position (three-dimensional): Talf

Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from mixed

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 5 percent
Maximum salinity: Nonsaline to slightly saline (2.0 to 8.0 mmhos/cm)
Sodium adsorption ratio, maximum: 15.0
Available water capacity: High (about 10.8 inches)

Interpretive groups

Land capability classification (irrigated): 3w
Land capability (nonirrigated): 7w

Typical profile

0 to 13 inches: Silty clay loam
13 to 60 inches: Clay loam

Minor Components

Holtville

Percent of map unit: 10 percent

Meloland

Percent of map unit: 10 percent

Data Source Information

Soil Survey Area: Imperial County, California, Imperial Valley Area
Survey Area Data: Version 5, Jul 25, 2008

Imperial County, California, Imperial Valley Area

118—INDIO LOAM, WET

Map Unit Setting

Elevation: -230 to 200 feet
Mean annual precipitation: 0 to 3 inches
Mean annual air temperature: 72 to 75 degrees F
Frost-free period: 300 to 350 days

Map Unit Composition

Indio, wet, and similar soils: 85 percent
Minor components: 15 percent

Description of Indio, Wet

Setting

Landform: Basin floors
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from mixed sources and/or eolian deposits derived from mixed sources

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 5 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 4.0 mmhos/cm)
Sodium adsorption ratio, maximum: 5.0
Available water capacity: Moderate (about 8.5 inches)

Interpretive groups

Land capability classification (irrigated): 2w
Land capability (nonirrigated): 7w

Typical profile

0 to 12 inches: Loam
12 to 72 inches: Stratified loamy very fine sand to silt loam

Minor Components

Vint

Percent of map unit: 6 percent

Meloland

Percent of map unit: 3 percent

Holtville

Percent of map unit: 3 percent

Glenbar

Percent of map unit: 3 percent

Data Source Information

Soil Survey Area: Imperial County, California, Imperial Valley Area
Survey Area Data: Version 5, Jul 25, 2008

Imperial County, California, Imperial Valley Area

122—MELOLAND VERY FINE SANDY LOAM, WET

Map Unit Setting

Elevation: -230 to 200 feet
Mean annual precipitation: 0 to 3 inches
Mean annual air temperature: 72 to 75 degrees F
Frost-free period: 300 to 350 days

Map Unit Composition

Meloland, wet, and similar soils: 85 percent
Minor components: 15 percent

Description of Meloland, Wet

Setting

Landform: Basin floors
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from mixed sources and/or eolian deposits derived from mixed sources

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 5 percent
Maximum salinity: Slightly saline to moderately saline (8.0 to 16.0 mmhos/cm)
Sodium adsorption ratio, maximum: 13.0
Available water capacity: Moderate (about 7.8 inches)

Interpretive groups

Land capability classification (irrigated): 3w
Land capability (nonirrigated): 7w

Typical profile

0 to 12 inches: Very fine sandy loam
12 to 26 inches: Stratified loamy fine sand to silt loam
26 to 71 inches: Clay

Minor Components

Imperial

Percent of map unit: 3 percent

Indio
Percent of map unit: 3 percent

Holtville
Percent of map unit: 3 percent

Glenbar
Percent of map unit: 3 percent

Vint
Percent of map unit: 3 percent

Data Source Information

Soil Survey Area: Imperial County, California, Imperial Valley Area
Survey Area Data: Version 5, Jul 25, 2008

Imperial County, California, Imperial Valley Area

123—MELOLAND AND HOLTVILLE LOAMS, WET

Map Unit Setting

Elevation: -230 to 300 feet
Mean annual precipitation: 0 to 3 inches
Mean annual air temperature: 72 to 75 degrees F
Frost-free period: 300 to 350 days

Map Unit Composition

Holtville, wet, and similar soils: 40 percent
Meloland, wet, and similar soils: 40 percent
Minor components: 20 percent

Description of Meloland, Wet

Setting

Landform: Basin floors
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from mixed sources and/or eolian deposits derived from mixed sources

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 5 percent
Maximum salinity: Slightly saline to moderately saline (8.0 to 16.0 mmhos/cm)
Sodium adsorption ratio, maximum: 13.0
Available water capacity: Moderate (about 7.4 inches)

Interpretive groups

Land capability classification (irrigated): 3w
Land capability (nonirrigated): 7w

Typical profile

0 to 12 inches: Loam
12 to 26 inches: Stratified loamy fine sand to silt loam
26 to 38 inches: Clay
38 to 60 inches: Stratified silt loam to loamy fine sand

Description of Holtville, Wet

Setting

Landform: Basin floors

Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium and/or lacustrine deposits derived from mixed

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 5 percent
Maximum salinity: Nonsaline to slightly saline (2.0 to 8.0 mmhos/cm)
Sodium adsorption ratio, maximum: 10.0
Available water capacity: Moderate (about 7.7 inches)

Interpretive groups

Land capability classification (irrigated): 3w
Land capability (nonirrigated): 7w

Typical profile

0 to 12 inches: Loam
12 to 24 inches: Clay
24 to 36 inches: Silt loam
36 to 60 inches: Loamy very fine sand

Minor Components

Glenbar

Percent of map unit: 4 percent

Imperial

Percent of map unit: 4 percent

Indio

Percent of map unit: 4 percent

Rositas

Percent of map unit: 4 percent

Vint

Percent of map unit: 4 percent

Data Source Information

Soil Survey Area: Imperial County, California, Imperial Valley Area
Survey Area Data: Version 5, Jul 25, 2008

Imperial County, California, Imperial Valley Area

142—VINT LOAMY VERY FINE SAND, WET

Map Unit Setting

Elevation: -230 to 150 feet
Mean annual precipitation: 0 to 3 inches
Mean annual air temperature: 72 to 75 degrees F
Frost-free period: 300 to 350 days

Map Unit Composition

Vint, wet, and similar soils: 90 percent
Minor components: 10 percent

Description of Vint, Wet

Setting

Landform: Basin floors
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from mixed sources and/or eolian deposits derived from mixed sources

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): High (1.98 to 5.95 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 5 percent
Maximum salinity: Nonsaline to slightly saline (2.0 to 8.0 mmhos/cm)
Available water capacity: Low (about 5.5 inches)

Interpretive groups

Land capability classification (irrigated): 2w
Land capability (nonirrigated): 7w

Typical profile

0 to 10 inches: Loamy very fine sand
10 to 60 inches: Loamy fine sand

Minor Components

Indio

Percent of map unit: 5 percent

California Revised Storie Index Rating (CA)

The Storie Index is a soil rating based on soil properties that govern a soil's potential for cultivated agriculture in California.

The Storie Index asseses the productivity of a soil from the following four characteristics: Factor A, degree of soil profile development; factor B, texture of the surface layer; factor C, slope; and factor X, manageable features, including drainage, microrelief, fertility, acidity, erosion, and salt content. A score ranging from 0 to 100 percent is determined for each factor, and the scores are mukltiplied together to derive an index rating.

For simplification, Storie Index ratings have been combined into six grades classes as follows: Grade 1 (excellent), 100 to 80; grade 2 (good), 79 to 60; grade 3 (fair), 59 to 40; grade 4 (poor), 39 to 20; grade 5 (very poor), 19 to 10; and grade 6 (nonagricultural), less than 10.

Report—California Revised Storie Index Rating (CA)

The Storie Index is a soil rating based on soil properties that govern a soil map unit component's potential for cultivated agriculture. [Absence of an entry indicates that a Storie Index rating is not applicable or was not estimated]. For simplification, Storie Index ratings have been combined into six grades as follows: Grade 1 (Excellent): Soils that rate between 80 and 100 and which are suitable for a wide range of crops. Grade 2 (Good) Soils that rate between 60 and 79 and which are suitable for a wide range of crops. Grade 3 (Fair): Soils that range between 40 and 59. Soils in this grade may give good results with certain specialized crops. Grade 4 (Poor): Soils that rate between 20 and 39 and which have a narrow range in their agricultural potential. Grade 5 (Very Poor): Soil that rate between 10 and 19 and are of very limited agricultural use except for pasture because of adverse soil conditions. Grade 6 (Nonagricultural): Soils that rate less than 10. [The numbers in the "Limiting feature value" column range from 0.01 to 1.00. Soils with a smaller the value have a lower potential for cultivated agriculture. The table shows each of the sub-factors used to generate the Storie Index rating for each soil component].

California Revised Storie Index Rating (CA)– Imperial County, California, Imperial Valley Area				
Map symbol and soil name	Pct. of map unit	California Revised Storie Index (CA)		
		Storie index rating	Storie index grade and limiting features	Limiting feature value
110—HOLTVILLE SILTY CLAY, WET				
Holtville, wet	85	45	Grade Three - Fair	
			Rated Soil Order	1.00
			Profile Group	1.00
			Nearly level to gently sloping	0.98
			Wetness, flooding, ponding, drainage, erosion	0.90
			Toxicity	0.85

California Revised Storie Index Rating (CA)– Imperial County, California, Imperial Valley Area				
Map symbol and soil name	Pct. of map unit	California Revised Storie Index (CA)		
		Storie index rating	Storie index grade and limiting features	Limiting feature value
114—IMPERIAL SILTY CLAY, WET				
Imperial, wet	85	42	Grade Three - Fair	
			Rated Soil Order	1.00
			Profile Group	1.00
			Nearly level to gently sloping	0.98
			Wetness, flooding, ponding, drainage, erosion	0.90
			Toxicity	0.80
115—IMPERIAL-GLENBAR SILTY CLAY LOAMS, WET, 0 TO 2 PERCENT SLOPES				
Glenbar, wet	40	72	Grade Two - Good	
			Rated Soil Order	1.00
			Profile Group	1.00
			Nearly level to gently sloping	0.98
			USDA Texture	0.95
			Wetness, flooding, ponding, drainage, erosion	0.90
Imperial, wet	40	67	Grade Two - Good	
			Rated Soil Order	1.00
			Profile Group	1.00
			Nearly level to gently sloping	0.98
			USDA Texture	0.95
			Wetness, flooding, ponding, drainage, erosion	0.90
118—INDIO LOAM, WET				
Indio, wet	85	86	Grade One - Excellent	
			USDA Texture	1.00
			Rated Soil Order	1.00
			Profile Group	1.00
			Nearly level to gently sloping	0.98
			Toxicity	0.97

California Revised Storie Index Rating (CA)– Imperial County, California, Imperial Valley Area				
Map symbol and soil name	Pct. of map unit	California Revised Storie Index (CA)		
		Storie index rating	Storie index grade and limiting features	Limiting feature value
122—MELOLAND VERY FINE SANDY LOAM, WET				
Meloland, wet	85	44	Grade Three - Fair	
			USDA Texture	1.00
			Rated Soil Order	1.00
			Profile Group	1.00
			Nearly level to gently sloping	0.98
			Wetness, flooding, ponding, drainage, erosion	0.90
123—MELOLAND AND HOLTVILLE LOAMS, WET				
Holtville, wet	40	75	Grade Two - Good	
			USDA Texture	1.00
			Rated Soil Order	1.00
			Profile Group	1.00
			Nearly level to gently sloping	0.98
			Wetness, flooding, ponding, drainage, erosion	0.90
Meloland, wet	40	44	Grade Three - Fair	
			USDA Texture	1.00
			Rated Soil Order	1.00
			Profile Group	1.00
			Nearly level to gently sloping	0.98
			Wetness, flooding, ponding, drainage, erosion	0.90
142—VINT LOAMY VERY FINE SAND, WET				
Vint, wet	90	72	Grade Two - Good	
			Rated Soil Order	1.00
			Profile Group	1.00
			Nearly level to gently sloping	0.98
			USDA Texture	0.95
			Wetness, flooding, ponding, drainage, erosion	0.90

Data Source Information

Soil Survey Area: Imperial County, California, Imperial Valley Area
Survey Area Data: Version 5, Jul 25, 2008

Meloland

Percent of map unit: 5 percent

Data Source Information

Soil Survey Area: Imperial County, California, Imperial Valley Area
Survey Area Data: Version 5, Jul 25, 2008

Agricultural Restoration Plan

Calexico Solar Farm II Phase A

South of State Route 98 Weed to Hammers Road

Calexico, California

Prepared for:

89MA 8ME, LLC
320 Hayward Avenue
Los Angeles, CA 94588

Prepared by:

GS Lyon

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January 2012

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January 24, 2012

Mr. Tom Buttgenbach
89MA 8ME, LLC
320 Hayward Avenue
Los Angeles, CA 94588

Engineer's Estimate of Probable Costs
Agricultural Restoration Plan
Calexico Solar Farm II (Phase A)
Calexico, California
GSL Project No. GS1105

Dear Mr. Buttgenbach:

GS Lyon personnel have developed an Engineer's Estimate of Probable Costs to restore the agricultural lands to "farm ready conditions" at the Calexico Solar Farm II (Phase A) PV Solar Facility in southern Imperial County, California. The solar farm project consists of 100MW of PV solar generation and will encompass twelve (12) farm fields totaling approximately 945 net acres , generally located south of State Route 98 between Hammers and Weed Roads about 2.5 miles west of Calexico.

The restoration plan exhibits indicate current conditions of the farm fields and the proposed solar power arrays. The estimate accounts for costs restore the land to farm-ready conditions upon ceasing the power facility operation. No crop planting is included in the restoration costs since customary farm practices do not include planting prior to leasing. Crop type and planting is each individual farmer's selection. Costs are provided for replacement of concrete irrigation ditches and subsurface agricultural tile drainage pipelines, deep chiseling (sub-soiling), discing, landplaning and restoration of irrigation land slopes (land–leveling).

This report also identifies Prime Farmland and Farmland of Statewide Importance as defined by the California Department of Conservation.

GS Lyon appreciates the opportunity to provide professional services in developing the restoration plan. Please contact our office with any questions or comments.

Sincerely Yours,
GS Lyon Consultants, Inc.

Jeffrey O. Lyon, P.E.
Principal Engineer

REGISTERED PROFESSIONAL ENGINEER
JEFFREY O. LYON
No. 31921
EXPIRES 12-31-12
CIVIL
STATE OF CALIFORNIA

Table of Contents

Appendices

1.0 Introduction

The Calexico Solar Farm II (Phase A) project will occupy twelve (12) agricultural fields that are currently in agricultural crop production. The lands generally consist of silty clay to fat clay soil that require subsurface tile drains to maintain crop yields, normally used for growing field crops such as alfalfa, bermuda grass, sudan grass and wheat. Even though there are lands identified as “Prime Farmland” by the California Department of Conservation, the cropping patterns of all of the agricultural lands within the Calexico Solar Farm II (Phase A) have historically been “field crops”. A complete Land Evaluation and Site Assessment (LESA) Model has been prepared for the project (see **Appendix F**).

The Calexico Solar Farm II (Phase A) project is expected to consist of 100MW of PV solar generation and extend a minimum of 25 years and may extend up to 40 years (see **Appendix E –** Project Description for project specifics). Without regular crop irrigation occurring during this period, there should be no increase in salts in the field (water table is not high enough to drive salts to the surface).

This restoration plan has been prepared to document the agricultural improvements of each farm field and to provide an estimate of the work (cost) required to return the land to agricultural production upon ceasing operation of the PV solar energy generating facility.

2.0 Restoration Methods

2.1 Irrigation Ditches - During extended periods of non-use (as has occurred recently as a result of the on-farm fallowing program), it has been found that the clay soils dry and shrink away from the concrete lining. The thin concrete lining (1.5 inches thick) is prone to cracking and breakage without support of moist soil behind the lining and the amount of ditch repairs required after extended non-use is generally extensive. It is generally more cost efficient to replace the ditch and field gates than to chase the problems created by fractured ditches.

2.2 Sub-surface Tile Drains - Tile drains that currently exist below the farm fields may be punctured by installation of PV panel frame support posts. In order to insure proper operation of the tile drainage system, a new system has been planned for each farm field. Should the steel support posts not be driven to the tile system depth, then only the red clay or concrete tile portions of the tile system would need to be replaced. The plastic tile lines have been found to be relatively unaffected by extended fallowing periods.

2.3 Ground Preparation - Without agricultural tillage over the 25 to 40 year span of the PV solar energy generating facility operation, the clay soils will become compacted. In order to insure crop growth, the fields will need to be sub-soiled (plow shanks extending to 36" to 42" below ground surface), re-leveled with laser controlled drag-scrapers, manure fertilizer applied, disced (2 directions) and landplaned (or tri-planed). A minimum of six (6) soil samples have been scheduled to be collected from each field and analyzed for agronomic minerals, salts and fertilizer compounds.

3.0 Cost Estimating/Unit Pricing

3.1 Irrigation Ditches - Contractors that routinely install concrete lined irrigation ditches in the Imperial Valley were contacted to develop unit pricing of a farm ditch. The overall cost of placing and compacting a 15 ft. by 2 ft. high ditch pad (native soil from the farm field), trenching for concrete lining, placement of concrete lining, installation of jack gates, installation of outlet pipes and slide gates were included into one cost per foot of concrete ditch construction.

3.2 Subsurface Tile Drains – A specialty tile drainage installation contractor in the Imperial Valley was consulted on the installation of tile drain baselines (8-inch diameter pipelines) and laterals (4-inch pipelines) to establish unit rate pricing of the tile system installations. The lengths of the laterals and baselines were taken from the existing tile drainage maps obtained from Imperial Irrigation District records.

3.3 Ground Preparation - Pricing from local farm service providers was used to determine the unit rate pricing for ground preparation prior to placement of irrigation borders and planting. Standard agricultural practices were used for the work to be performed. Land-leveling costs were developed by consultation with an agricultural land-leveling specialty contractor in the Imperial Valley.

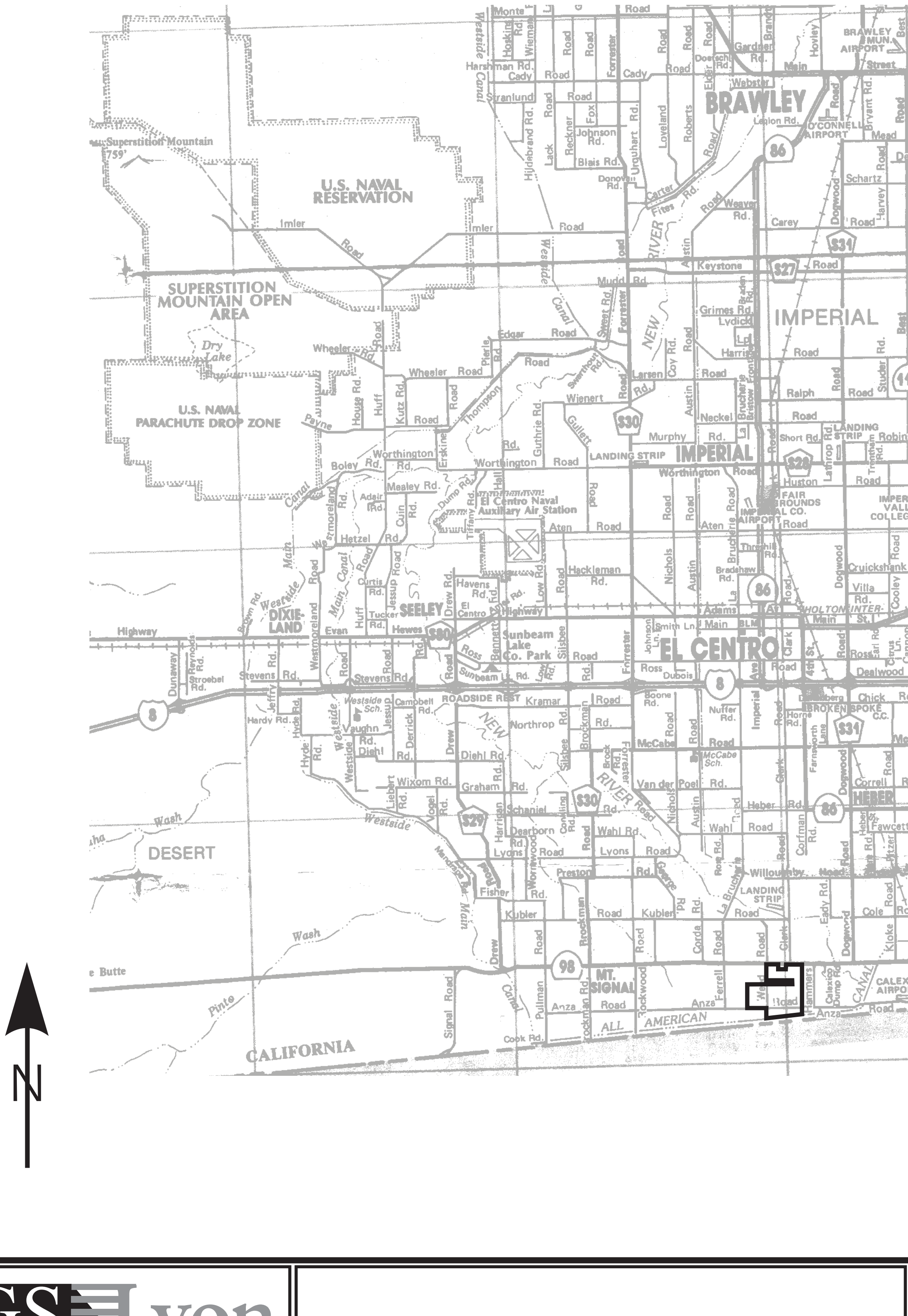
4.0 Prime Farmland and Farmland of State Importance

The California Department of Conservation has classified all agricultural lands in the Imperial Valley as identified in the FARMLAND MAPPING and MONITORING PROGRAM – 2008 Imperial County Important Farmland Map. The Soil Candidate Listing for Prime Farmland and Farmland of Statewide Importance-Imperial County (Rev. 2010) appends the Farmland Map, identifying each soil type described by the US Department of Agriculture, Natural Resources Conservation Service, Soil Survey of Imperial County, Imperial Valley Area, October 1981. The areas that make up Prime Farmland are identified as the Soil Survey Soil Mapping Units described in the Soil Candidate Listing (see **Appendix D**).

This report has identified **0 acres** within the Calexico Solar Farm II (Phase A) project site as being classified as **Prime Farmland**. Digital Google Earth™ maps overlain with Soil Survey soil mapping unit contours obtained from the USDA website were used to determine the currently farmed areas that were classified as Prime Farmland.

Appendix A

Project Location Maps and Maps of Existing Conditions

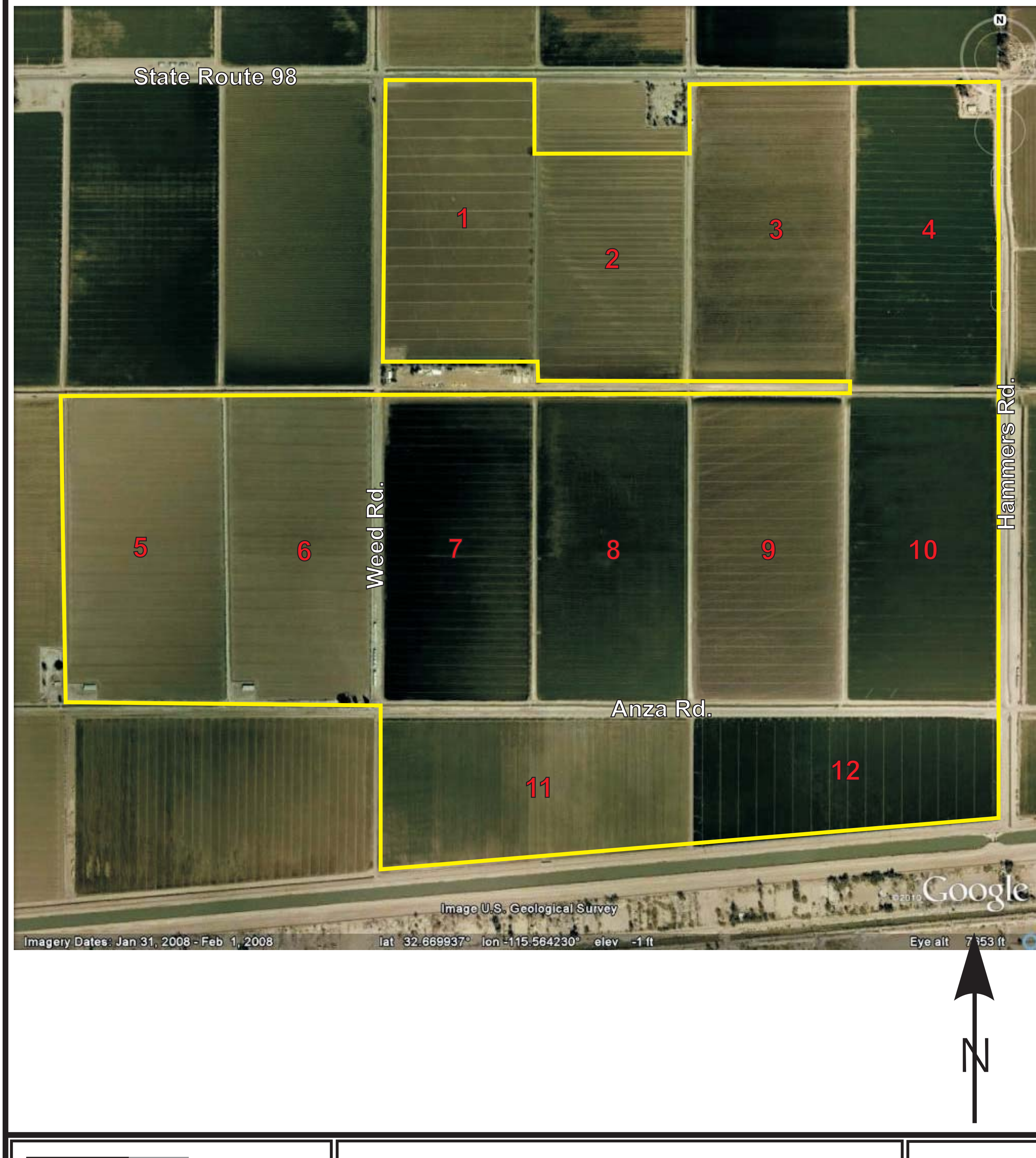


GS Lyon

Project No.: GS1105

Calexico Solar Farm II Phase A
Vicinity Map

Plate
A-1

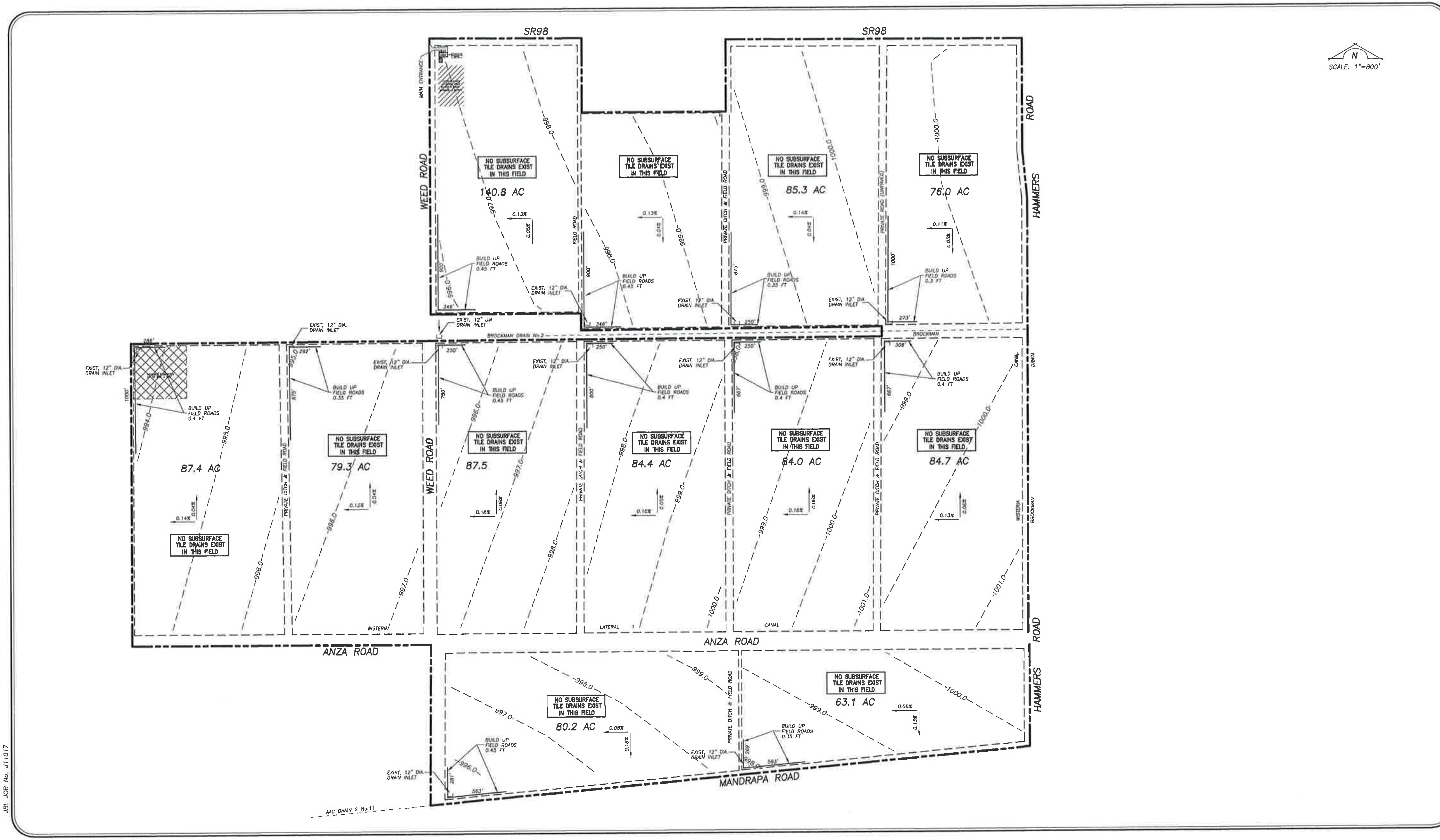


GS Lyon

Project No.: GS1105

Calexico Solar Farm II Phase A
Site Map

Plate
A-2



PRINTED: 12/19/11

REV No.	REVISION	DATE

8minutenergy RENEWABLES

PREPARED UNDER THE DIRECT SUPERVISION OF:

JEFFREY O. LYON, R.C.E. 31,921 — DATE
ENGINEER OF RECORD

REGISTERED PROFESSIONAL ENGINEER — JEFFREY O. LYON — RCE 31,921 — EXP 12-31-12 — CIVIL — STATE OF CALIFORNIA

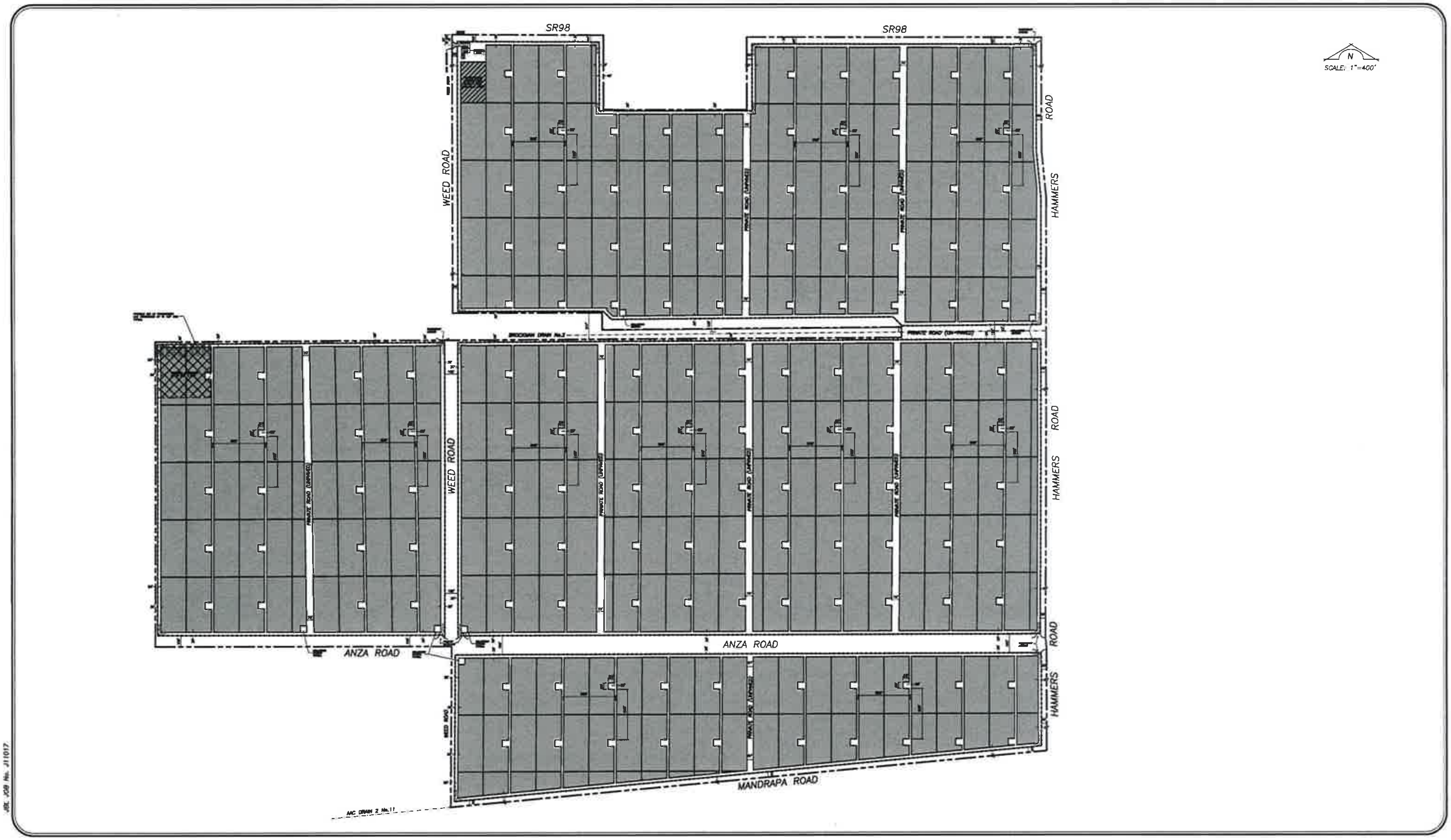
GS Lyon
Engineering & Construction Management
780 N. 4th Street
El Centro, CA 92243
(760) 370-3000
FAX (760) 337-8900

CALEXICO SOLAR FARM II PHASE A (89MA)
LOCATION: CALEXICO, CA
SHEET TITLE: EXISTING AG CONDITIONS
CLIENT: 8MINUTENERGY RENEWABLES

SHEET No. 2
BY: GMG
DATE: 12/16/11
JOB #: GS1105

Appendix B

Solar Farm Improvements



JBL JOB No. J11017

PRINTED: 1/20/12

REV No.	REVISION	DATE

8minutenergy RENEWABLES

PREPARED UNDER THE DIRECT SUPERVISION OF:

JEFFREY O. LYON, R.C.E. 31,921 — DATE
ENGINEER OF RECORD

REGISTERED PROFESSIONAL ENGINEER — JEFFREY O. LYON — RCE 31,921 — EXP 12-31-12 — CIVIL — STATE OF CALIFORNIA

GS Lyon
Engineering & Construction Management
780 N. 4th Street
El Centro, CA 92243
(760) 370-3000
FAX (760) 337-8900

CALEXICO SOLAR FARM II PHASE A (89MA)

LOCATION: CALEXICO, CA
SHEET TITLE: OVERALL SITE PLAN EAST
CLIENT: 8MINUTENERGY RENEWABLES

SHEET No. 2
BY: GMG
DATE: 8/9/11
JOB #: GS1105

Appendix C

Restoration Cost Summary

Calexico Solar Farm II Phase A (89MA)

Field No. 1 - 059-110-006 (West Field) (77.8 ac)

Subsurface Tile Drainage System - Baseline	0	LF	$	7.65	$	-
Subsurface Tile Drainage System - Laterals	0	LF	$	2.25	$	-
Irrigation Ditch/Pad and Outlets/Gates/Slide Gates	2,573	LF	$	62.25	$	160,169.25
Land Leveling	77.8	ac	$	150.00	$	11,670.00
Ground Work (Subsoil/ Stubble Disc/Landplane)	77.8	ac	$	130.00	$	10,114.00
Manure Application	77.8	ac	$	75.00	$	5,835.00
Agronomic Soil Sampling	1	LS	$	800.00	$	800.00
			Total		**$**	**188,588.25**
			Cost/Ac.		**$**	**2,424.01**

Field No. 2 - 059-110-006 (East Field) (61.6 ac)

Subsurface Tile Drainage System - Baseline	0	LF	$	7.65	$	-
Subsurface Tile Drainage System - Laterals	0	LF	$	2.25	$	-
Irrigation Ditch/Pad and Outlets/Gates/Slide Gates	2,828	LF	$	62.25	$	176,043.00
Land Leveling	61.6	ac	$	150.00	$	9,240.00
Ground Work (Subsoil/ Stubble Disc/Landplane)	61.6	ac	$	130.00	$	8,008.00
Manure Application	61.6	ac	$	75.00	$	4,620.00
Agronomic Soil Sampling	1	LS	$	800.00	$	800.00
			Total		**$**	**198,711.00**
			Cost/Ac.		**$**	**3,225.83**

Field No. 3 - 059-110-007 (West Field) (85.3 ac)

Subsurface Tile Drainage System - Baseline	0	LF	$	7.65	$	-
Subsurface Tile Drainage System - Laterals	0	LF	$	2.25	$	-
Irrigation Ditch/Pad and Outlets/Gates/Slide Gates	2,553	LF	$	62.25	$	158,924.25
Land Leveling	85.3	ac	$	150.00	$	12,795.00
Ground Work (Subsoil/ Stubble Disc/Landplane)	85.3	ac	$	130.00	$	11,089.00
Manure Application	85.3	ac	$	75.00	$	6,397.50
Agronomic Soil Sampling	1	LS	$	800.00	$	800.00
			Total		**$**	**190,005.75**
			Cost/Ac.		**$**	**2,227.50**

Field No. 4 - 059-110-007 (East Field) (76 ac)

Subsurface Tile Drainage System - Baseline	0	LF	$	7.65	$	-
Subsurface Tile Drainage System - Laterals	0	LF	$	2.25	$	-
Irrigation Ditch/Pad and Outlets/Gates/Slide Gates	2,861	LF	$	62.25	$	178,097.25
Land Leveling	76.0	ac	$	150.00	$	11,400.00
Ground Work (Subsoil/ Stubble Disc/Landplane)	76.0	ac	$	130.00	$	9,880.00
Manure Application	76.0	ac	$	75.00	$	5,700.00
Agronomic Soil Sampling	1	LS	$	800.00	$	800.00
			Total		**$**	**205,877.25**
			Cost/Ac.		**$**	**2,708.91**

Field No. 5 - 059-130-003 (West Field) (87.4 ac)

Subsurface Tile Drainage System - Baseline	0	LF	$	7.65	$	-
Subsurface Tile Drainage System - Laterals	0	LF	$	2.25	$	-
Irrigation Ditch/Pad and Outlets/Gates/Slide Gates	2,595	LF	$	62.25	$	161,538.75
Land Leveling	87.4	ac	$	150.00	$	13,110.00
Ground Work (Subsoil/ Stubble Disc/Landplane)	87.4	ac	$	130.00	$	11,362.00
Manure Application	87.4	ac	$	75.00	$	6,555.00
Agronomic Soil Sampling	1	LS	$	800.00	$	800.00
			Total		**$**	**193,365.75**
			Cost/Ac.		**$**	**2,212.42**

Field No. 6 - 059-130-003 (East Field) (79.3 ac)

Subsurface Tile Drainage System - Baseline	0	LF	$	7.65	$	-
Subsurface Tile Drainage System - Laterals	0	LF	$	2.25	$	-
Irrigation Ditch (Common with Field No. 5)	2,574	LF	$	62.25	$	160,231.50
Land Leveling	79.3	ac	$	150.00	$	11,895.00
Ground Work (Subsoil/ Stubble Disc/Landplane)	79.3	ac	$	130.00	$	10,309.00
Manure Application	79.3	ac	$	75.00	$	5,947.50
Agronomic Soil Sampling	1	LS	$	800.00	$	800.00
			Total		**$**	**189,183.00**
			Cost/Ac.		**$**	**2,385.66**

Field No. 7 - 059-110-008 (West Field) (83.4 ac)

Subsurface Tile Drainage System - Baseline	0	LF	$	7.65	$	-
Subsurface Tile Drainage System - Laterals	0	LF	$	2.25	$	-
Irrigation Ditch/Pad and Outlets/Gates/Slide Gates	2,567	LF	$	62.25	$	159,795.75
Land Leveling	83.4	ac	$	150.00	$	12,510.00
Ground Work (Subsoil/ Stubble Disc/Landplane)	83.4	ac	$	130.00	$	10,842.00
Manure Application	83.4	ac	$	75.00	$	6,255.00
Agronomic Soil Sampling	1	LS	$	800.00	$	800.00
			Total		**$**	**190,202.75**
			Cost/Ac.		**$**	**2,280.61**

Field No. 8 - 059-110-008 (Center West Field) (84.3 ac)

Subsurface Tile Drainage System - Baseline	0	LF	$	7.65	$	-
Subsurface Tile Drainage System - Laterals	0	LF	$	2.25	$	-
Irrigation Ditch/Pad and Outlets/Gates/Slide Gates	2,567	LF	$	62.25	$	159,795.75
Land Leveling	84.3	ac	$	150.00	$	12,645.00
Ground Work (Subsoil/ Stubble Disc/Landplane)	84.3	ac	$	130.00	$	10,959.00
Manure Application	84.3	ac	$	75.00	$	6,322.50
Agronomic Soil Sampling	1	LS	$	800.00	$	800.00
			Total		**$**	**190,522.25**
			Cost/Ac.		**$**	**2,260.05**

Field No. 9 - 059-110-008 (Center East Field) (84 ac)

Subsurface Tile Drainage System - Baseline	0	LF	$	7.65	$	-
Subsurface Tile Drainage System - Laterals	0	LF	$	2.25	$	-
Irrigation Ditch/Pad and Outlets/Gates/Slide Gates	2,555	LF	$	62.25	$	159,048.75
Land Leveling	84.0	ac	$	150.00	$	12,600.00
Ground Work (Subsoil/ Stubble Disc/Landplane)	84.0	ac	$	130.00	$	10,920.00
Manure Application	84.0	ac	$	75.00	$	6,300.00
Agronomic Soil Sampling	1	LS	$	800.00	$	800.00
			Total		**$**	**189,668.75**
			Cost/Ac.		**$**	**2,257.96**

Field No. 10 - 059-110-008 (West Field) (84.6 ac)

Subsurface Tile Drainage System - Baseline	0	LF	$	7.65	$	-
Subsurface Tile Drainage System - Laterals	0	LF	$	2.25	$	-
Irrigation Ditch/Pad and Outlets/Gates/Slide Gates	2,555	LF	$	62.25	$	159,048.75
Land Leveling	84.6	ac	$	150.00	$	12,690.00
Ground Work (Subsoil/ Stubble Disc/Landplane)	84.6	ac	$	130.00	$	10,998.00
Manure Application	84.6	ac	$	75.00	$	6,345.00
Agronomic Soil Sampling	1	LS	$	800.00	$	800.00
			Total		**$**	**189,881.75**
			Cost/Ac.		**$**	**2,244.47**

Field No. 11 - 059-110-003 (West Field) (80.2 ac)

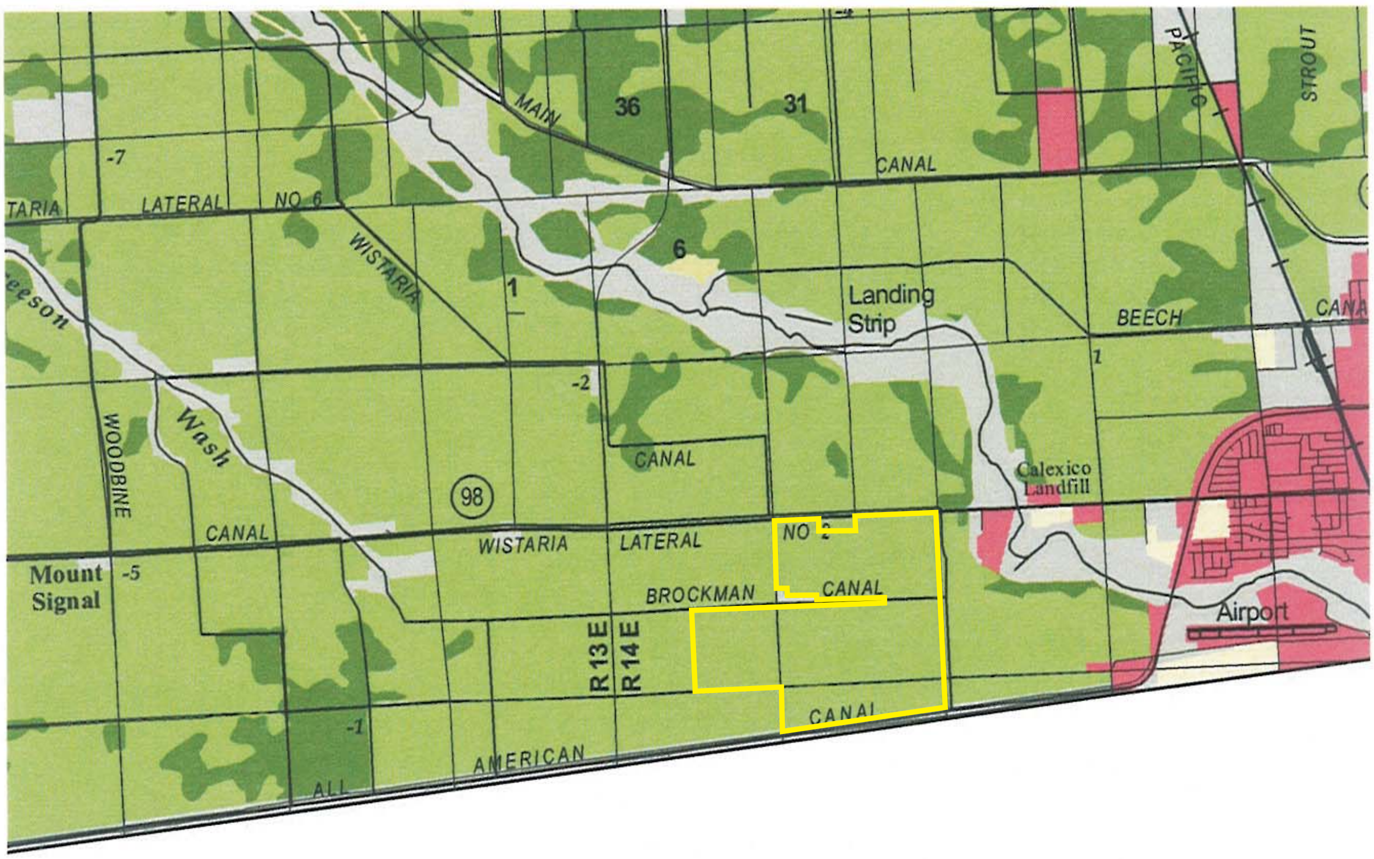
Subsurface Tile Drainage System - Baseline	0	LF	$	7.65	$	-
Subsurface Tile Drainage System - Laterals	0	LF	$	2.25	$	-
Irrigation Ditch/Pad and Outlets/Gates/Slide Gates	2,658	LF	$	62.25	$	165,460.50
Land Leveling	80.2	ac	$	150.00	$	12,030.00
Ground Work (Subsoil/ Stubble Disc/Landplane)	80.2	ac	$	130.00	$	10,426.00
Manure Application	80.2	ac	$	75.00	$	6,015.00
Agronomic Soil Sampling	1	LS	$	800.00	$	800.00
			Total		**$**	**194,731.50**
			Cost/Ac.		**$**	**2,428.07**

Field No. 12 - 059-110-003 (East Field) (61.5 ac)

Subsurface Tile Drainage System - Baseline	0	LF	$	7.65	$	-
Subsurface Tile Drainage System - Laterals	0	LF	$	2.25	$	-
Irrigation Ditch/Pad and Outlets/Gates/Slide Gates	2,654	LF	$	62.25	$	165,211.50
Land Leveling	61.5	ac	$	150.00	$	9,225.00
Ground Work (Subsoil/ Stubble Disc/Landplane)	61.5	ac	$	130.00	$	7,995.00
Manure Application	61.5	ac	$	75.00	$	4,612.50
Agronomic Soil Sampling	1	LS	$	800.00	$	800.00
			Total		**$**	**187,844.00**
			Cost/Ac.		**$**	**3,054.37**
			TOTAL		**$**	**2,308,582.00**

Appendix D

Prime Farmland and Farmland of Statewide Importance



*Legend on following page

N

GS Lyon

Project No.: GS1105

Calexico Solar Farm II Phase A
Imperial County Important Farmland 2010

Plate
D-1

PRIME FARMLAND - 195,589 acres

PRIME FARMLAND HAS THE BEST COMBINATION OF PHYSICAL AND CHEMICAL FEATURES ABLE TO SUSTAIN LONG-TERM AGRICULTURAL PRODUCTION. THIS LAND HAS THE SOIL QUALITY, GROWING SEASON, AND MOISTURE SUPPLY NEEDED TO PRODUCE SUSTAINED HIGH YIELDS. LAND MUST HAVE BEEN USED FOR IRRIGATED AGRICULTURAL PRODUCTION AT SOME TIME DURING THE FOUR YEARS PRIOR TO THE MAPPING DATE.

FARMLAND OF STATEWIDE IMPORTANCE - 311,048 acres

FARMLAND OF STATEWIDE IMPORTANCE IS SIMILAR TO PRIME FARMLAND BUT WITH MINOR SHORTCOMINGS, SUCH AS GREATER SLOPES OR LESS ABILITY TO STORE SOIL MOISTURE. LAND MUST HAVE BEEN USED FOR IRRIGATED AGRICULTURAL PRODUCTION AT SOME TIME DURING THE FOUR YEARS PRIOR TO THE MAPPING DATE.

UNIQUE FARMLAND - 2,196 acres

UNIQUE FARMLAND CONSISTS OF LESSER QUALITY SOILS USED FOR THE PRODUCTION OF THE STATE'S LEADING AGRICULTURAL CROPS. THIS LAND IS USUALLY IRRIGATED, BUT MAY INCLUDE NONIRRIGATED ORCHARDS OR VINEYARDS AS FOUND IN SOME CLIMATIC ZONES IN CALIFORNIA. LAND MUST HAVE BEEN CROPPED AT SOME TIME DURING THE FOUR YEARS PRIOR TO THE MAPPING DATE.

FARMLAND OF LOCAL IMPORTANCE - 32,109 acres

UNIRRIGATED AND UNCULTIVATED LANDS WITH PRIME AND STATEWIDE SOILS.

URBAN AND BUILT-UP LAND - 27,709 acres

URBAN AND BUILT-UP LAND IS OCCUPIED BY STRUCTURES WITH A BUILDING DENSITY OF AT LEAST 1 UNIT TO 1.5 ACRES, OR APPROXIMATELY 6 STRUCTURES TO A 10-ACRE PARCEL. COMMON EXAMPLES INCLUDE RESIDENTIAL, INDUSTRIAL, COMMERCIAL, INSTITUTIONAL FACILITIES, CEMETERIES, AIRPORTS, GOLF COURSES, SANITARY LANDFILLS, SEWAGE TREATMENT, AND WATER CONTROL STRUCTURES.

OTHER LAND - 458,829 acres

OTHER LAND IS LAND NOT INCLUDED IN ANY OTHER MAPPING CATEGORY. COMMON EXAMPLES INCLUDE LOW DENSITY RURAL DEVELOPMENTS, BRUSH, TIMBER, WETLAND, AND RIPARIAN AREAS NOT SUITABLE FOR LIVESTOCK GRAZING, CONFINED LIVESTOCK, POULTRY, OR AQUACULTURE FACILITIES, STRIP MINES, BORROW PITS, AND WATER BODIES SMALLER THAN 40 ACRES. VACANT AND NONAGRICULTURAL LAND SURROUNDED ON ALL SIDES BY URBAN DEVELOPMENT AND GREATER THAN 40 ACRES IS MAPPED AS OTHER LAND.

WATER - 1,029 acres

PERENNIAL WATER BODIES WITH AN EXTENT OF AT LEAST 40 ACRES.

(All acreages are totals for Imperial County)

GS Lyon Project No.: GS1105	Calexico Solar Farm II Phase A I.C. Important Farmland 2010 Legend	Plate D-2

GS Lyon

Project No.: GS1105

Calexico Solar Farm II Phase A
Soil Survey Map

Plate
D-3

California Department of Conservation

FARMLAND MAPPING AND MONITORING PROGRAM

SOIL CANDIDATE LISTING

for

PRIME FARMLAND AND FARMLAND OF STATEWIDE IMPORTANCE

IMPERIAL COUNTY

U.S. Department of Agriculture, Natural Resources Conservation Service, soil surveys for Imperial County include:

Soil Survey of Imperial County, California, Imperial Valley Area, October 1981

Soil Survey of Yuma-Wellton Area: Parts of Yuma County, Arizona, and Imperial County, California, December 1980

Soil Survey of Palo Verde Area, California, September 1974

Beginning in 2002, SSURGO digital soil information has been incorporated into the Imperial County Important Farmland Map. Prior versions of the map have not been modified.

The SSURGO data includes Imperial County, Imperial Valley Area (published 3/22/2004), Yuma-Wellton Area (published 08/11/2004) and Palo Verde Area (published 4/20/2004). The digital surveys contain additional soil units beyond those published in the original paper surveys. Soils on the Prime and Statewide lists that only occur in the SSURGO data are appended to this list in italics.

For more information on the NRCS SSURGO data, please see: http://soils.usda.gov/survey/geography/ssurgo/

7/12/95, updated 06/02/2010

U.S. DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE
DAVIS, CALIFORNIA 95616

THESE SOIL MAPPING UNITS MEET THE CRITERIA FOR PRIME FARMLAND AS OUTLINED IN THE U.S. DEPARTMENT OF AGRICULTURE'S LAND INVENTORY AND MONITORING (LIM) PROJECT FOR THE IMPERIAL VALLEY AREA, YUMA-WELLTON AREA (WINTERHAVEN), AND PALO VERDE AREA SOIL SURVEYS.

IMPERIAL VALLEY AREA

Symbol	Name
100	Antho loamy fine sand
101*	Antho-Superstition complex
105	Glenbar clay loam
106#	Glenbar clay loam, wet
108	Holtville loam
109	Holtville silty clay
110#	Holtville silty clay, wet
117	Indio loam
118#	Indio loam, wet
119	Indio-Vint complex
120	Laveen loam
122#	Meloland very fine sandy loam, wet
123#	Meloland and Holtville loams, wet
137	Rositas silt loam, 0 to 2 percent slopes
139*	Superstition loamy fine sand
142#	Vint loamy very fine sand, wet

IMPERIAL VALLEY AREA Continued

Symbol	Name
143	Vint fine sandy loam
144[#]	Vint and Indio very fine sandy loams, wet

[*] Prime Farmland is managed so that in all horizons within a depth of 40 inches (1 meter), during part of each year the conductivity of the saturation extract is less than 4 mmhos/cm and the exchangeable sodium percentage (ESP) is less than 15.

[#] Prime Farmland if drained

Note: Soils 107 (Glenbar complex), 132 (Rositas fine sand, 0 to 2 percent slopes), 133 (Rositas fine sand, 2 to 5 percent slopes), 135 (Rositas fine sand, wet, 0 to 2 percent slopes), 136 (Rositas loamy fine sand, 0 to 2 percent slopes) and 138 (Rositas and Superstition loamy fine sands) have been moved from the Prime Farmland list to the Farmland of Statewide Importance list per NRCS in 1995.

YUMA-WELLTON AREA (Imperial County portion)

Symbol	Name
8[#]	Gadsden clay
10[#]	Glenbar silty clay loam
12[#]	Holtville clay
13[#]	Indio silt loam
17	Kofa clay
24	Ripley silt loam

[#] Prime Farmland if reclaimed of excess salts and sodium.

Notes: *Soil 8* (Gadsden clay) was moved from the Farmland of Statewide Importance list to the Prime Farmland list per AZ NRCS letter of September 27, 2004.
Soil 19 (Lagunita silt loam) was removed from the Prime Farmland list per AZ NRCS letter of September 27, 2004.

PALO VERDE AREA

Symbol	Name
Ac	Aco gravelly loamy sand
Af	Aco sandy loam
Gb	Gilman fine sandy loam
Gc	Gilman silty clay loam
Ge	Glenbar silty clay loam
Hb*	Holtville fine sandy loam
Hc*	Holtville silty clay
Id*	Indio very fine sandy loam
Ie*	Indio silty clay loam
Oc*	Orita fine sand
Og*	Orita gravelly loamy sand
Or*	Orita gravelly fine sandy loam
Rb*	Ripley very fine sandy loam
Rc*	Ripley silty clay loam
RoA	Rositas fine sand, 0 to 2 percent slopes
RoB	Rositas fine sand, 2 to 9 percent slopes
RtA	Rositas silty clay loam, 0 to 2 percent slopes
9#	*Gadsden clay*

PALO VERDE AREA Continued

Symbol	Name
9A#	*Gadsden loam*
36#	*Indio silt loam*

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* Prime Farmland if reclaimed of excess salts and sodium.

Prime Farmland if either protected from flooding or not frequently flooded during the growing season.

IMPERIAL COUNTY
FARMLAND OF STATEWIDE
IMPORTANCE SOILS

U.S. DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE
DAVIS, CALIFORNIA 95616

THESE SOIL MAPPING UNITS MEET THE CRITERIA FOR FARMLAND OF STATEWIDE IMPORTANCE AS OUTLINED IN THE U.S. DEPARTMENT OF AGRICULTURE'S LAND INVENTORY AND MONITORING (LIM) PROJECT FOR THE IMPERIAL VALLEY AREA, YUMA-WELLTON AREA (WINTERHAVEN), AND PALO VERDE AREA SOIL SURVEYS.

IMPERIAL VALLEY AREA

Symbol	Name
107	Glenbar complex
111	Holtville-Imperial silty clay loams
112	Imperial silty clay
113	Imperial silty clay, saline
114	Imperial silty clay, wet
115	Imperial-Glenbar silty clay loams, wet, 0 to 2 percent slopes
116	Imperial-Glenbar silty clay loams, 2 to 5 percent slopes
121	Meloland fine sand
124	Niland gravelly sand
125	Niland gravelly sand, wet
126	Niland fine sand
127	Niland loamy fine sand
128	Niland-Imperial complex, wet
130	Rositas sand, 0 to 2 percent slopes

IMPERIAL VALLEY AREA Continued

Symbol	Name
131	Rositas sand, 2 to 5 percent slopes
132	Rositas fine sand, 0 to 2 percent slopes
133	Rositas fine sand, 2 to 9 percent slopes
135	Rositas fine sand, wet, 0 to 2 percent slopes
136	Rositas loamy fine sand, 0 to 2 percent slopes
138	Rositas-Superstition loamy fine sands

YUMA-WELLTON AREA (Imperial County Portion)

Symbol	Name
14*	Indio silt loam, saline
16*	Indio-Lagunita-Ripley complex
18*	Lagunita loamy sand
25*	Rositas sand

* Due to insufficient documentation of qualifying criteria, these units were dropped from the Farmland of Statewide Importance list per the Arizona office of NRCS (September 27, 2004).

Note: *Soil 8* (Gadsden Clay) was moved to the Prime Farmland list from the Farmland of Statewide Importance list per AZ NRCS letter of September 27, 2004.

PALO VERDE AREA

Symbol	Name
Co	Cibola fine sandy loam
Cs	Cibola silty clay loam
Ib	Imperial fine sandy loam
Ic	Imperial silty clay
Md	Meloland fine sandy loam
Me	Meloland silty clay loam
RsA	Rositas gravelly loamy sand, 0 to 2 percent slopes

Appendix E

Project Description

Calexico Solar Farm II Phases A and B

PROJECT DESCRIPTION

89MA 8ME, LLC
Sponsor: 8minutenergy Renewables LLC
10100 Santa Monica Boulevard, Suite 300
Los Angeles, CA 90067
(213) 281-9771

With Technical Assistance By:
GS Lyon Consultants, Inc.
780 North 4th Street
El Centro, CA 92243
(760) 337-1100

July 2011

8minutenergy RENEWABLES

Table of Contents

PROJECT INFORMATION

Project Name: Calexico Solar Farm II

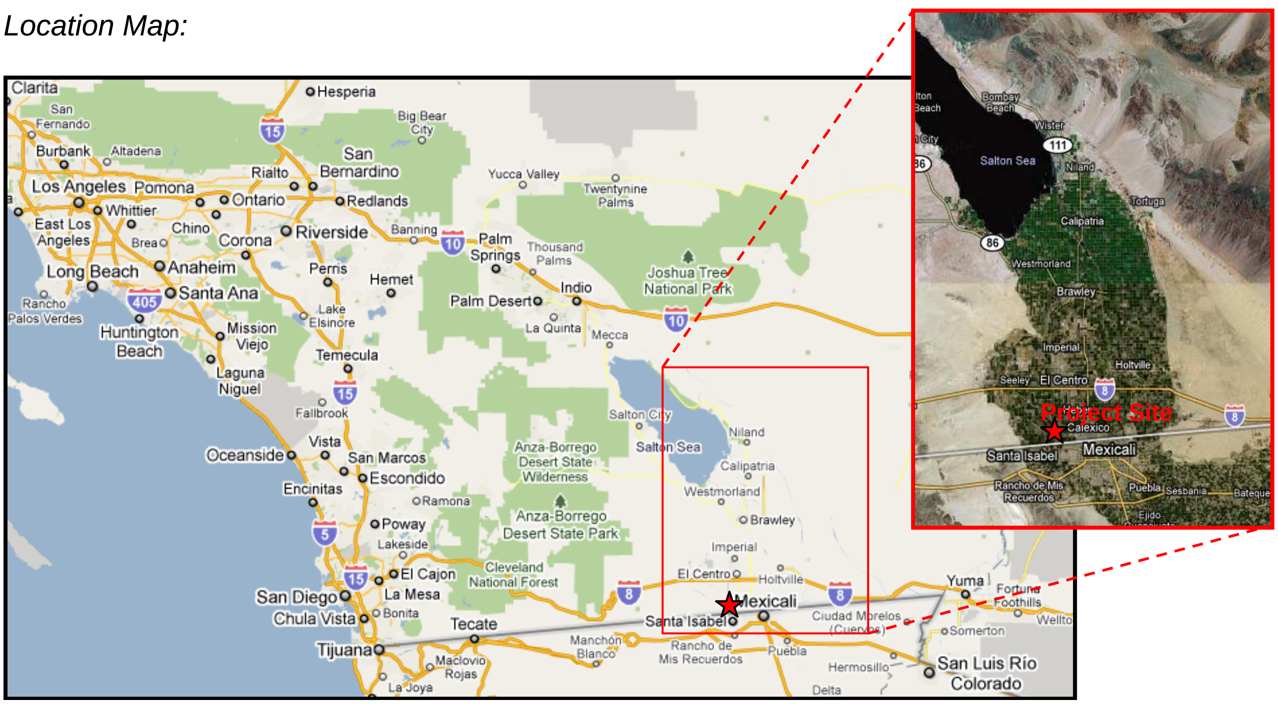
General Location: The project will be located approximately two miles west of Calexico, California in southern Imperial County. The project comprises several agricultural parcels totaling approximately 1,500 acres, generally located between Kubler Road to the north and the US-Mexico border to the south, and between Hammers Road to the east and a private road to the west (½ mile west of Corda Road). The land used by the project is owned by several land owners. Agricultural lands lie to the immediate north, south, east, and west of the project, with the exception of isolated residential and/or commercial structures and a small crop duster airstrip that transects a portion of CSF-II Phase A.

Calexico Solar Farm I comprises two phases (Phase A and Phase B), each requesting approval of a separate CUP.

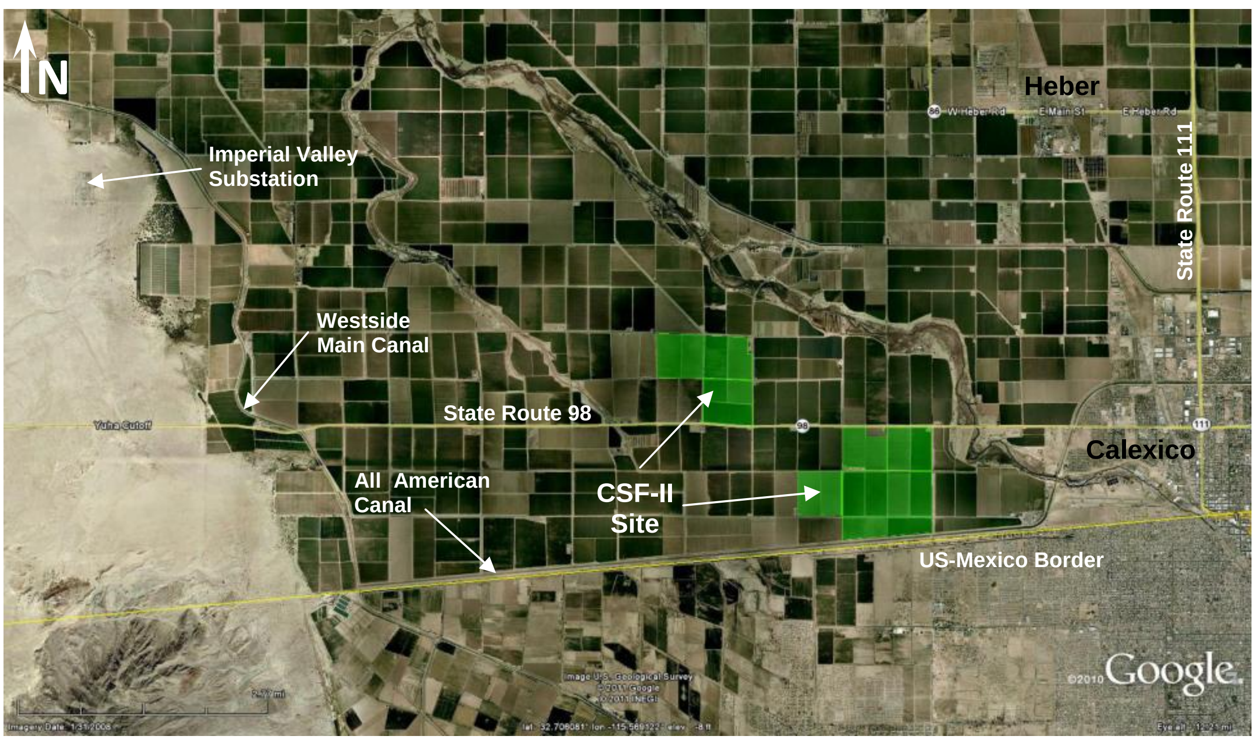
Assessor's Parcel Numbers:

- Phase A (~940 AC): 059-110-006, 059-110-008, 059-130-003, 059-110-003, 059-110-007
- Phase B (~530 AC): 052-180-043, 052-180-044, 052-180-022, 052-180-050, 052-180-051

Location Map:



Vicinity Map:



DESCRIPTION OF PROPOSED PROJECT

89MA 8ME, LLC and 8minutenergy Renewables LLC (the "Applicant") are seeking approval of two Conditional Use Permits (CUP) from Imperial County for the development of an up to 200 MW Calexico Solar Farm II ("CSF-II") solar farm located west of Calexico (see "Vicinity Map" above). The Applicant plans to develop this project in two phases: Phase A and Phase B, each with a separate CUP, and each intended to generate up to 100 MW. The Applicant further intends for each phase to have its own O&M building and onsite substation.

Project Phases

An interconnection application process for the entire CSF-II project with the California Independent System Operator (CAISO) has been initiated, and a queue position with CAISO has been secured for a total of 200 MW, which will be shared by the two phases of the CSF-II project. The Applicant intends for each CUP application of the project's two phases to produce up to 100 MW. However, each phase and CUP may produce up to 200 MW if the other phase and CUP either does not get built at all or does not get built for its full 100 MW share. The total output of both CUPs and phases combined will not exceed a total of 200 MW in any scenario.

The land requirements of a solar farm can vary significantly depending on the mounting structures used (e.g., fixed-tilt vs. tracking) and the efficiency of the modules selected. In general, on a per-MW basis, less land is required for higher efficiency modules (which may not be available cost effectively at the time of construction) with fixed-tilt mounts than for lower efficiency modules with tracking mounts. Thus, by using high efficiency modules and fixed-tilt mounts, a single phase and CUP of CSF-II could accommodate up to 200 MW itself. It is entirely possible that each phase and CUP ends up with a mix of fixed tilt and/or tracking mounts and different module efficiencies.

Therefore, the Applicant requests the approval of two CUPs for the CSF-II project: one CUP for Phase A, and a second CUP for Phase B. The CUP term requested for each phase and CUP is 40 years. The Applicant proposes to construct, own, operate, and fund the CSF-II project. The The Applicant expects both phases of the CSF-II project to produce power by 2014.

CSF-II's interconnection will occur at the 230 kV side of the SDG&E Imperial Valley (IV) Substation, located approximately 7 miles northwest of the project site. The Applicant intends to interconnect via 230 kV transmission facilities shared with one or more solar projects in the vicinity; several suitable transmission facilities are currently planned in CSF-II's immediate area. CSF-II intends to transfer electrical power from both of its onsite substations (one each on Phase A and Phase B land) to IV Substation via an offsite shared substation and transmission facility constructed, owned, operated, and funded by Mount Signal Solar Farm I (82LV 8me, LLC), which has a Right-of-Way (ROW) application being processed by the Bureau of Land Management (BLM). Alternatively, CSF-II may:

1. Build a single onsite substation located in one of CSF-II's phases, which would collect power generated by both phases of CSF-II and transmit that power to IV Substation via the method described above; or

2. "Host" a shared substation onsite in one of CSF-II's phases, which c/would receive power from the other phase as well as from another nearby solar project(s). Power would then be transmitted to IV Substation via shared transmission facilities constructed, owned, operated, and funded by a separate legal entity; or

3. Utilize the transmission, substation, and/or O&M facilities of another legal entity(ies) other than those of Mount Signal Solar Farm I, such as another neighboring solar project or a Special Purpose Vehicle (SPV) created to accommodate multiple solar projects' shared transmission, substation, and/or O&M facilities.

In the above alternative scenarios, CSF-II's onsite transmission, substation, and/or O&M facilities c/would be reduced or eliminated, and those areas c/would instead by covered with solar panels.

Any necessary authorization or agreement to share facilities would be obtained from the appropriate legal entity(ies) prior to CSF-II's construction.

The Applicant has considered the following in its selection of the CSF-II site for detailed evaluation:

- Land availability (approximately 1,500 acres);
- Zoning (the CSF-II will be sited on land currently zoned "A-2" General Agriculture and "A-2-R" General Agriculture Rural Zone);
- Minimal environmental consequences (CSF-II will be located on disturbed land currently used for agriculture);
- Water availability (no water wells required);
- Primarily (95%+) low production agricultural land (Farmland of Statewide Importance);
- Long-term land lease (25-year lease commencing with entitlements with a 15-year extension for a total of 40 years)

Map of CSF-II Photo Locations

#1 Looking SW

#2 Looking NW


#3 Looking NE


#4 Looking NE


#5 Looking SE


#6 Looking SE


#7 Looking SE


#8 Looking NW

#9 Looking NE

#10 Looking NE

#11 Looking SE

#12 Looking SW

Up to twelve (12) full time employees will operate the entire CSF-II project (split roughly evenly between phases, and between daytime and nighttime shifts). Typically, up to six (6) staff total for both phases combined will work during the day shift (sunrise to sunset), and the remainder during the night shifts and weekend. As noted earlier, it is possible that one phase of CSF-II would simply feed its power to the other phase. In that scenario, CSF-II's phases would share personnel, thereby reducing the staff required for CSF-II as a whole to a total of approximately ten (10) staff. It is also possible that CSF-II would share another legal entity's O&M facilities. In that scenario, CSF-II c/would also share personnel with that legal entity, thereby reducing or eliminating the onsite staff required for CSF-II.

CSF-II will export and sell the generated electricity via the CAISO grid. After the useful life of the project (up to 40 years) the panels will be disassembled from the steel mounting frames and the site restored to its pre-development condition. CSF-II as a whole is planned to generate up to 200 MW AC of electricity during peak daylight hours (up to 100 MW planned for each phase, or up to 200 MW if technology permits or is available; total for CSF-II as a whole would not exceed 200 MW in either case).

CSF-II will utilize non-reflective photovoltaic (PV) panels (or modules) to convert sunlight directly into electricity. Individual panels will be installed on either fixed-tilt or tracker mount systems, which will stand up to 15 feet high (depending on the mount) while either flat or tilted up to approximately 40 degrees from horizontal. The solar array field will be arranged in grids, and each grid will include an inverter container and a pad-mounted transformer near the center. CSF-II will also have several electrical control containers throughout the project. CSF-II as a whole will require the installation of up to 1.6 million photovoltaic panels to generate up to 200 MW AC (direct current ("DC") nameplate capacity of approximately 264 MW DC). The initial energy production of CSF-II as a whole will be up to approximately 480,000 MWh per year, sufficient to power over 68,000 homes and displacing over 270,000 tons of CO_2 emissions per year when compared to a gas-fired power plant or 540,000 tons when compared to a coal-fired power plant. This displacement of CO_2 emissions is equivalent to planting approximately 11 to 22 million trees or removing approximately 50,000 to 100,000 cars from the roads, respectively.

Fixed-tilt solar panels

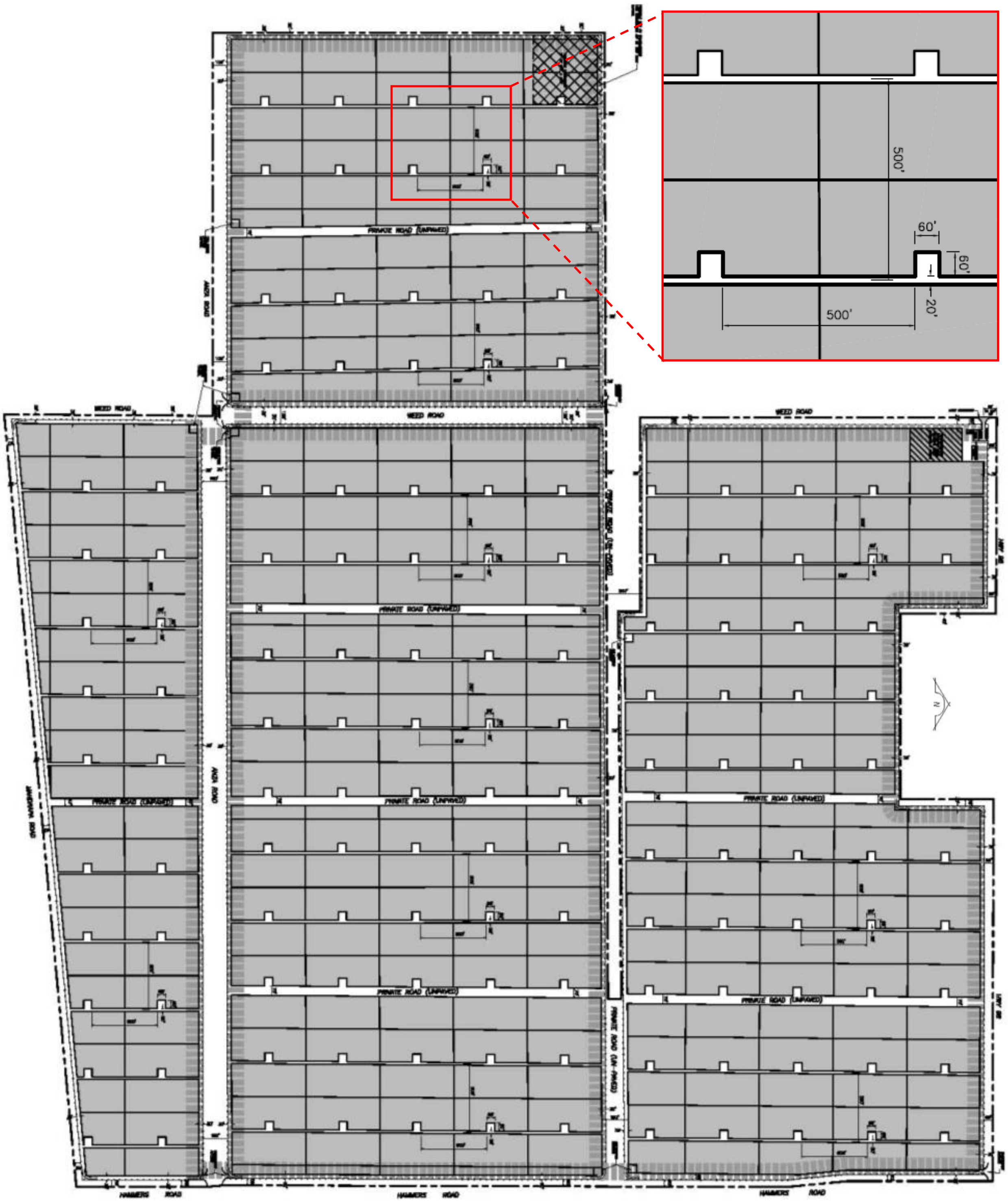
Typical fixed-tilt solar panel rows

Typical single-axis tracking solar panels

Typical single-axis tracking solar panel rows

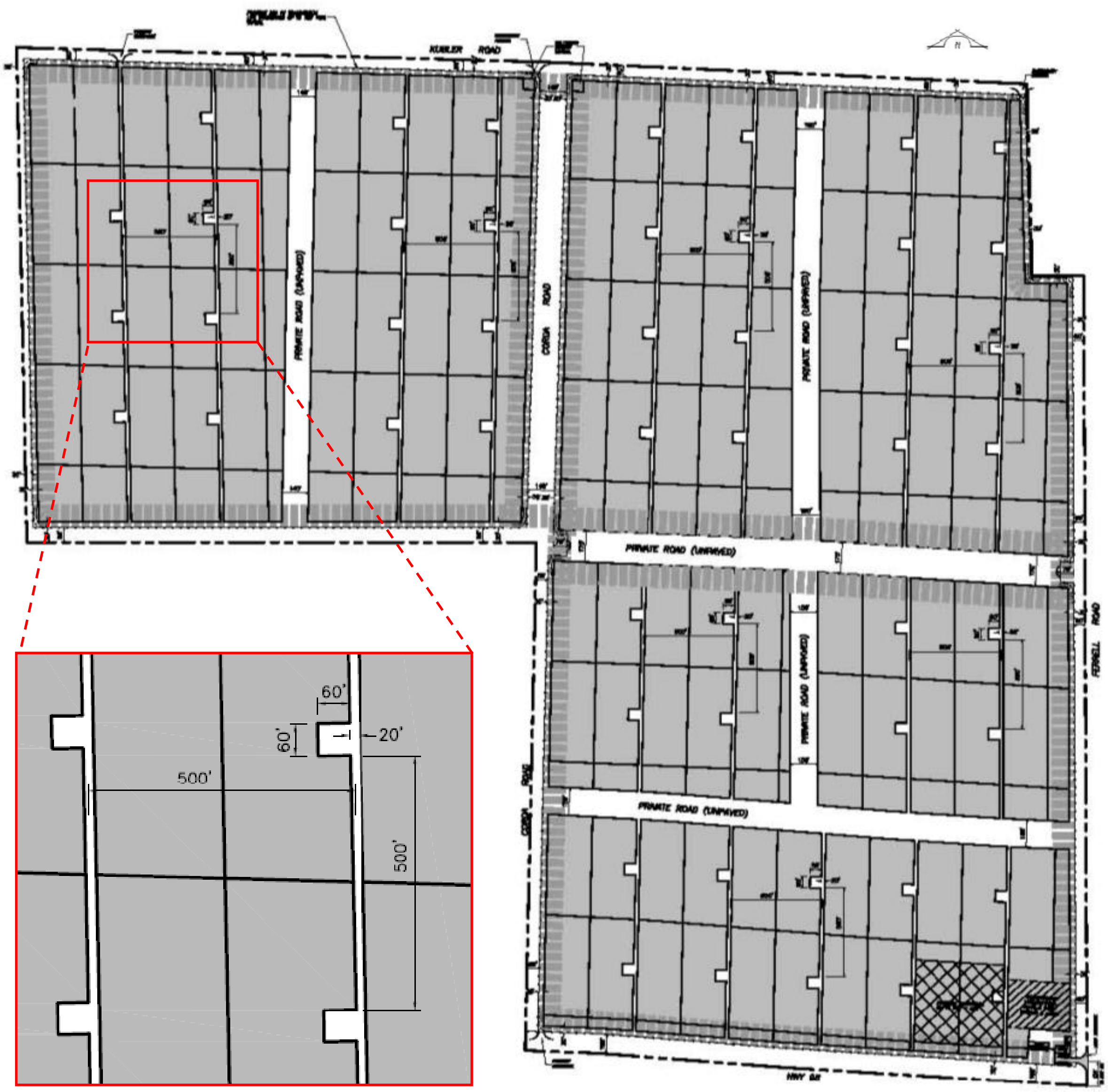
Typical single-axis tracking solar panel rows

Typical azimuth tracking solar panel rows



Project Site Layout – Phase A[1]

[1] See Appendix for enlarged version



Project Site Layout – Phase B[1]

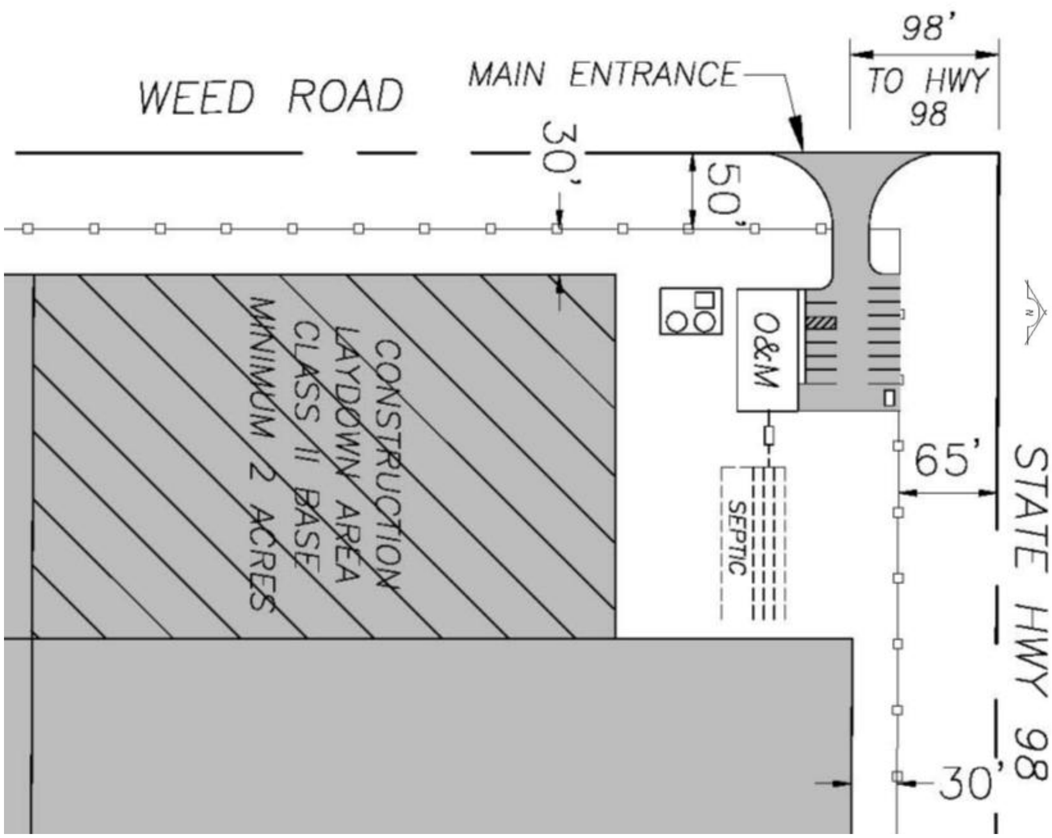
The Applicant proposes to situate the solar array on agricultural lands generally located between Kubler to the north and the US-Mexico border to the south, and between Hammers Road to the east and a private road to the west (½ mile west of Corda Road). Any Imperial Irrigation District (IID) irrigation canals and drains will remain in place, including maintenance access roads as per IID easements.

The Applicant intends for each phase of CSF-II to have a separate operations and maintenance ("O&M") building (up to approximately 320 square feet each, or 40' x 80' each), with associated parking, which will be constructed near the southeast corner of Weed Road and SR-98 for

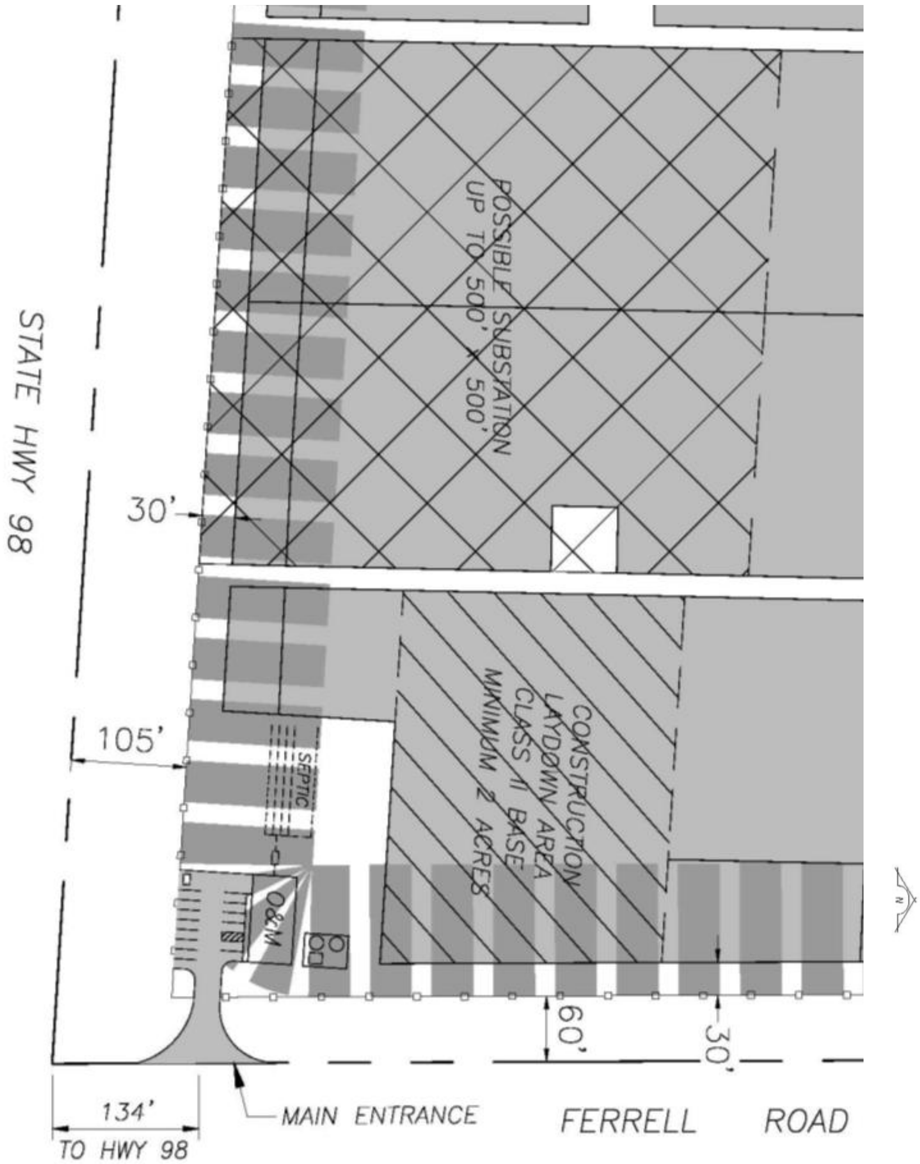
[1] See Appendix for enlarged version

Phase A and the northwest corner of Ferrell Road and SR-98 for Phase B (see Site Layout in the Appendix). The O&M buildings will be steel framed, with metal siding and roof panels, painted to match the surrounding setting (desert sand). Each O&M building site will have a septic tank and leach field for wastewater disposal. A water system and small water treatment plant will be placed at each O&M building to provide onsite de-ionized water for panel washing.

Panel washing requires about one quart of water for each panel per month. It is estimated that water demand from the IID canal for panel washing and domestic use will not exceed 80 acre-feet per year for CSF-II as a whole (split between phases roughly in proportion to their respective acreages). A total of approximately 20,000 to 70,000 gallons of water for CSF-II as a whole (split between phases roughly in proportion to their respective acreages) will be stored in steel tank(s) placed above ground onsite at the water treatment area, under a metal shade structure. 10,000 gallons of water for each O&M building will be exclusively dedicated for O&M firefighting purposes, i.e., to protect the O&M building only. The Applicant intends to also order and obtain a portion of the landlords' agricultural water allocations (roughly 8,000 acre-feet) from the IID to irrigate and maintain a cover crop (saltgrass or similar) on the disturbed portions of the CSF-II site; alternatively or in addition, a soil stabilizer may also be used. If a cover crop is used onsite, it is estimated that water usage to maintain that cover crop would be up to approximately 370 acre-feet per year (split between phases roughly in proportion to their respective acreages).



Operations and Maintenance (O&M) Building Area – Phase A



Operations and Maintenance (O&M) Building Area – Phase B

Access to the CSF-II is via existing paved roads (SR-98, Ferrell Road, and Weed Road). The site will be enclosed with a low voltage, 8-foot high enhanced security fence with perimeter landscaping along public roads. The fencing will be screened with neutral colored slats (or similar) along public roads. The fence and landscaping would largely screen the project from view and beautify the project's frontages to ensure that the project would not adversely impact scenic resources or the visual character of the site and its surroundings. Each O&M building's parking lot and access driveway from will be paved (not curbed). The roads, driveways and parking lots will meet the Department of Public Works and Fire/OES Standards as well as those of the Air Pollution Control District. Alternatively, CSF-II may share the cost of a Wildland Type II (or similar) fire truck with other nearby solar projects to permit the fire department access throughout the site. Parking spaces and walkways will be concreted to meet all California Accessibility Regulations.

The solar array areas will have low lying grass and/or a soil stabilizer to control dust and storm water erosion. A small (48”x 96”) metal sign will be mounted at the entrances to CSF-II that identifies the project.

As noted earlier, it is possible that one phase of CSF-II would simply feed its power to the other phase. In that scenario, CSF-II’s phases would share O&M facilities and would therefore require only one set of O&M facilities (O&M building with associated parking area, water tank(s), dedicated 10,000 gallons of fire-fighting water to protect the O&M building, etc.). The other O&M building area would instead be covered by solar panels. It is also possible that CSF-II would share another legal entity’s O&M facilities. In that scenario, CSF-II’s own onsite O&M facility needs c/would therefore be reduced or eliminated, and any unused O&M building area depicted in the Site Layout c/would instead be covered by solar panels.

TECHNICAL STUDIES[1]

Hazardous Materials (Phase I Environmental Site Assessment)

A Phase I Environmental Site Assessment (ESA) was completed for the CSF-II site by GS Lyon Consultants, Inc. in April 2011. The assessment revealed two Recognized Environmental Conditions (RECs) in connection with the property:

- A small crop duster airstrip and operations base transects a portion of CSF-II Phase A (but falls outside Phase A's project boundaries); no further action was deemed necessary.
- A small (less than 2 acres) farm shop is located in the northeast corner of CSF-II Phase A, and hydrocarbon stains were found on surface soils; a Phase II ESA was recommended for the farm shop site.

A follow-up technical memo in April 2011 (subsequent to the preparation of the above report) noted that the conclusions reached in the original report were the same regardless of whether the project is developed in one or two phases. The Applicant noted that while the identified RECs remain regardless of phasing, they pertain only to Phase A of CSF-II since Phase B is located more than one mile west Phase A.

Geotechnical and GeoHazards Study

A geologic hazards survey was completed for the CSF-II site by Landmark Consultants, Inc. (El Centro, CA) in April 2011. No geologic hazards exist on or within the near vicinity of the site.

A follow-up technical memo in April 2011 (subsequent to the preparation of the above report) noted that the conclusions reached in the original report were the same regardless of whether the project is developed in one or two phases.

Transportation Impact Analysis

In April 2011, Linscott, Law & Greenspan, Engineers completed a Traffic Impact Analysis to assess the impact of the construction and operation of the solar farm to the roadways and intersections that will be utilized by the Project. The study estimated traffic volumes, including projected construction and operations traffic, would remain below the acceptable traffic volume thresholds identified by the County.

Visualization Study

In April 2011, Modative completed a visualization study to determine the aesthetic impacts of the proposed solar farm to the surrounding area. As shown in the visualization, the project will not damage any scenic resources or have a significant impact to the visual character of the site and its surroundings.

[1] See appendix for technical studies and reports

Glare Analysis for Ground Traffic

In April 2011, Good Company completed a reflectivity study to assess the project's potential for glare along nearby traffic corridors. The study concluded that the panels' orientation for either fixed-tilt or single-axis tracking solar panels results in angles of reflection well above the built environment and nearby traffic corridors. At the project's proposed perimeter fence, which lies 30 feet from the first solar panels, the minimum height of the reflection is already at 35.8 feet or higher (depending on the time of year). At farther distances, the height of reflection is higher.

Glare Analysis for Air Traffic

In April 2011, Aztec Engineering completed a reflectivity study to assess the project's potential for glare and glint affecting air traffic to and from Calexico Airport. The study concluded that neither fixed-tilt nor tracking solar panels at CSF-II will have any relevant effect for airplanes landing at or taking off from the airport. In the few days in the year when there is some glint produced by the project's solar panels, airplanes will also be directly facing the sun (which will render the glint effect negligible), so the panels will not have a relevant effect on airplanes' visibility, nor deteriorate the actual approaching or launching flight conditions.

Biological Survey

In April 2011, Barrett's Biological Surveys (El Centro, CA) completed a Biological Resources Technical Report for the CSF-II site. Eleven (11) burrowing owls and eight (8) burrows were observed onsite for CSF-II. Of these, two (2) owls and three (3) burrows were found on CSF-II Phase A land, while nine (9) owls and five (5) burrows were found on CSF-II Phase B land. Nine (9) burrowing owls and eight (8) burrows were found in the buffer zone of CSF-II, which includes IID canals, drains, and roads. Of these, two (2) owls and three (3) burrows were found in the buffer zone of CSF-II Phase A, while seven (7) owls and five (5) burrows were found in the buffer zone of CSF-II Phase B. A cover crop could be maintained onsite, which would provide a foraging habitat for the burrowing owls.

In addition, two mesquite trees were found on CSF-II Phase A land (one in an IID right-of-way).

Cultural Analysis

In April 2011, AECOM (formerly EDAW) completed cultural literature review of the CSF-II project site and a one-mile radius around the site. A records search and literature review identified two (2) cultural resources recorded within one mile of CSF-II (but not in the project area itself). A historic mesquite thicket was found within one mile of Phase B, while segments of the All-American Canal were found within one mile of Phase A.

DESCRIPTION OF THE CSF-II ARRAY

The Applicant estimates that CSF-II will utilize approximately 800,000 to 1.6 million PV panels (roughly half allocated to each phase), depending on the power rating of the panels procured; this range may change somewhat as PV technology continues to change and improve. These panels will be mounted on frameworks made of galvanized steel or aluminum in continuous rows of up to 500 feet in length. The arrays are grouped to create grids of up to 500' x 500' (typ), with inverter modules and a transformer near the center of each grid. The grids produce approximately 1.1 MW to 1.4 MW direct electrical current (DC), which is converted to alternating electrical current (AC) at the inverter module. Each grid's inverter modules and transformer will be housed within an up to roughly 160 square foot container or similar structure. CSF-II will also have several electrical control containers which would look similar to inverter containers.

Typical Inverter Container

The approximate 20 kV to 70 kV output from the transformer will be transferred to each phase of CSF-II's respective onsite electrical substation (one substation is planned for each phase), which will step up the voltage to a maximum of 230 kV. The power will then be transferred to the Imperial Valley Substation using one of the methods described earlier.

Each onsite substation will be fed via buried electrical conduits, electrical conductor wires, and/or up to a maximum of 230 kV overhead electrical transmission lines that run along the CSF-II property line, roads, or parcel boundaries in some cases. Each onsite substation will occupy an area of up to 500' x 500', located in the southeast corner of two private roads (½ mile west of Weed Road and ½ mile south of SR-98) for Phase A and the northwest corner of Ferrell Road and SR-98 for Phase B.

As noted earlier, it is possible that one phase of CSF-II would simply feed its power to the other phase; this would occur via electrical transmission facilities described above. In that scenario, CSF-II's phases would share a substation designed to accommodate both phases. The other phase would therefore not require its own substation, and this area would instead be covered by solar panels. It is also possible that CSF-II would share facilities with one or more separate legal entities. In such a scenario, CSF-II c/would either "host" a shared substation located onsite or transmit its power to a shared substation located offsite. If an offsite substation is used, the potential CSF-II onsite substation locations depicted in the Site Layout (see Appendix) c/would instead be covered by solar panels.

An up to 230 kV transmission line designed to interconnect CSF-II with other nearby solar projects may traverse CSF-II land along the edge(s) of the project, and may connect to CSF-II's onsite substation(s). Please see Site Layout in the Appendix for the location of an up to 120-foot wide corridor that could accommodate an up to 230 kV power line.

A 20-foot wide all-weather gravel road will be located within each 500 feet of solar panels to provide County fire/emergency vehicle access within the facility and to allow access to the DC to AC electrical inverter modules. Additionally, a 20-foot wide all-weather gravel road will also exist between the perimeter fence and the solar panels with additional space in the corners for turning radii for a County fire truck. Alternatively, CSF-II may share the cost of a Wildland Type II (or similar) fire truck with other nearby solar projects to permit the fire department access throughout the site.

Solar PV Power Plant Examples (Greece and Spain)

Typical Solar PV Mounting Structure

Onsite Substations

The onsite substations will occupy an area of up to 500' x 500', located in the southeast corner of two private roads (½ mile west of Weed Road and ½ mile south of SR-98) for Phase A and the northwest corner of Ferrell Road and SR-98 for Phase B. The onsite substations will have breakers, step-up transformers, and other necessary electrical equipment such as an electrical control container. The substation areas will be secured separately by an additional 8-foot high enhanced security chain-link fence.

As noted earlier, it is possible that one phase of CSF-II would simply feed its power to the other phase; this would occur via electrical transmission facilities described earlier. In that scenario, CSF-II's phases would share a substation designed to accommodate both phases. The other phase would therefore not require its own substation, and this area would instead be covered by solar panels. It is also possible that CSF-II would share facilities with one or more separate legal entities. In such a scenario, CSF-II would either "host" a shared substation located onsite or transmit its power to a shared substation located offsite. If an offsite substation is used, the potential CSF-II onsite substation locations depicted in the Site Layout (see Appendix) c/would instead be covered by solar panels

In the event that one phase "hosts" an onsite substation to be shared by one or more nearby solar projects, the substation's equipment would be designed to accommodate up to 230 kV electrical output from each of those projects. A 230 kV gen-tie line designed to interconnect CSF-II with other nearby solar projects may traverse CSF-II land along the edge(s) of the project or parcel boundaries and may connect to CSF-II's onsite substation(s). Please see Site Layout in the Appendix for the location of an up to 120-foot wide corridor that could accommodate an up to 230 kV transmission line.

Typical Substation Design

Typical Substation Design (Midway Substation)

Annual Production and In-Service-Date

The CSF-II facility will provide maximum electrical output during daylight hours. Peak electricity demand in California corresponds with air conditioning use on summer afternoons when ambient temperatures are high. CSF-II's peak generating capacity corresponds to this time-period when the peak solar energy, solar insulation value, is highest. There is no generating capacity between sunset and sunrise due to the lack of solar energy.

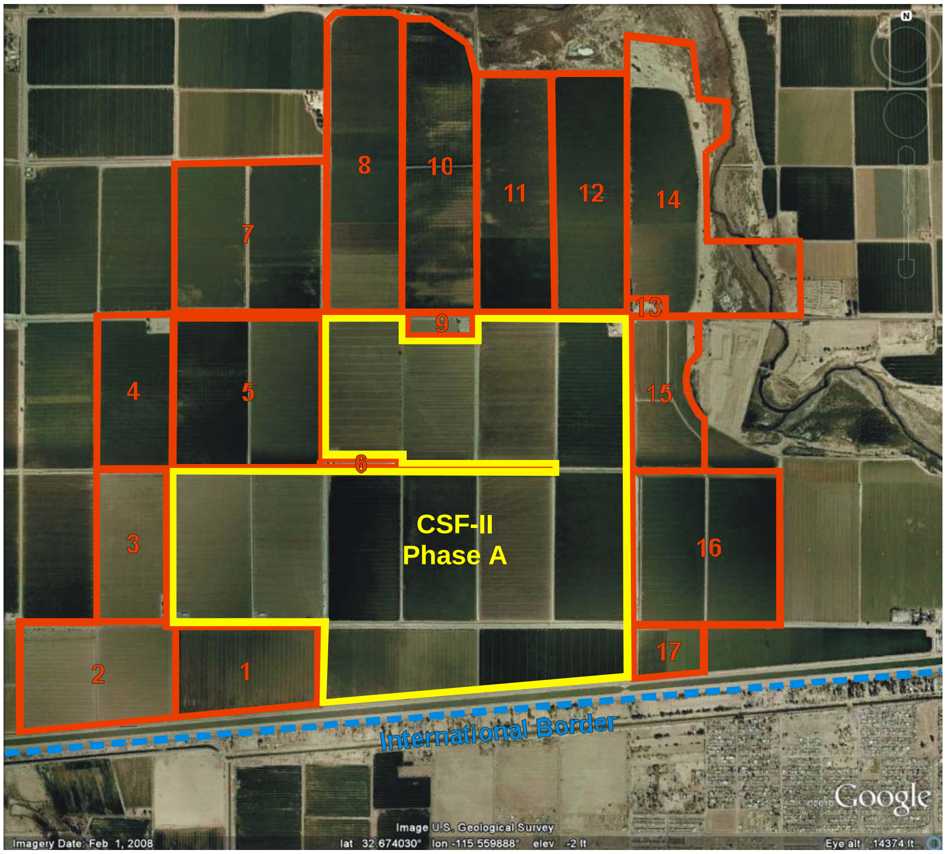
CSF-II as a whole will have a total power output of up to 200 MW AC (up to 100 MW planned for each of two phases) with an annual production of up to approximately 480,000 MWh per year. Construction of CSF-II will be phased in blocks as interconnection becomes available, with the full 200 MW capacity scheduled to be available by 2014 ("In-Service-Date"). The In-Service-Date assumes that, permitting, financing, power purchase agreement ("PPA") negotiations and interconnection and transmission availability are in accordance with the project schedule.

SURROUNDING PROPERTIES

CSF-II abuts mostly agricultural land uses to the north, south, east, and west, with the exception of isolated residential and/or commercial structures and a small crop duster airstrip that transects a portion of CSF-II Phase A. In addition, the US-Mexico border is located just beyond the southern boundary of the project, and SR-98 runs between CSF-II Phase A and Phase B. The project is located approximately two miles west of the city of Calexico.

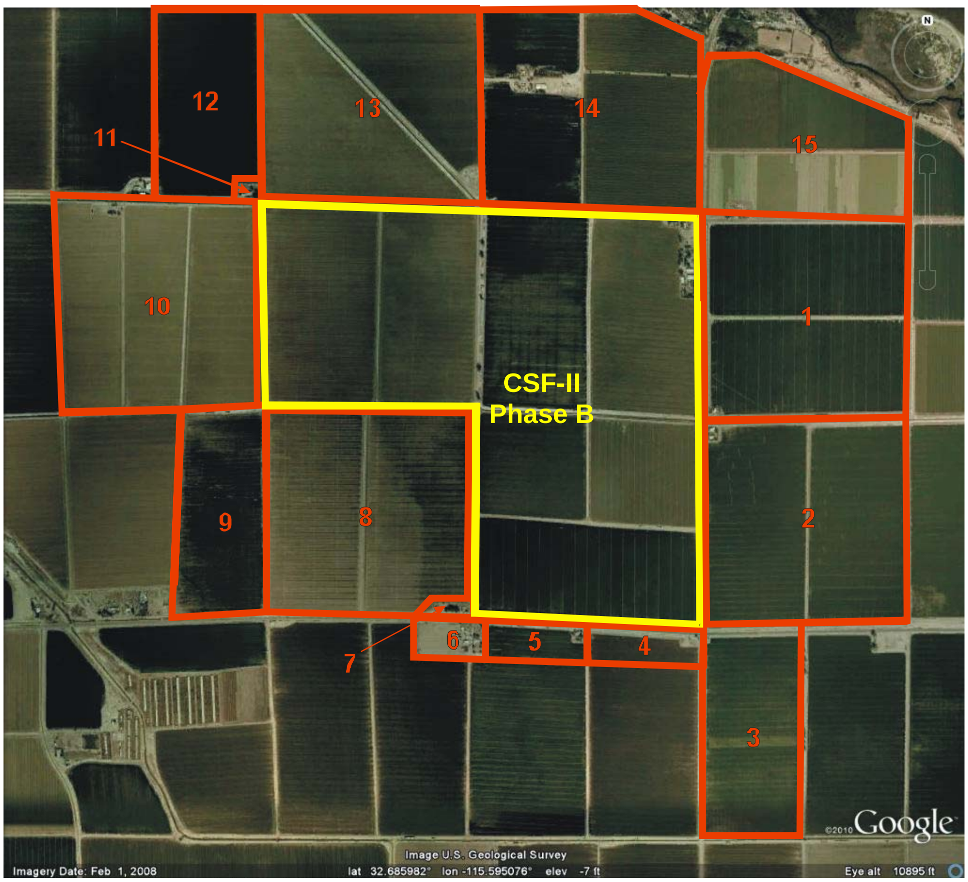
Adjacent Owners List/APN List

Phase A No.	Assessor's Parcel No.	Owner	Owner's Address
1	059-130-004	Calexico West Inc.	9590 Chesapeake Dr Ste 101, San Diego, CA 92123
2	059-130-005	Calexico West Inc.	5540 Ruffin Rd #A, San Diego, CA 92123
3	059-130-002	Calexico West Inc.	9590 Chesapeake Dr Ste 101, San Diego, CA 92123
4	059-120-003	West-Gro Farms Inc	PO Box 1748, El Centro, CA 92244
5	059-120-004	West-Gro Farms Inc	PO Box 1748, El Centro, CA 92244
6	059-110-004	Frontier Agriculture Service Inc	PO Box 1768, Calexico, CA 92231
7	059-050-003	Joy Johnson	2140 El Camino Rinconado, Tuscon, AZ 85749
8	059-060-007	Joy Phoenix	2140 N. El Camino Rinconado, Tuscon, AZ 85749
9	059-110-001	Mabel C. Rocamora	3163 Quiet Hills Dr, Escondido, CA 92029
10	059-060-006	Joy Phoenix	2140 El Camino Rinconado, Tuscon, AZ 85749
11	059-060-005	Joy Phoenix	2140 El Camino Rinconado, Tuscon, AZ 85749
12	059-060-004	Joy Phoenix	2140 N. El Camino Rinconado, Tuscon, AZ 85749
13	059-070-015	C & G Farms, Inc.	PO Box 2216 Gonzales, CA 93926
14	059-070-014	Joy Phoenix	2140 N. El Camino Rinconado, Tuscon, AZ 85749
15	059-100-029	Calexico West Inc	5540 Ruffin Rd #A, San Diego, CA 92123
16	059-100-013	John Carter	PO Box 1945, El Centro, CA 92244
17	059-100-028	Calexico West Inc.	5540 Ruffin Rd #A, San Diego, CA 92123



Adjacent Owners Map

Phase B No.	Assessor's Parcel No.	Owner	Owner's Address
1	059-050-001	Joy Johnson	2140 El Camino Rinconado, Tuscon, AZ 85749
2	059-120-001	Joy Johnson	2140 El Camino Rinconado, Tuscon, AZ 85749
3	059-120-002	James A & Dorothy G Ellis	1301 S. Grade Rd, Alpine, CA 91901
4	052-210-035	Calexico West, Inc	PO Box 421217, San Diego, CA 92142
5	052-210-034	Calexico West, Inc	PO Box 421217, San Diego, CA 92142
6	052-210-033	Mariana Gonzalez Valle	698 W. HWY 98, Calexico, CA 92231
7	052-180-065	NL Mora, T Mora Aguilar, L Mora Chavez	704 W. HWY 98, Calexico, CA 92231
8	052-180-064	Monica & Jason Salma	PO Box 2978, Riverside, CA 92516
9	052-180-040	Monica & Jason Salma	PO Box 2978, Riverside, CA 92516
10	052-180-048	Monica & Jason Salma	PO Box 2978, Riverside, CA 92516
11	052-180-055	Maria Othon	603 George Rd, Calexico, CA 92231
12	052-180-054	C & G Farms	PO Box 2216, Gonzales, CA 93926
13	052-180-018	Jim Preece	246 E. Dealwood Rd, El Centro, CA 92243
14	052-180-042	Graig Andrew Corda	690 Corda Rd, Calexico, CA 92231
15	059-040-013	D Bingham, D Adamek, D Wheeler	1223 Westwind Dr, El Centro, CA 92243

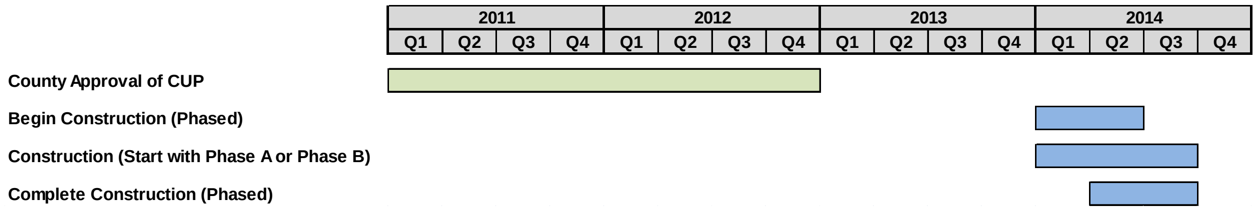


Adjacent Owners Map

No roadways will be affected by CSF-II, except during the project's 6 to 9 month construction (for the project as a whole). Construction truck traffic will reach CSF-II via SR-98, Weed Road, and Ferrell Road. Despite the increased traffic during construction of the proposed project (inclusive of Phase A and Phase B combined), a Traffic Impact Analysis found that the traffic volumes on these roads are still below the volume thresholds identified by the County.

DEVELOPMENT SCHEDULE

It is anticipated that permitting, construction, and operation of the CSF-II facility will generally adhere to the following schedule:



Note that either Phase A or Phase B may be constructed first.

PUBLIC UTILITIES AND SERVICES

The CSF-II is expected to be serviced as follows:

1) *Refuse* – Allied Waste Management/Palo Verde Valley Disposal
2) *Sewer* – On-site Septic System
3) *Water* – IID supply/onsite treatment
4) *Police* – Imperial County Sheriff Department
5) *Fire* – Imperial County Fire Station
6) *Electric* – Imperial Irrigation District
7) *Telephone* – AT&T

PROJECT FEATURES AND BEST MANAGEMENT PRACTICES (BMPs)

The following sections describe standard project features and best management practices that will be applied during construction and long-term operation of CSF-II in an effort to avoid negative environmental impacts.

Aesthetics

The project will have an enhanced security perimeter fence no less than 8 feet high, and will be screened with neutral colored (desert sand) PVC slats (or similar) along each public road. Perimeter landscaping will be provided along each public road.

Erosion Control and Storm Water Drainage

Earthmoving activities will be limited to the construction of the access roads, O&M buildings, the electrical substations and any storm water protection or storage (detention) facilities. Final grading may include revegetation with low lying grass or applying earth-binding materials to disturbed areas.

Site Drainage during Construction and Operation

To the extent possible and economically feasible, site drainage during construction will follow predevelopment flow patterns. Ultimate site discharge will be at the low corners of the project parcels. The incremental storm water run-off attributed to construction of foundations for solar panel mounting frames, foundations within the substations, inverter modules, control containers, and the O&M building area will be contained by ditches, drains, and/or elevated roadways at the low corner of the project parcels, which will prevent offsite migration of storm water and allow sedimentation and absorption with ultimate discharge at the low corner of the project parcels. Designs will be based upon the State's Construction General Permit (2009-0009DWQ) for erosion and sediment control. All storm water storage areas will be designed to absorb or discharge within 72 hours (mosquito abatement measure). CSF-II intends avoid any existing tile drainage, if possible.

Temporary Erosion and Sedimentation Control Measures

Temporary erosion and sedimentation control measures to be used during construction will be designed to prevent sediments from being displaced and carried offsite by storm water runoff. Prior to beginning excavation activities, a silt fence, straw bales, or other BMP will be installed where appropriate where minor runoff to offsite areas could occur. The silt fence will filter sediments from construction runoff. During construction, the extent of earth disturbances will be minimized as much as practical. Temporary BMP control measures will be maintained as necessary throughout the construction period. A sediment trap will be constructed for the major site runoff discharge. The sediment trap will be located immediately upstream of the site boundary.

Waste and Hazardous Materials Management

The CSF-II will have minimal levels of materials on site that have been defined as hazardous under 40CFR, Part 261. The following materials will be used during the construction, operation, and long term maintenance of CSF-II:

- Insulating oil – used for electrical equipment
- Lubricating oil – used for maintenance vehicles
- Various solvents/detergents – equipment cleaning
- Gasoline – used for maintenance vehicles

Wastes will be managed in accordance with applicable regulations of the approved CSF-II facility as follows:

- Any hazardous wastes will be maintained at quantities below the threshold requiring a Hazardous Material Management Program (HMMP) (one 55 gallon drum per phase, if operated separately).
- All waste drums will be stored in accordance with good practice and applicable regulations, and will be protected from environmental conditions, including rain, wind, and direct heat and physical hazards such as vehicle traffic and sources of heat and impact.
- Waste lubricating oils will be recovered and reclaimed by a waste oil-recycling contractor.

- Spent lubricating oil filters from vehicles will be disposed at an authorized waste disposal facility.
- Batteries will be reclaimed and recycled by authorized facilities.
- Any hazardous waste generation, handling, and storage areas will be inspected and monitored on a regular basis.
- California-authorized and certified hazardous waste haulers will transport hazardous wastes to registered waste treatment, storage, disposal, and recycling facilities.
- Emergency response and reporting will be performed per written procedures that follow government and industry requirements and standards.
- Workers will be trained to handle hazardous wastes generated at the site.
- If 55 gallons of hazardous waste or more should accumulate onsite, storage of such hazardous waste will at no time exceed 90 days from the date of initial accumulation exceeding 55 gallons, and a HMMP shall be developed as described below.

The storage, use, and handling of any hazardous materials will be in accordance with applicable regulations and will include the following items:

- Facility personnel will be trained in hazardous materials and hazardous waste awareness, handling, and management as required for their level of responsibility.
- Bulk chemicals will be stored in the original shipping container provided by and returned to the chemical provider.
- Chemical storage areas and feed/transfer areas will be equipped with secondary containment sufficient in size to contain the volume of the largest container or tank including an allowance for rainwater.
- Small-quantity chemicals used for maintenance tasks will be kept in appropriate flammable material or corrosive material storage lockers following applicable regulations.
- Periodic inspections will ensure that all containers are secure and properly marked.
- Sanitary wastewater generated at the facility cannot be conveyed to an existing sewage public treatment facility. There are no public entities that manage sanitary wastewater flows for locations in the vicinity of the project site.

Should onsite storage of hazardous materials exceed one 55 gallon drum per phase, if operated separately, CSF-II will implement a Hazardous Materials Management Program (HMMP) developed for the CSF-II construction and operation stages, and will include, at a minimum, procedures for:

1. Hazardous materials handling, use and storage,
2. Emergency response,
3. Spill control and prevention,
4. Employee training,
5. Record keeping and reporting.

The HMMP (if required) will be developed and implemented prior to start of construction or prior to the storage on-site of an excess of 55 gallons of hazardous materials per phase. The program will be revised and updated as required in a timely manner. Employees will be trained and the program implemented prior to the start of commercial operation. The procedures outlined in the HMMP will be in accordance with all applicable regulations.

Spill Prevention and Containment

Spill prevention and containment for construction and operation of CSF-II will adhere as follows to EPA's guidance on Spill Prevention Control and Countermeasures (SPCC) as any hazardous materials stored onsite will be in quantities of less than 55 gallons per phase, if operated separately.

> *Regularly scheduled inspections, evaluations, and testing by qualified personnel are critical parts of discharge prevention. Their purpose is to prevent, predict, and readily detect discharges. They are conducted not only on containers, but also on associated piping, valves, and appurtenances, and on other equipment and components that could be a source or cause of an oil release.*

Waste Water/Septic System

A standard onsite septic tank and leach field will be used for each project phase (unless the phases share O&M facilities, or CSF-II shares another legal entity's O&M facilities) to dispose sanitary wastewater, designed to meet operation and maintenance guidelines required by Imperial County laws, ordinances, regulations and standards. Any necessary replacement leach field will be adjacent to the primary field.

Inert Solids

Inert solid wastes resulting from construction activities may include recyclable items such as paper, cardboard, solid concrete and block, metals, wire, glass, type 1-4 plastics, drywall, wood, and lubricating oils. Non-recyclable items include insulation, other plastics, food waste, vinyl flooring and base, carpeting, paint containers, packing materials, and other construction wastes. All packaging materials for components of the solar farm shall be crated and recycled offsite. No crating or packaging materials will be placed in local landfills. Management practices require recycling of contractor waste when possible, and proper storage of non-recyclable waste and debris to prevent wind dispersion, and weekly pickup of non-recyclable wastes with disposal at a local approved landfill.

Chemical storage tanks (if any) will be shop-fabricated, double-walled construction meeting applicable regulations. These tanks, as well as portable drums (if any), will be provided with appropriate anchors or cradles and placed within spill containment basins.

Any wastes classified as hazardous such as solvents, degreasing agents, concrete curing compounds, paints, adhesives, chemicals, or chemical containers will be stored (in an approved storage facility/shed/structure) and disposed of as required by local and state regulations. Material quantities of hazardous wastes are not expected.

FIRE PROTECTION

Each phase of CSF-II will have onsite fire-protection systems and will be supported by local fire protection services. Portable and fixed fire suppression equipment and systems will be included in the project. Portable fire extinguishers will be located at strategic locations throughout the project site. The fixed fire protection system will also include 10,000 gallons of dedicated water from onsite storage tank(s) and wet fire-department connection for protection of the O&M

building only. Pressurized waterlines or fire department connections are not planned for the solar arrays.

As noted earlier, it is possible that one phase of CSF-II would simply feed its power to the other phase. In that scenario, CSF-II's phases would share O&M facilities and would therefore require only one O&M building area and associated water tank(s), with 10,000 gallons for the project as a whole dedicated to protecting the O&M building. The other O&M building area would instead be covered by solar panels. It is also possible that CSF-II would share another legal entity's O&M facilities. In that scenario, CSF-II's own onsite O&M facility needs c/would therefore be reduced or eliminated, and any unused O&M building area depicted in the Site Layout c/would instead be covered by solar panels

Employees will be given fire safety training including instruction in fire prevention, the use of portable fire extinguishers and the reporting of fires to the local fire department. Employees will only suppress fires in their incipient stage.

Service roads along the perimeter and within the property will be minimum 20-foot wide, all-weather gravel roads capable of supporting a 75,000 pound load imposed by a fire apparatus. Alternatively, CSF-II may share the cost of a Wildland Type II (or similar) fire truck with other nearby solar projects to permit the fire department access throughout the site. Interior roads with a minimum width of 20 feet will be spaced approximately 500 feet from each other. Each of these roads will have a turnaround area with a minimum 60' x 60' dimension (or 60' x 80' including the service road) approximately every 500 feet from each other or the perimeter fire service road.

If a cover crop (saltgrass or similar) is used onsite, it will be maintained at a reasonably low height to avoid the potential for a fire incident.

SITE SECURITY AND FENCING

An onsite security system will be installed. Controlled access gates will be maintained at the entrances to CSF-II.

Perimeter security fencing and access gates will be provided for CSF-II. The security fencing will be low voltage and provided with warning reflective signage. Regular site security vehicular patrols will be conducted to provide additional site security. Site access will be provided to offsite emergency response teams that respond in the event of an "after-hours" emergency. Access to the property will either be via swinging or sliding gates with a minimum width of 20 feet. Entry into CSF-II by fire department or emergency units will be handled on a manual override basis. If the gates are manual, a key for the gate will be provided in a key box at the gate location.

HEALTH AND SAFETY

Safety precautions and emergency systems will be implemented as part of the design and construction of the CSF-II facility to ensure safe and reliable operation. Administrative controls will include classroom and hands-on training in operating and maintenance procedures, general safety items, and a planned maintenance program. These will work with the system design and monitoring features to enhance safety and reliability.

All employees shall be provided with communication devices, cell phones, or walkie-talkies, to aid in the event of an emergency situation on-site.

Safety, Auxiliary and Emergency Systems

Safety, auxiliary, and emergency systems may consist of lighting, grounding, backup UPS systems and diesel power generators, fire and hazardous materials safety systems, security systems, chemical safety systems, and emergency response teams. The O&M building will include its own utilities and services, such as emergency power, fire suppression, and treated water systems.

CSF-II will implement programs to assure compliance with federal and state occupational safety and health program requirements. In addition to compliance with these programs, CSF-II will identify and implement plant-specific programs that effectively assess potential hazards and mitigate them on a routine basis.

As discussed above, hazardous materials may be stored and used at CSF-II during construction and operation, but will be restricted to less than one 55 gallon drum per phase (if operated separately). The design and construction of any hazardous materials storage and dispensing systems will be in accordance with applicable regulations. Hazardous materials storage areas will be designed with curbs or other containment measures like double-walled storage tanks, if applicable, to contain spills and leaks. If hazardous materials exceed 55 gallons, a Hazardous Material Management Program will be developed as described above.

Emergency eyewashes and showers (if required by fire or safety codes) will be provided at appropriate locations. Appropriate Personal Protective Equipment (PPE) will be provided during both construction and operation of the CSF-II facility.

Emergency Response Plan

CSF-II will have an Emergency Response Plan (ERP). The ERP will address potential emergencies including chemical releases, fires, and injuries. The ERP will describe emergency response equipment and equipment locations, evacuation routes, procedures for reporting to local emergency response agencies, responsibilities for emergency response, and other required actions to be taken in the event of an emergency.

Employee response to an emergency will be limited to an immediate response to minimize the risk of escalation of the accident or injury. Employees will be trained to respond to fires, spills, earthquakes, and injuries. A first aid facility with adequate first-aid supplies and personnel qualified in first aid treatment will be onsite.

ADDITIONAL INFORMATION

Project Construction

Construction of the CSF-II as a whole will require approximately 6 to 9 months. This section describes major components during the design, layout, and construction processes.

Project Engineering, Procurement, Construction, and Compliance

The engineering, procurement, and construction of the CSF-II will be accomplished as follows:

1. AES Solar has been selected to provide detailed engineering, preparation of drawings and specifications for permitting. The Applicant will provide project management. Long lead equipment will be procured by AES Solar in advance of the start of construction.
2. A Construction Manager Contractor at Risk (CMAR) for site preparation, buildings, services, power collection, and transmission will be identified in advance of the start of construction for value engineering input, construction preparation, and procurement.
3. A Prime Equipment Supplier (PES) or Suppliers will be identified for the manufacturing, assembly, and installation of the PV arrays and inverters.

The overall detailed construction schedule will be prepared and coordinated through the prime CMAR contractor with input from the Applicant. Detailed construction operating plans will be included in the Project Execution Plan (PEP) as follows:

1. A project specific Occupational Safety and Health Plan will be developed to specify worker safety procedures and the Applicant's and CMAR's responsibilities in order to prevent incidents involving personnel on the project site.
2. The PEP will address roles, responsibilities and identify primary contacts, procedures, and actions required during the design, procurement, and construction stages of the work.
3. A project specific Quality Assurance / Control Plan will be developed by the CMAR Contractor(s)' QA/QC Departments with input from appropriate representatives of the Contractor(s)' Project Team, the Applicant, and major equipment suppliers.
4. During construction, construction trades personnel parking will be located within the lay-down area. The parking area will be fenced and controlled by security personnel during normal work hours.
5. A temporary gravel area of minimum two acres will be located adjacent to each O&M building. This area will be located near the southeast corner of SR-98 and Weed Road for Phase A and near the northwest corner of SR-98 and Ferrell Road for Phase B. It will be devoted to equipment and materials lay-down, storage, parking of construction equipment, small fabrication areas and office trailers. If one phase of CSF-II's O&M building is not necessary, its temporary lay-down area would instead be covered by solar panels.
6. The CMAR contractor(s) will have at least one Safety Coordinator who will prepare a site-specific safety plan. Emergency services will be coordinated with the nearby fire department.
7. All contractors, subcontractors, and consultants will participate in comprehensive health, safety, environmental, HMMP (if required), and emergency procedures training prior to any initial site activities.

Site Preparation, Surveying and Staking

Site preparation, surveying, and staking of the project site will begin following the Applicant's receipt of Imperial County's approval to implement CSF-II. Activities that will be included in this phase include:

1. Land surveying activities (including benchmarks),
2. Staking of construction limits (lay-down yards, access roads, temporary use areas),
3. Briefing of contractors.

Temporary Lay Down Yard

A minimum two-acre lay down yard will be required for PV panel offloading and steel frame assembly. It is assumed that the PV panel arrays will be assembled in parallel with the construction of the O&M building and the electrical substation. Upon completion of the project, the lay down yard will be revegetated in low lying grass or with a soil stabilizer, and the area will be filled with solar panels as shown in the Site Layout. If CSF-II's phases share O&M, a single lay down yard may be used for the entire CSF-II project. If CSF-II shares another legal entity's facilities, a separate lay down yard may not be needed for CSF-II; alternatively, the lay down yard area needed may be reduced.

Site Clearing

The proposed project will be designed in such a manner to minimize ground disturbances and resulting environmental impacts.

PV Panel Steel Mounting Frames Installation

Foundations for mounting frames typically consist of a 12 to 15 inch diameter drilled pier extending up to 10 feet below ground surface.

PV Solar Array Field

To the extent possible and economically feasible, the site layout will attempt to maintain predevelopment drainage patterns. Discharge from the site will be at the low corners of the project parcels. If an onsite O&M building is constructed, the 20-foot wide paved entry road will be designed to convey nuisance runoff to drainage channels/swales. It is expected that storm water runoff will flow over the crown of any paved roadway, which is typically less than six inches from swale flow line to crown at centerline of roadway, thus allowing drainage during storms. Interior access roads (e.g., between PV panel grids) will be all-weather gravel roads, as noted earlier. Alternatively, CSF-II may share the cost of a Wildland Type II (or similar) fire truck with other nearby solar projects to permit the fire department access throughout the site. Unpaved access areas between PV panel rows may be planted with saltgrass (or similar), which would be watered infrequently, thus not requiring mowing or cutting, yet maintaining binding of the soil with the grass root system. As an alternative to the cover crop, a permeable soil stabilizing polymer may be used as a dust suppressant.

It is anticipated that specialized trades and higher skill level construction personnel will commute to the CSF-II construction site(s) on a daily basis from within the Imperial Valley area

and, in the case of those travelling from longer distances, may stay in temporary housing or apartments during the week for the duration of construction of the proposed project.

Heavy construction will be scheduled to occur between 6:00 am and 5:00 pm, Monday through Friday. Additional hours may be necessary to make up schedule deficiencies or to complete critical construction activities. There is estimated to be up to 60 workers per day during the construction of the project.

Some activities may continue 24 hours per day, seven days per week. These activities include, but are not limited to, refueling equipment, staging material for the following day's construction activities, quality assurance/control, and commissioning.

Materials and supplies will be delivered to the site by truck. Truck deliveries will normally occur during daylight hours. However, there will be offloading and/or transporting to the site on weekends and during evening hours.

O&M Building

It is anticipated that an O&M Building (up to approximately 320 square feet, or 40' x 80') will be required for each phase of CSF-II. The O&M buildings will include:

1. Office
2. Repair Building/Parts Storage
3. Electrical/Array Control Room
4. Restrooms
5. Water Treatment Facility

As noted earlier, it is possible that one phase of CSF-II would simply feed its power to the other phase. In that scenario, CSF-II's phases would share O&M facilities and would therefore require only one O&M building area with associated parking area, which would be sized appropriately to accommodate both phases. The other O&M building area would instead be covered by solar panels. It is also possible that CSF-II would share another legal entity's O&M facilities. In that scenario, CSF-II's own onsite O&M facility needs c/would therefore be reduced or eliminated, and any unused O&M building area depicted in the Site Layout c/would instead be covered by solar panels

Work Force

It is expected that CSF-II will be operated with a staff of up to twelve (12) full-time employees for both phases combined (split roughly evenly between phases). The facility will operate seven days per week, generating electricity during normal daylight hours when the solar energy is available. Maintenance activities will occur seven days a week, 24 hours a day to ensure PV Panel output when solar energy is available. As noted earlier, these employees may be shared by both phases, in which case the number of staff would be reduced to approximately ten (10). It is also possible that CSF-II would share another legal entity's O&M facilities. In that scenario, CSF-II c/would also share personnel with that legal entity, thereby reducing or eliminating the onsite staff required for CSF-II.

Project Lighting

The project will be compliant with the Imperial County Zoning Ordinance. Day lighting will supplement energy-efficient fluorescent lighting in the O&M building(s). Emergency egress identification and path lighting will be provided per building code requirements.

Electrical Grounding

The facility will be designed in accordance with National Electrical Code requirements including MAG amendments. The electrical system may experience unit ground potential rise due to ground fault, lightning strike, or switching surges. A grounding system will be installed to permit dissipation of ground fault currents and minimize ground potential rise.

The grounding grid will be designed with adequate capacity to dissipate heat produced by ground current under fault conditions and be designed to maintain safe voltage gradients. Ground resistivity testing and calculations will be performed during detailed design to determine the number and type of grounding electrodes and the grid spacing necessary to ensure safe step and touch potentials under fault conditions. Each PV panel string within the solar field will be bonded to the foundation to provide localized grounding of each string.

Within project buildings, grounding conductors will bond building structural steel, metallic piping, and non-energized metallic parts of electrical equipment to the building grounding systems. Isolated grounding conductors will connect sensitive control systems to the building grounding systems.

If required, a cathodic protection system will be designed and installed to control electrochemical corrosion of exterior surfaces of underground carbon steel, copper, aluminum, and stainless steel. Bottoms of soil- or sand-pad-mounted steel tanks and exterior surfaces of underground ductile or cast-iron pipe will be protected against corrosion. The type of cathodic protection system (galvanic or impressed current) will be based on soil characteristics, the amount of material to be protected, and the interference effects of any nearby cathodic protection systems.

Lightning protection will follow the National Fire Protection Association (NFPA) 780 guidelines and will be provided where required for project structures and pumps.

Heating, Ventilation, and Air-Conditioning

Heating, ventilation, and air-conditioning (HVAC) will consist of heat pump ground-mounted units with code-required fresh make-up air capabilities for the office and control area of the O&M building(s). Mechanical ventilation will be provided for the maintenance areas.

Temperature control will be provided for both personnel and equipment areas, and humidity control will be provided in the control and communications equipment rooms.

Operations and Maintenance

Operation and Facility Maintenance Needs

Once CSF-II is constructed, minimal maintenance needs are required and are generally limited to the following:

1. Washing of PV panels
2. Monitoring electricity generation
3. Providing site security
4. Facility maintenance (e.g., replacing or repairing PV modules, wiring, control equipment and inverters)
5. Site maintenance, including but not limited to:
    a. Cover crop (if any) c/would be maintained via periodic flood irrigation
    b. Landscaping will be maintained via drip irrigation, sprinklers, and/or bubblers, as appropriate

Maintenance Activities

PV panel washing, operations dust control, domestic water use, and water treatment under regular maintenance routines will require up to 80 acre-feet (26 million gallons) of water per year for the entire CSF-II project (split between phases roughly in proportion to their respective acreages). Backwash water from the reverse osmosis water treatment plant will equal the clean process water volume. Backwash water will be applied to any required landscaped areas along the perimeter fence. A very low speed is anticipated for maintenance vehicles.

Access roads and solar array long-term maintenance will include:

1. Temporary soil stabilization techniques, such as scheduling construction sequences to minimize land disturbance during the rainy and non-rainy seasons and employing BMPs appropriate for the season.
2. Sediment control techniques, such as using silt fences, straw bales, and/or fiber rolls to intercept and slow the flow of sediment-laden runoff such that sediment settles before runoff leaves the site.
3. Wind erosion control by maintaining low lying grass over or dust palliatives, as required, to prevent or alleviate windblown dust.
4. Other measures, as appropriate, to comply with Imperial County laws, ordinances, regulations and standards.

<u>EXISTING CONDITIONS OF PROJECT SITE</u>

CALEXICO SOLAR FARM II PHASES A & B

(89MA 8ME, LLC)

Figure 1: Satellite view (Google Earth)

Figure 2: Project phases

Figure 3: Photo locations

Figure 4: Phase A, location #1 looking southwest

Figure 5: Phase A, location #2 looking northwest

Figure 6: Phase A, location #3 looking northeast

Figure 7: Phase A, location #4 looking northeast

Figure 8: Phase A, location #5 looking southeast

Figure 9: Phase A, location #6 looking southeast

Figure 10: Phase A, location #7 looking southeast

Figure 11: Phase B, location #8 looking northwest

Figure 12: Phase B, location #9 looking northeast

Figure 13: Phase B, location #10 looking northeast

Figure 14: Phase B, location #11 looking southeast

Figure 15: Phase B, location #12 looking southwest

Appendix F

Land Evaluation and Site Assessment (LESA) Model

LESA ASSESSMENT
CALEXICO SOLAR FARM II
PHASE A PROJECT AREA

CALEXICO SOLAR FARM II PHASE A PROJECT

**(NW/4 (portion) Section 17, NE/4 Section 17, S/2 Section 17,
SE/4 Section 18, NW/4 Section 20, NE/4 (portion) Section 20,
Lot 1 (portion) Section 20, T17S, R14E, SBB&M)**

IMPERIAL COUNTY, CALIFORNIA

April 2011

EMA Report No. 2176-02A

Prepared for:

89MA 8ME, LLC
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Los Angeles, California 90067

EMA

ENVIRONMENTAL MANAGEMENT ASSOCIATES

LAND EVALUATION AND SITE ASSESSMENT MODEL

CALEXICO SOLAR FARM II PHASE A PROJECT

**(NW/4 (portion) Section 17, NE/4 Section 17, S/2 Section 17,
SE/4 Section 18, NW/4 Section 20, NE/4 (portion) Section 20,
Lot 1 (portion) Section 20, T17S, R14E, SBB&M)**

IMPERIAL COUNTY, CALIFORNIA

The Land Evaluation and Site Assessment (LESA) model is an approach for rating the relative quality of land resources based upon specific measurable features. The LESA model was first developed by the federal Natural Resources Conservation Service (NRCS) in 1981. It was subsequently adapted in 1990 by the California Department of Conservation to evaluate land use decisions that affect the conversion of agriculture lands in California. The formulation of the California LESA Model is intended to provide lead agencies under the California Environmental Quality Act (CEQA) with an optional methodology to ensure that significant effects on the environment of agricultural land conversions are quantitatively and consistently considered in the environmental review process.

For determining the potential CEQA significance resulting from the conversion of agricultural lands to some other purpose, the California Agricultural LESA Model has developed Scoring Thresholds which are used to compare the Final LESA Score and the Weighted Factor Scores for the Project with suggested Scoring Decisions. These LESA Scores do not take into consideration any proposed mitigation measures or other factors that might affect a lead agency's determination of the significance of the agricultural lands conversion impact under CEQA.

The information provided on the following pages present documentation of the LESA assessment prepared using the California Agricultural LESA Model for the proposed Calexico Solar Farm II Phase A Project (Project) (APN 059-110-003-000; 059-110-006-000; 059-110-007-000; 059-110-008-000; and 059-130-003-000). The proposed Project would be constructed on approximately 940 acres of privately owned land located about four miles west of the city of Calexico, California (Figure 1). The Project is bounded on the north by California State Highway 98, and bounded on the east by Anza Road, an Imperial County road (Figure 1). The international border with Mexico is located immediately south of Project.

LESA ASSESSMENT

89MA 8ME, LLC
CALEXICO SOLAR FARM II PHASE A PROJECT
IMPERIAL COUNTY, NEVADA

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LIST OF FIGURES

LIST OF APPENDICES

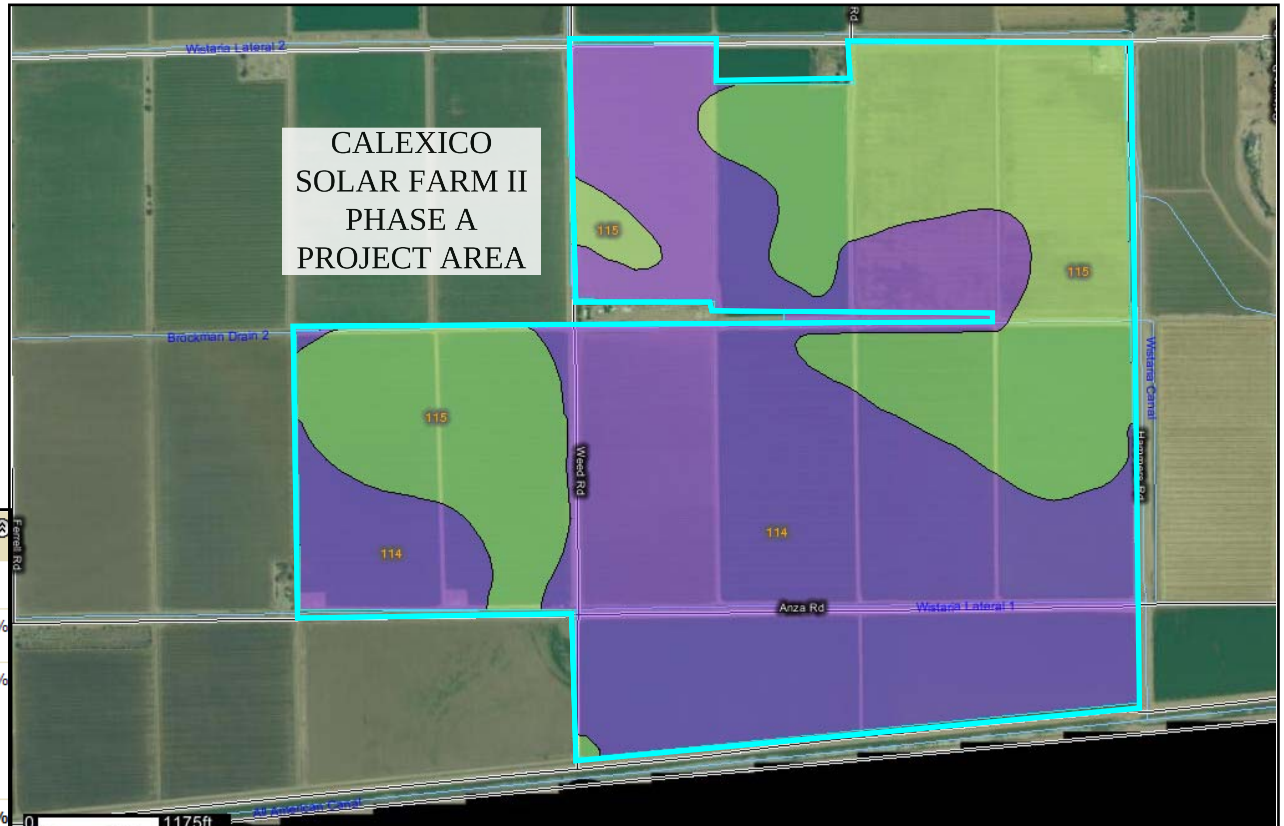
Figure 1 : Location Map

Land Evaluation Worksheet							
A	**B**	**C**	**D**	**E**	**F**	**G**	**H**
Soil Map Unit*	**Project Acres**	**Proportion of Project Area**	**LCC** (irrigated)**	**LCC Rating (irrigated)*****	**LCC Score (C x E)**	**Storie Index****	**Storie Index Score (C x G)**
114	577.21	0.614	IIIw	60	36.84	42	25.79
115	362.87	0.386	IIIw	60	23.16	67	25.86
Totals	940	1.000		**LCC Total Score**	60	**Storie Index Total Score**	52
Total Project Area (acres)=	940						

* The Soil Map Unit information and acreage were determined from the current soil survey information available at the USDA Natural Resources Conservation Service website: http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx (Figure 2).

** The Land Capability Classification and Storie Index information was obtained from the current soil survey information available at the USDA Natural Resources Conservation Service website: http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx (Appendix A).

*** The LCC Rating for irrigated land was determined from the LCC Point Rating Table 2 from the LESA Instruction Manual (California Department of Conservation 1997).



Imperial County, California, Imperial Valley Area (CA683)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
114	IMPERIAL SILTY CLAY, WET	580.0	61.4%
115	IMPERIAL-GLENBAR SILTY CLAY LOAMS, WET, 0 TO 2 PERCENT SLOPES	364.4	38.6%
Totals for Area of Interest		944.4	100.0%

*Adjusted to 940 acres

Figure 2 : Project Area Soils Map

	Site Assessment Worksheet 1		
	Project Size Score*		
	I	J	K
	LCC Class I-II	LCC Class III	LCC Class IV-VIII
Project Acres per LCC Class		577.21	
Project Acres per LCC Class		362.87	
Project Acres per LCC Class			
Project Acres per LCC Class			
Project Acres per LCC Class			
Total Project Acres per LCC Class		**940**	**0**
**** Project Size Scores***	**0**	**100**	**0**
Highest Project Size Score	**100**		

* Project Size Score was determined from the Project Size Scoring Table from the LESA Instruction Manual (California Department of Conservation 1997).

Site Assessment Worksheet 2				
Water Resources Availability				
A	**B**	**C**	**D**	**E**
Project Portion	**Water Source**	**Proportion of Project Area**	**Water Availability Score***	**Weighted Availability Score (C x D)**
1	Irrigation District Only	1.0	100	100
2				
3				
4				
5				
6				
		(Must Sum to 1.0)	***Total Water Resource Score***	100
* The Water Availability Score was determined using the Water Resources Availability Scoring Table from the LESA Instruction Manual (California Department of Conservation 1997).				

Site Assessment Worksheet 3						
Surrounding Agricultural Land & Surrounding Protected Resource Land						
A	B	C	D	E	F	G
Zone of Influence*					Surrounding Agricultural Land Score (From LESA Manual Table 6)	Surrounding Protected Resource Land Score (From LESA Manual Table 7)**
Total Acres	Acres in Agriculture	Acres of Protected Resource Land	Percent in Agriculture (B/A)	Percent Protected Resource Land (C/A)		
2155.7	2045	0	95	0	100	0

* In conformance with the instructions in the LESA Instruction Manual (California Department of Conservation 1997), the Zone of Influence was determined by drawing the smallest rectangle that could completely encompass the entire Project Area. A second rectangle was then drawn which extended one quarter mile on all sides beyond the first rectangle. The Zone of Influence is represented by the entire area of all parcels with any lands inside the outer rectangle, less the area of the proposed project (Figure 3).

** The LESA Instruction Manual (California Department of Conservation 1997) describes *Protected Resource Land* as those lands with long term use restrictions that are compatible with or supportive of agricultural uses of land. Included among them are the following: Williamson Act contracted lands; Publicly owned lands maintained as park, forest, or watershed resources; and Lands with agricultural, wildlife habitat, open space, or other natural resource easements that restrict the conversion of such land to urban or industrial uses.

Surrounding Parcels***	Acres	Protected Resource Land?	Percent Protected Resource Land	Acres in Protected Land	Agricultural Land?	Percent Agricultural Land	Acres of Agriculture
059-070-014	205.7	N	0	0	Y	60	123.4
059-070-015	4.3	N	0	0	Y	100	4.3
059-100-029	71.6	N	0	0	Y	100	71.6
059-100-030	6.3	N	0	0	N	0	0.0
059-100-001	2.5	N	0	0	N	0	0.0
059-100-013	167.2	N	0	0	Y	100	167.2
059-100-028	39.5	N	0	0	Y	100	39.5
059-120-001	167.2	N	0	0	Y	100	167.2
059-050-003	165.5	N	0	0	Y	100	165.5
059-120-002	78.7	N	0	0	Y	100	78.7
059-120-003	82.1	N	0	0	Y	100	82.1
059-130-001	81.7	N	0	0	Y	100	81.7
059-130-002	85.2	N	0	0	Y	100	85.2
059-130-005	109.7	N	0	0	Y	100	109.7
059-130-004	96.0	N	0	0	Y	100	96.0

Surrounding Parcels***	Acres	Protected Resource Land?	Percent Protected Resource Land	Acres in Protected Land	Agricultural Land?	Percent Agricultural Land	Acres of Agriculture	
059-120-004	161.6	N	0	0	Y	100	161.6	
059-110-004	10.4	N	0	0	Y	40	4.2	
059-110-001	18.4	N	0	0	Y	100	18.4	
059-060-007	163.2	N	0	0	Y	100	163.2	
059-060-006	163.6	N	0	0	Y	97	158.7	
059-060-005	138.3	N	0	0	Y	97	134.1	
059-060-004	137.2	N	0	0	Y	97	133.1	
Total	**2155.7**		**Total**	**0**		**Total**	**2045.2**	
**The Imperial County Assessors website was accessed to identify the surrounding parcel numbers (http://imperialcounty.net/Assessor/index.html). The percentage of agriculture was determined from a map overlay used to estimate the proportion of land in agriculture and the California Department of Conservation Important Farmland Map Series.								

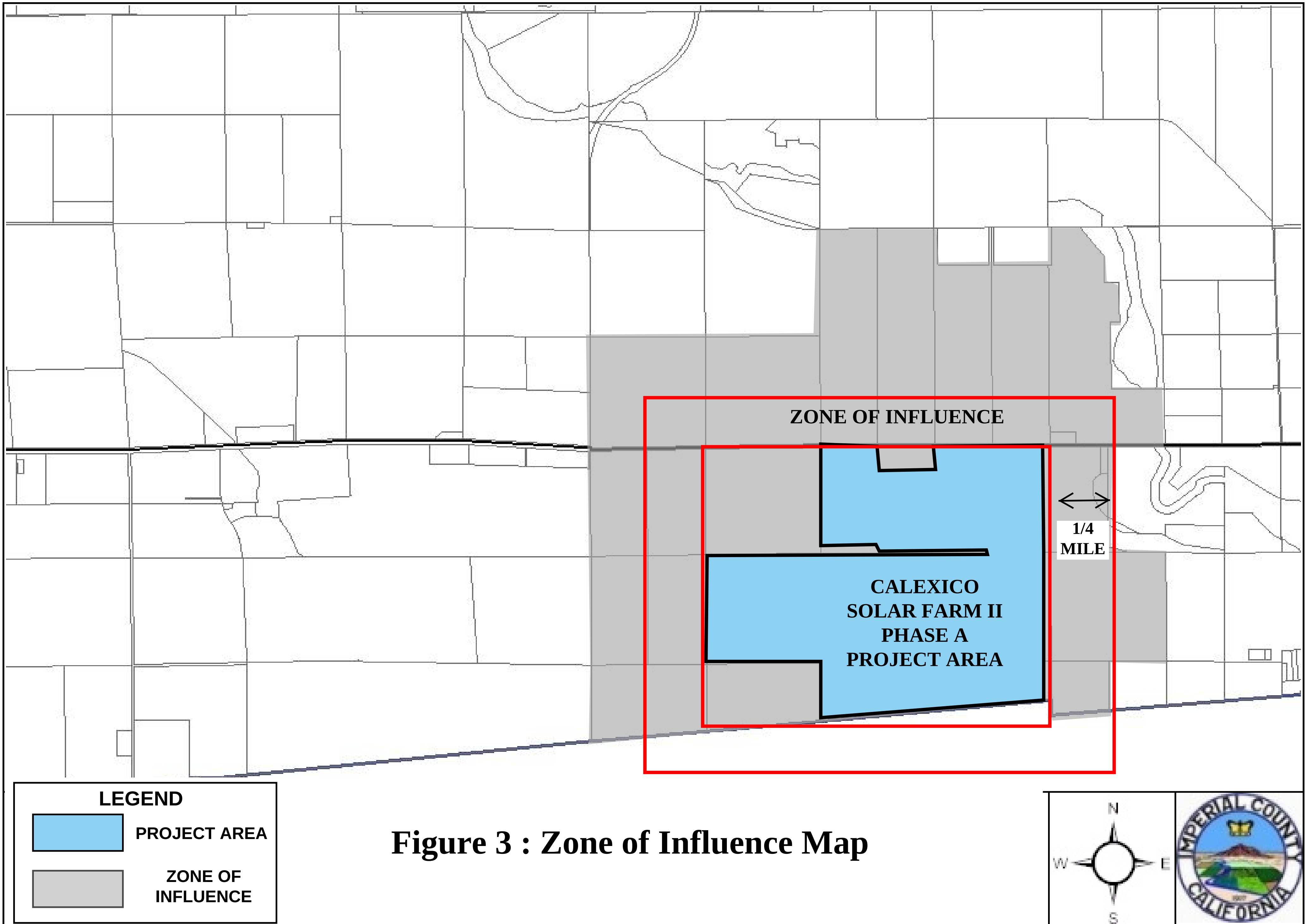


Figure 3 : Zone of Influence Map

This map represents a visual display of related geographic information. Data provided hereon is not a guarantee of actual field conditions. To be sure of complete accuracy, please contact IMPERIALCOUNTY_PUBLIC staff for the most up-to-date information.

Final LESA Score Sheet			
	Factor Scores	**Factor Weight**	**Weighted Factor Scores**
LE Factors			
Land Capability Classification	60.00	0.25	15.00
Storie Index	51.65	0.25	12.91
LE subtotal		0.50	27.91
SA Factors			
Project Size	100	0.15	15.00
Water Resource Availability	100	0.15	15.00
Surrounding Agricultural Land	100	0.15	15.00
Protected Resource Land	0	0.05	0.00
SA Subtotal		0.50	45.00
		Total LESA Score	**72.91**

California LESA Model Scoring Thresholds	
Total LESA Score	**Scoring Decision**
0 to 39 Points	Not Considered Significant
40 to 59 Points	Considered Significant only if LE and SA subscores are each greater than or equal to 20 points
60 to 79 Points	Considered Significant unless either LE or SA subscore is less than 20 points
80 to 100 Points	Considered Significant

APPENDIX A: CALEXICO SOLAR FARM II PHASE A PROJECT SOILS DETAILS

Imperial County, California, Imperial Valley Area

114—IMPERIAL SILTY CLAY, WET

Map Unit Setting

Elevation: -230 to 200 feet
Mean annual precipitation: 0 to 3 inches
Mean annual air temperature: 72 to 75 degrees F
Frost-free period: 300 to 350 days

Map Unit Composition

Imperial, wet, and similar soils: 85 percent
Minor components: 15 percent

Description of Imperial, Wet

Setting

Landform: Basin floors
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Clayey alluvium derived from mixed sources and/or clayey lacustrine deposits derived from mixed sources

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 5 percent
Maximum salinity: Very slightly saline to slightly saline (4.0 to 8.0 mmhos/cm)
Sodium adsorption ratio, maximum: 20.0
Available water capacity: Moderate (about 8.3 inches)

Interpretive groups

Land capability classification (irrigated): 3w
Land capability (nonirrigated): 7w

Typical profile

0 to 12 inches: Silty clay
12 to 60 inches: Silty clay loam

Minor Components

Glenbar

Percent of map unit: 4 percent

Meloland

Percent of map unit: 4 percent

Holtville

Percent of map unit: 4 percent

Niland

Percent of map unit: 3 percent

Data Source Information

Soil Survey Area: Imperial County, California, Imperial Valley Area
Survey Area Data: Version 5, Jul 25, 2008

Imperial County, California, Imperial Valley Area

115—IMPERIAL-GLENBAR SILTY CLAY LOAMS, WET, 0 TO 2 PERCENT SLOPES

Map Unit Setting

Elevation: -230 to 200 feet
Mean annual precipitation: 0 to 3 inches
Mean annual air temperature: 72 to 75 degrees F
Frost-free period: 300 to 350 days

Map Unit Composition

Glenbar, wet, and similar soils: 40 percent
Imperial, wet, and similar soils: 40 percent
Minor components: 20 percent

Description of Imperial, Wet

Setting

Landform: Basin floors
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Clayey alluvium derived from mixed sources and/or clayey lacustrine deposits derived from mixed sources

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 5 percent
Maximum salinity: Very slightly saline to slightly saline (4.0 to 8.0 mmhos/cm)
Sodium adsorption ratio, maximum: 20.0
Available water capacity: Moderate (about 8.6 inches)

Interpretive groups

Land capability classification (irrigated): 3w
Land capability (nonirrigated): 7w

Typical profile

0 to 12 inches: Silty clay loam
12 to 60 inches: Silty clay loam

Description of Glenbar, Wet

Setting

Landform: Basin floors
Landform position (three-dimensional): Talf

Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from mixed

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 5 percent
Maximum salinity: Nonsaline to slightly saline (2.0 to 8.0 mmhos/cm)
Sodium adsorption ratio, maximum: 15.0
Available water capacity: High (about 10.8 inches)

Interpretive groups

Land capability classification (irrigated): 3w
Land capability (nonirrigated): 7w

Typical profile

0 to 13 inches: Silty clay loam
13 to 60 inches: Clay loam

Minor Components

Holtville

Percent of map unit: 10 percent

Meloland

Percent of map unit: 10 percent

Data Source Information

Soil Survey Area: Imperial County, California, Imperial Valley Area
Survey Area Data: Version 5, Jul 25, 2008

California Revised Storie Index Rating (CA)

The Storie Index is a soil rating based on soil properties that govern a soil's potential for cultivated agriculture in California.

The Storie Index asseses the productivity of a soil from the following four characteristics: Factor A, degree of soil profile development; factor B, texture of the surface layer; factor C, slope; and factor X, manageable features, including drainage, microrelief, fertility, acidity, erosion, and salt content. A score ranging from 0 to 100 percent is determined for each factor, and the scores are mukltiplied together to derive an index rating.

For simplification, Storie Index ratings have been combined into six grades classes as follows: Grade 1 (excellent), 100 to 80; grade 2 (good), 79 to 60; grade 3 (fair), 59 to 40; grade 4 (poor), 39 to 20; grade 5 (very poor), 19 to 10; and grade 6 (nonagricultural), less than 10.

Report—California Revised Storie Index Rating (CA)

The Storie Index is a soil rating based on soil properties that govern a soil map unit component's potential for cultivated agriculture. [Absence of an entry indicates that a Storie Index rating is not applicable or was not estimated]. For simplification, Storie Index ratings have been combined into six grades as follows: Grade 1 (Excellent): Soils that rate between 80 and 100 and which are suitable for a wide range of crops. Grade 2 (Good) Soils that rate between 60 and 79 and which are suitable for a wide range of crops. Grade 3 (Fair): Soils that range between 40 and 59. Soils in this grade may give good results with certain specialized crops. Grade 4 (Poor): Soils that rate between 20 and 39 and which have a narrow range in their agricultural potential. Grade 5 (Very Poor): Soil that rate between 10 and 19 and are of very limited agricultural use except for pasture because of adverse soil conditions. Grade 6 (Nonagricultural): Soils that rate less than 10. [The numbers in the "Limiting feature value" column range from 0.01 to 1.00. Soils with a smaller the value have a lower potential for cultivated agriculture. The table shows each of the sub-factors used to generate the Storie Index rating for each soil component].

California Revised Storie Index Rating (CA)– Imperial County, California, Imperial Valley Area				
Map symbol and soil name	Pct. of map unit	California Revised Storie Index (CA)		
		Storie index rating	Storie index grade and limiting features	Limiting feature value
114—IMPERIAL SILTY CLAY, WET				
Imperial, wet	85	42	Grade Three - Fair	
			Rated Soil Order	1.00
			Profile Group	1.00
			Nearly level to gently sloping	0.98
			Wetness, flooding, ponding, drainage, erosion	0.90
			Toxicity	0.80

California Revised Storie Index Rating (CA)– Imperial County, California, Imperial Valley Area				
Map symbol and soil name	Pct. of map unit	California Revised Storie Index (CA)		
		Storie index rating	Storie index grade and limiting features	Limiting feature value
115—IMPERIAL-GLENBAR SILTY CLAY LOAMS, WET, 0 TO 2 PERCENT SLOPES				
Glenbar, wet	40	72	Grade Two - Good	
			Rated Soil Order	1.00
			Profile Group	1.00
			Nearly level to gently sloping	0.98
			USDA Texture	0.95
			Wetness, flooding, ponding, drainage, erosion	0.90
Imperial, wet	40	67	Grade Two - Good	
			Rated Soil Order	1.00
			Profile Group	1.00
			Nearly level to gently sloping	0.98
			USDA Texture	0.95
			Wetness, flooding, ponding, drainage, erosion	0.90

Data Source Information

Soil Survey Area: Imperial County, California, Imperial Valley Area
Survey Area Data: Version 5, Jul 25, 2008

Agricultural Restoration Plan

Calexico Solar Farm II Phase B

NWC Ferrell Road and State Route 98

Calexico, California

Prepared for:

89MA 8ME, LLC
320 Hayward Avenue
Los Angeles, CA 94588

Prepared by:

GS Lyon Consultants, Inc.
780 N. 4th Street
El Centro, CA 92243
(760) 337-1100

January 2012

GS Lyon

Engineering And
Information Technology

780 N. 4th Street El Centro, CA 92243
(760) 337-1100 (760) 337-8900 fax

January 24, 2012

Mr. Tom Buttgenbach
89MA 8ME, LLC
320 Hayward Avenue
Los Angeles, CA 94588

Engineer's Estimate of Probable Costs
Agricultural Restoration Plan
Calexico Solar Farm II (Phase B)
Calexico, California
GSL Project No. GS1105

Dear Mr. Buttgenbach:

GS Lyon personnel have developed an Engineer's Estimate of Probable Costs to restore the agricultural lands to "farm ready conditions" at the Calexico Solar Farm II (Phase B) PV Solar Facility in southern Imperial County, California. The solar farm project consists of 100MW of PV solar generation and will encompass seven (7) farm fields totaling approximately 445 net acres , generally located at the northwest intersection of State Route 98 and Ferrell Road about 4 miles west of Calexico.

The restoration plan exhibits indicate current conditions of the farm fields and the proposed solar power arrays. The estimate accounts for costs restore the land to farm-ready conditions upon ceasing the power facility operation. No crop planting is included in the restoration costs since customary farm practices do not include planting prior to leasing. Crop type and planting is each individual farmer's selection. Costs are provided for replacement of concrete irrigation ditches and subsurface agricultural tile drainage pipelines, deep chiseling (sub-soiling), discing, landplaning and restoration of irrigation land slopes (land–leveling).

This report also identifies Prime Farmland and Farmland of Statewide Importance as defined by the California Department of Conservation.

GS Lyon appreciates the opportunity to provide professional services in developing the restoration plan. Please contact our office with any questions or comments.

Sincerely Yours,
GS Lyon Consultants, Inc.

Jeffrey O. Lyon, P.E.
Principal Engineer

REGISTERED PROFESSIONAL ENGINEER
JEFFREY O. LYON
No. 31921
EXPIRES 12-31-12
CIVIL
STATE OF CALIFORNIA

Table of Contents

Appendices

1.0 Introduction

The Calexico Solar Farm II (Phase B) project will occupy seven (7) agricultural fields that are currently in agricultural crop production. The lands generally consist of silty clay to fat clay soil that require subsurface tile drains to maintain crop yields, normally used for growing field crops such as alfalfa, bermuda grass, sudan grass and wheat. Even though there are lands identified as "Prime Farmland" by the California Department of Conservation, the cropping patterns of all of the agricultural lands within the Calexico Solar Farm II (Phase B) have historically been "field crops". A complete Land Evaluation and Site Assessment (LESA) Model has been prepared for the project (see **Appendix F**).

The Calexico Solar Farm II (Phase B) project is expected to consist of 100MW of PV solar generation and extend a minimum of 25 years and may extend up to 40 years (see **Appendix E –** Project Description for project specifics). Without regular crop irrigation occurring during this period, there should be no increase in salts in the field (water table is not high enough to drive salts to the surface).

This restoration plan has been prepared to document the agricultural improvements of each farm field and to provide an estimate of the work (cost) required to return the land to agricultural production upon ceasing operation of the PV solar energy generating facility.

2.0 Restoration Methods

2.1 Irrigation Ditches - During extended periods of non-use (as has occurred recently as a result of the on-farm fallowing program), it has been found that the clay soils dry and shrink away from the concrete lining. The thin concrete lining (1.5 inches thick) is prone to cracking and breakage without support of moist soil behind the lining and the amount of ditch repairs required after extended non-use is generally extensive. It is generally more cost efficient to replace the ditch and field gates than to chase the problems created by fractured ditches.

2.2 Sub-surface Tile Drains - Tile drains that currently exist below the farm fields may be punctured by installation of PV panel frame support posts. In order to insure proper operation of the tile drainage system, a new system has been planned for each farm field. Should the steel support posts not be driven to the tile system depth, then only the red clay or concrete tile portions of the tile system would need to be replaced. The plastic tile lines have been found to be relatively unaffected by extended fallowing periods.

2.3 Ground Preparation - Without agricultural tillage over the 25 to 40 year span of the PV solar energy generating facility operation, the clay soils will become compacted. In order to insure crop growth, the fields will need to be sub-soiled (plow shanks extending to 36" to 42" below ground surface), re-leveled with laser controlled drag-scrapers, manure fertilizer applied, disced (2 directions) and landplaned (or tri-planed). A minimum of six (6) soil samples have been scheduled to be collected from each field and analyzed for agronomic minerals, salts and fertilizer compounds.

3.0 Cost Estimating/Unit Pricing

3.1 Irrigation Ditches - Contractors that routinely install concrete lined irrigation ditches in the Imperial Valley were contacted to develop unit pricing of a farm ditch. The overall cost of placing and compacting a 15 ft. by 2 ft. high ditch pad (native soil from the farm field), trenching for concrete lining, placement of concrete lining, installation of jack gates, installation of outlet pipes and slide gates were included into one cost per foot of concrete ditch construction.

3.2 Subsurface Tile Drains – A specialty tile drainage installation contractor in the Imperial Valley was consulted on the installation of tile drain baselines (8-inch diameter pipelines) and laterals (4-inch pipelines) to establish unit rate pricing of the tile system installations. The lengths of the laterals and baselines were taken from the existing tile drainage maps obtained from Imperial Irrigation District records.

3.3 Ground Preparation - Pricing from local farm service providers was used to determine the unit rate pricing for ground preparation prior to placement of irrigation borders and planting. Standard agricultural practices were used for the work to be performed. Land-leveling costs were developed by consultation with an agricultural land-leveling specialty contractor in the Imperial Valley.

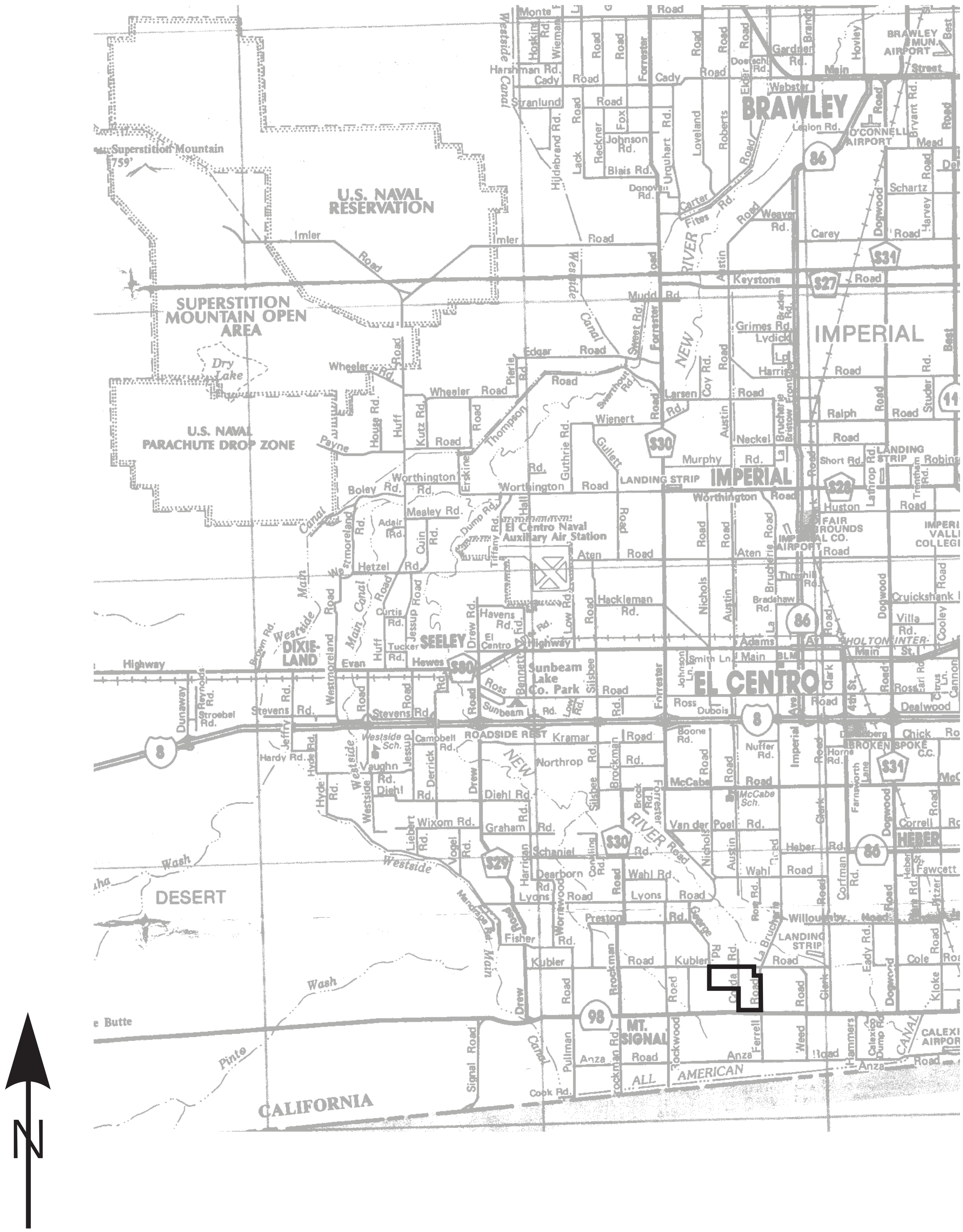
4.0 Prime Farmland and Farmland of State Importance

The California Department of Conservation has classified all agricultural lands in the Imperial Valley as identified in the FARMLAND MAPPING and MONITORING PROGRAM – 2008 Imperial County Important Farmland Map. The Soil Candidate Listing for Prime Farmland and Farmland of Statewide Importance-Imperial County (Rev. 2010) appends the Farmland Map, identifying each soil type described by the US Department of Agriculture, Natural Resources Conservation Service, Soil Survey of Imperial County, Imperial Valley Area, October 1981. The areas that make up Prime Farmland are identified as the Soil Survey Soil Mapping Units described in the Soil Candidate Listing (see **Appendix D**).

This report has identified **6 acres** within the Calexico Solar Farm II (Phase B) project site as being classified as **Prime Farmland**. Digital Google Earth™ maps overlain with Soil Survey soil mapping unit contours obtained from the USDA website were used to determine the currently farmed areas that were classified as Prime Farmland. The areas were digitally scaled using electronic mapping programs (see **Plates D4 – Appendix D**).

Appendix A

Project Location Maps and Maps of Existing Conditions



GS Lyon

Project No.: GS1105

Calexico Solar Farm II Phase B
Vicinity Map

Plate
A-1

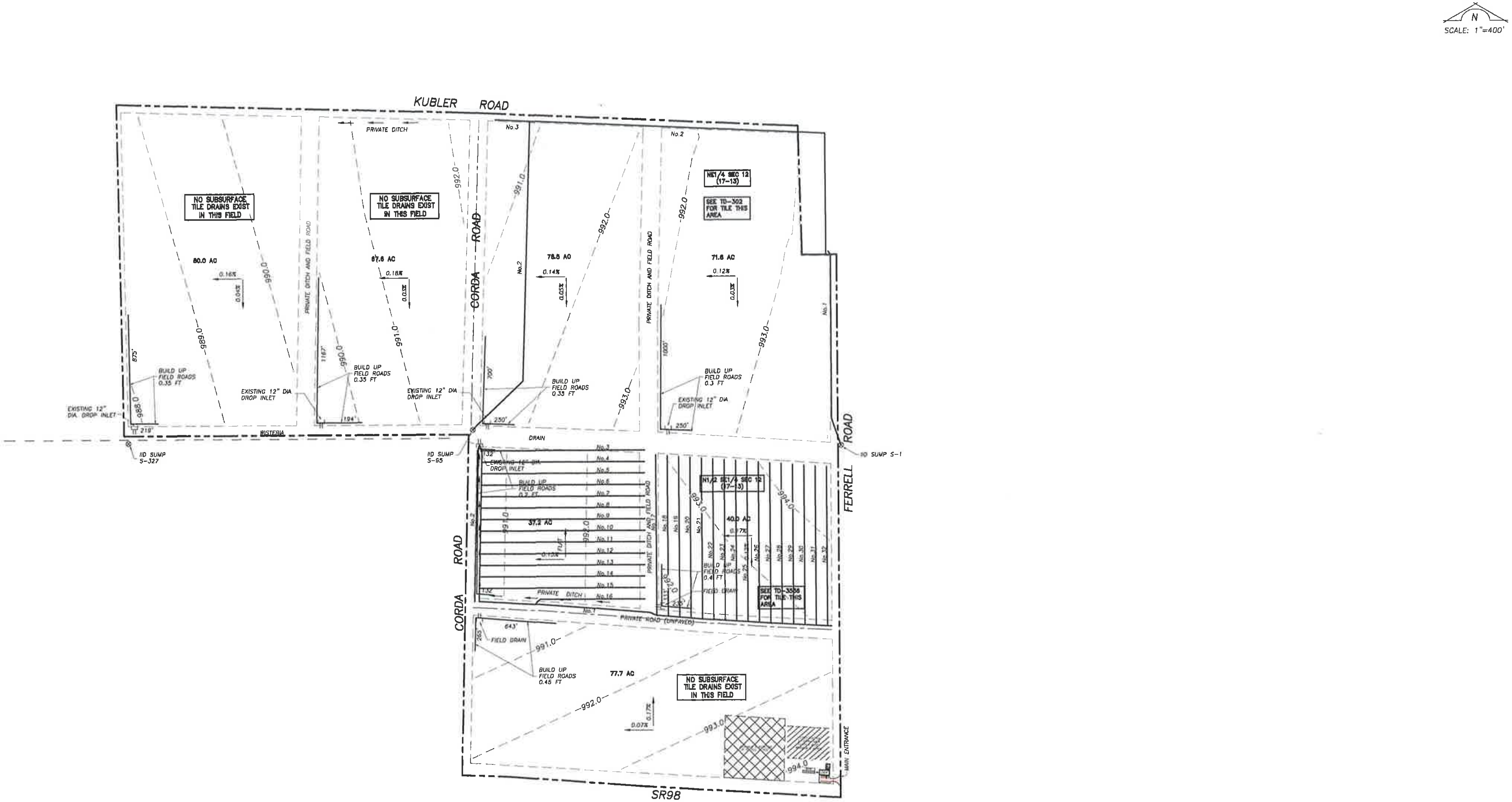
N

GS Lyon

Project No.: GS1105

Calexico Solar Farm II Phase B
Site Map

Plate
A-2



JBL JOB No. J11017

PRINTED: 12/2/11

REV No.	REVISION	DATE

8minutenergy RENEWABLES

PREPARED UNDER THE DIRECT SUPERVISION OF:

JEFFREY O. LYON, R.C.E. 31,921 ENGINEER OF RECORD — DATE

REGISTERED PROFESSIONAL ENGINEER JEFFREY O. LYON RCE 31,921 EXP 12-31-12 CIVIL STATE OF CALIFORNIA

GS Lyon
Engineering & Construction Management
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El Centro, CA 92243
(760) 370-3000
FAX (760) 337-8900

CALEXICO SOLAR FARM II PHASE B (89MA)

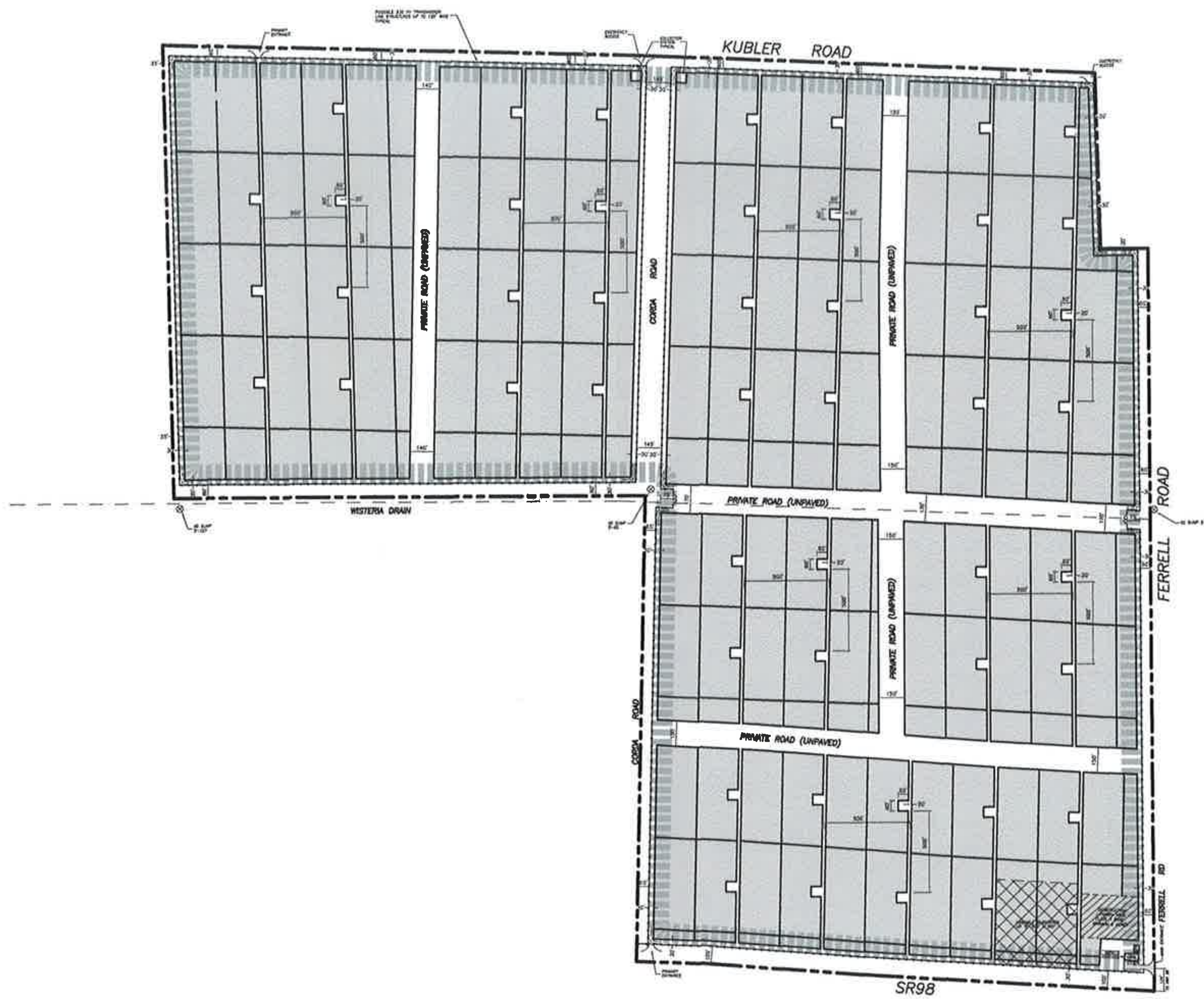
LOCATION CALEXICO, CA
SHEET TITLE EXISTING AG CONDITIONS
CLIENT 8MINUTENERGY RENEWABLES

SHEET No. 1
BY GMG
DATE 9/12/11
JOB # GS1105

Appendix B

Solar Farm Improvements

N
SCALE: 1"=400'



JBL JOB No. J11017

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REV No.	REVISION	DATE

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CALEXICO SOLAR FARM II PHASE B (89MA)

LOCATION CALEXICO, CA
SHEET TITLE OVERALL SITE PLAN WEST
CLIENT 8MINUTENERGY RENEWABLES

SHEET No. 1
BY GMG
DATE 8/9/11
JOB # GS1105

Appendix C

Restoration Cost Summary

Calexico Solar Farm II Phase B (89MA)

Field No. 1 - 052-180-044 (West Field) (80 ac)

Subsurface Tile Drainage System - Baseline	0	LF	$	7.65	$	-
Subsurface Tile Drainage System - Laterals	0	LF	$	2.25	$	-
Irrigation Ditch/Pad and Outlets/Gates/Slide Gates	2,473	LF	$	62.25	$	153,944.25
Land Leveling	80.0	ac	$	150.00	$	12,000.00
Ground Work (Subsoil/ Stubble Disc/Landplane)	80.0	ac	$	130.00	$	10,400.00
Manure Application	80.0	ac	$	75.00	$	6,000.00
Agronomic Soil Sampling	1	LS	$	800.00	$	800.00
			Total		**$**	**183,144.25**
			Cost/Ac.		**$**	**2,289.30**

Field No. 2 - 052-180-044 (East Field) (67.5 ac)

Subsurface Tile Drainage System - Baseline	0	LF	$	7.65	$	-
Subsurface Tile Drainage System - Laterals	0	LF	$	2.25	$	-
Irrigation Ditch/Pad and Outlets/Gates/Slide Gates	2,433	LF	$	62.25	$	151,454.25
Land Leveling	67.5	ac	$	150.00	$	10,125.00
Ground Work (Subsoil/ Stubble Disc/Landplane)	67.5	ac	$	130.00	$	8,775.00
Manure Application	67.5	ac	$	75.00	$	5,062.50
Agronomic Soil Sampling	1	LS	$	800.00	$	800.00
			Total		**$**	**176,216.75**
			Cost/Ac.		**$**	**2,610.62**

Field No. 3 - 052-180-043 (West Field) (72.2 ac)

Subsurface Tile Drainage System - Baseline	5,390	LF	$	7.65	$	41,233.50
Subsurface Tile Drainage System - Laterals	18,697	LF	$	2.25	$	42,068.25
Irrigation Ditch/Pad and Outlets/Gates/Slide Gates	2,466	LF	$	62.25	$	153,508.50
Land Leveling	72.2	ac	$	150.00	$	10,830.00
Ground Work (Subsoil/ Stubble Disc/Landplane)	72.2	ac	$	130.00	$	9,386.00
Manure Application	72.2	ac	$	75.00	$	5,415.00
Agronomic Soil Sampling	1	LS	$	800.00	$	800.00
			Total		**$**	**263,241.25**
			Cost/Ac.		**$**	**3,646.00**

Field No. 4 - 052-180-043 (East Field) (71.4 ac)

Subsurface Tile Drainage System - Baseline	5,390	LF	$	7.65	$	41,233.50
Subsurface Tile Drainage System - Laterals	22,158	LF	$	2.25	$	49,855.50
Irrigation Ditch/Pad and Outlets/Gates/Slide Gates	2,932	LF	$	62.25	$	182,517.00
Land Leveling	71.4	ac	$	150.00	$	10,710.00
Ground Work (Subsoil/ Stubble Disc/Landplane)	71.4	ac	$	130.00	$	9,282.00
Manure Application	71.4	ac	$	75.00	$	5,355.00
Agronomic Soil Sampling	1	LS	$	800.00	$	800.00
			Total		**$**	**299,753.00**
			Cost/Ac.		**$**	**4,198.22**

Field No. 5 - 052-180-022 (37 ac)

Subsurface Tile Drainage System - Baseline	3,369	LF	$	7.65	$	25,772.85
Subsurface Tile Drainage System - Laterals	17,984	LF	$	2.25	$	40,464.00
Irrigation Ditch/Pad and Outlets/Gates/Slide Gates	1,291	LF	$	62.25	$	80,364.75
Land Leveling	37.0	ac	$	150.00	$	5,550.00
Ground Work (Subsoil/ Stubble Disc/Landplane)	37.0	ac	$	130.00	$	4,810.00
Manure Application	37.0	ac	$	75.00	$	2,775.00
Agronomic Soil Sampling	1	LS	$	800.00	$	800.00
			Total		**$**	**160,536.60**
			Cost/Ac.		**$**	**4,338.83**

Field No. 6 - 052-180-050 (40.2 ac)

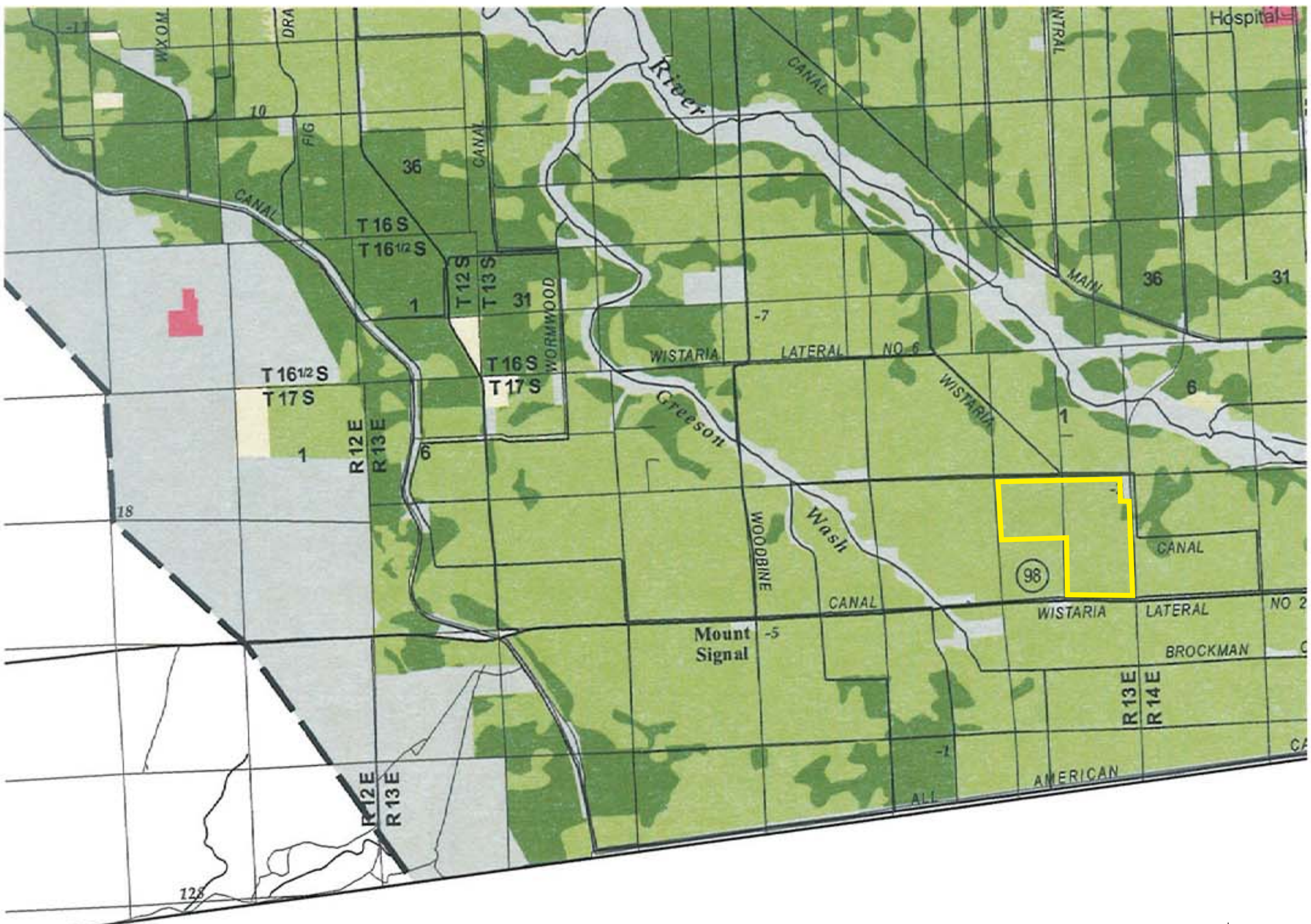
Subsurface Tile Drainage System - Baseline	2,054	LF	$	7.65	$	15,713.10
Subsurface Tile Drainage System - Laterals	20,608	LF	$	2.25	$	46,368.00
Irrigation Ditch (Common with Field No. 5)	1,447	LF	$	62.25	$	90,075.75
Land Leveling	40.2	ac	$	150.00	$	6,030.00
Ground Work (Subsoil/ Stubble Disc/Landplane)	40.2	ac	$	130.00	$	5,226.00
Manure Application	40.2	ac	$	75.00	$	3,015.00
Agronomic Soil Sampling	1	LS	$	800.00	$	800.00
			Total		**$**	**167,227.85**
			Cost/Ac.		**$**	**4,159.90**

Field No. 7 - 052-180-051 (76.9 ac)

Subsurface Tile Drainage System - Baseline	0	LF	$	7.65	$	-
Subsurface Tile Drainage System - Laterals	0	LF	$	2.25	$	-
Irrigation Ditch/Pad and Outlets/Gates/Slide Gates	2,930	LF	$	62.25	$	182,392.50
Land Leveling	76.9	ac	$	150.00	$	11,535.00
Ground Work (Subsoil/ Stubble Disc/Landplane)	76.9	ac	$	130.00	$	9,997.00
Manure Application	76.9	ac	$	75.00	$	5,767.50
Agronomic Soil Sampling	1	LS	$	800.00	$	800.00
			Total		**$**	**210,492.00**
			Cost/Ac.		**$**	**2,737.22**
			TOTAL		**$**	**1,460,611.70**

Appendix D

Prime Farmland and Farmland of Statewide Importance



*Legend on following page

GS Lyon

Project No.: GS1105

Calexico Solar Farm II Phase B
Imperial County Important Farmland 2010

Plate
D-1

PRIME FARMLAND - 195,589 acres

PRIME FARMLAND HAS THE BEST COMBINATION OF PHYSICAL AND CHEMICAL FEATURES ABLE TO SUSTAIN LONG-TERM AGRICULTURAL PRODUCTION. THIS LAND HAS THE SOIL QUALITY, GROWING SEASON, AND MOISTURE SUPPLY NEEDED TO PRODUCE SUSTAINED HIGH YIELDS. LAND MUST HAVE BEEN USED FOR IRRIGATED AGRICULTURAL PRODUCTION AT SOME TIME DURING THE FOUR YEARS PRIOR TO THE MAPPING DATE.

FARMLAND OF STATEWIDE IMPORTANCE - 311,048 acres

FARMLAND OF STATEWIDE IMPORTANCE IS SIMILAR TO PRIME FARMLAND BUT WITH MINOR SHORTCOMINGS, SUCH AS GREATER SLOPES OR LESS ABILITY TO STORE SOIL MOISTURE. LAND MUST HAVE BEEN USED FOR IRRIGATED AGRICULTURAL PRODUCTION AT SOME TIME DURING THE FOUR YEARS PRIOR TO THE MAPPING DATE.

UNIQUE FARMLAND - 2,196 acres

UNIQUE FARMLAND CONSISTS OF LESSER QUALITY SOILS USED FOR THE PRODUCTION OF THE STATE'S LEADING AGRICULTURAL CROPS. THIS LAND IS USUALLY IRRIGATED, BUT MAY INCLUDE NONIRRIGATED ORCHARDS OR VINEYARDS AS FOUND IN SOME CLIMATIC ZONES IN CALIFORNIA. LAND MUST HAVE BEEN CROPPED AT SOME TIME DURING THE FOUR YEARS PRIOR TO THE MAPPING DATE.

FARMLAND OF LOCAL IMPORTANCE - 32,109 acres

UNIRRIGATED AND UNCULTIVATED LANDS WITH PRIME AND STATEWIDE SOILS.

URBAN AND BUILT-UP LAND - 27,709 acres

URBAN AND BUILT-UP LAND IS OCCUPIED BY STRUCTURES WITH A BUILDING DENSITY OF AT LEAST 1 UNIT TO 1.5 ACRES, OR APPROXIMATELY 6 STRUCTURES TO A 10-ACRE PARCEL. COMMON EXAMPLES INCLUDE RESIDENTIAL, INDUSTRIAL, COMMERCIAL, INSTITUTIONAL FACILITIES, CEMETERIES, AIRPORTS, GOLF COURSES, SANITARY LANDFILLS, SEWAGE TREATMENT, AND WATER CONTROL STRUCTURES.

OTHER LAND - 458,829 acres

OTHER LAND IS LAND NOT INCLUDED IN ANY OTHER MAPPING CATEGORY. COMMON EXAMPLES INCLUDE LOW DENSITY RURAL DEVELOPMENTS, BRUSH, TIMBER, WETLAND, AND RIPARIAN AREAS NOT SUITABLE FOR LIVESTOCK GRAZING, CONFINED LIVESTOCK, POULTRY, OR AQUACULTURE FACILITIES, STRIP MINES, BORROW PITS, AND WATER BODIES SMALLER THAN 40 ACRES. VACANT AND NONAGRICULTURAL LAND SURROUNDED ON ALL SIDES BY URBAN DEVELOPMENT AND GREATER THAN 40 ACRES IS MAPPED AS OTHER LAND.

WATER - 1,029 acres

PERENNIAL WATER BODIES WITH AN EXTENT OF AT LEAST 40 ACRES.

(All acreages are totals for Imperial County)

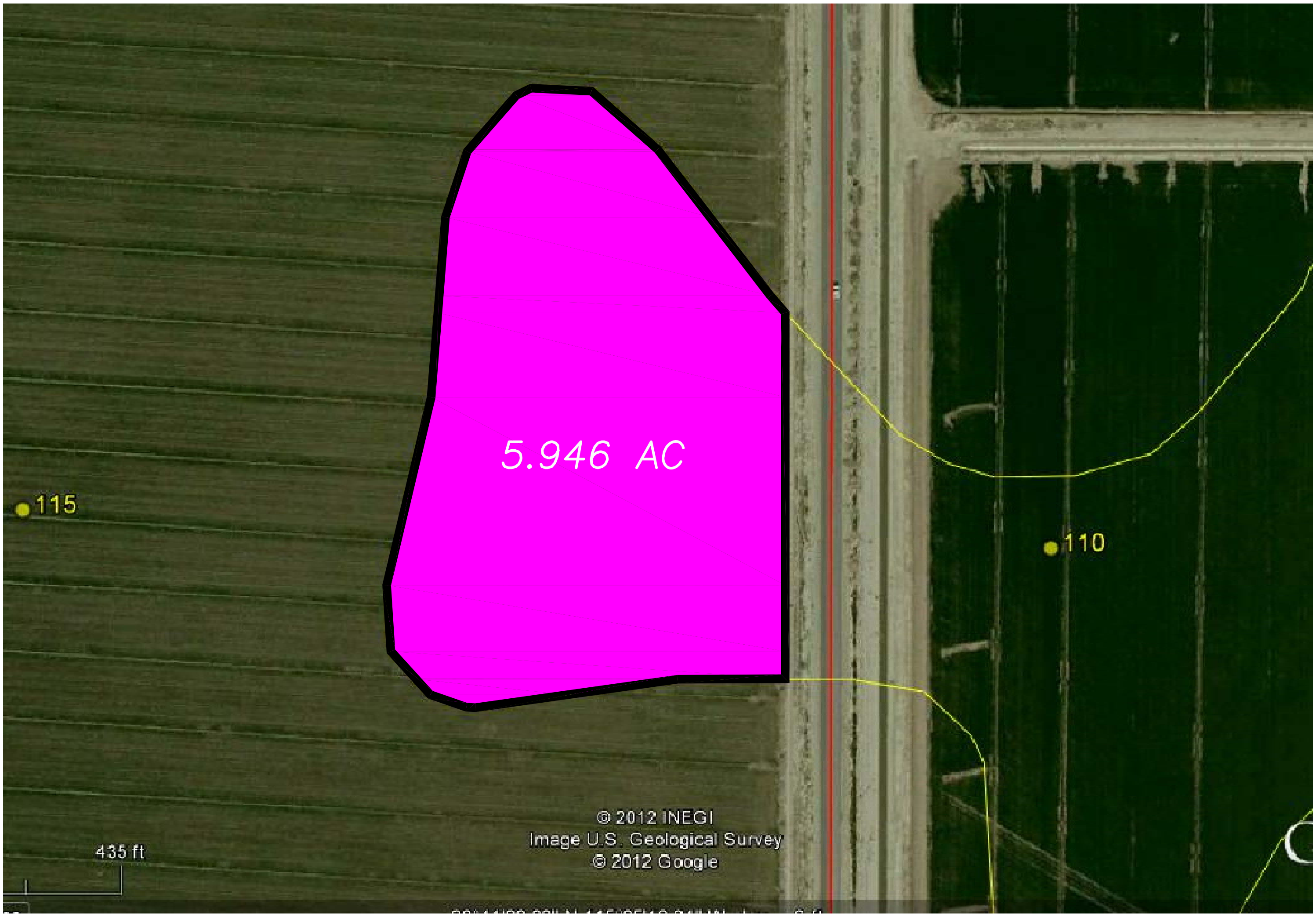
GS Lyon **Project No.: GS1105**	**Calexico Solar Farm II Phase B** **I.C. Important Farmland 2010 Legend**	**Plate** **D-2**

GS Lyon

Project No.: GS1105

Calexico Solar Farm I Phase B
Soil Survey Map

Plate
D-3



Prime Farmland Area - 5.94 Acres

GS Lyon
Project No.: GS1023

Calexico Solar Farm II (89MA Phase B)
Prime Farmland Area

Plate
D-4

California Department of Conservation

FARMLAND MAPPING AND MONITORING PROGRAM

SOIL CANDIDATE LISTING

for

PRIME FARMLAND AND FARMLAND OF STATEWIDE IMPORTANCE

IMPERIAL COUNTY

U.S. Department of Agriculture, Natural Resources Conservation Service, soil surveys for Imperial County include:

Soil Survey of Imperial County, California, Imperial Valley Area, October 1981

Soil Survey of Yuma-Wellton Area: Parts of Yuma County, Arizona, and Imperial County, California, December 1980

Soil Survey of Palo Verde Area, California, September 1974

Beginning in 2002, SSURGO digital soil information has been incorporated into the Imperial County Important Farmland Map. Prior versions of the map have not been modified.

The SSURGO data includes Imperial County, Imperial Valley Area (published 3/22/2004), Yuma-Wellton Area (published 08/11/2004) and Palo Verde Area (published 4/20/2004). The digital surveys contain additional soil units beyond those published in the original paper surveys. Soils on the Prime and Statewide lists that only occur in the SSURGO data are appended to this list in italics.

For more information on the NRCS SSURGO data, please see: http://soils.usda.gov/survey/geography/ssurgo/

7/12/95, updated 06/02/2010

IMPERIAL COUNTY
PRIME FARMLAND SOILS

U.S. DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE
DAVIS, CALIFORNIA 95616

THESE SOIL MAPPING UNITS MEET THE CRITERIA FOR PRIME FARMLAND AS OUTLINED IN THE U.S. DEPARTMENT OF AGRICULTURE'S LAND INVENTORY AND MONITORING (LIM) PROJECT FOR THE IMPERIAL VALLEY AREA, YUMA-WELLTON AREA (WINTERHAVEN), AND PALO VERDE AREA SOIL SURVEYS.

IMPERIAL VALLEY AREA

Symbol	Name
100	Antho loamy fine sand
101*	Antho-Superstition complex
105	Glenbar clay loam
106#	Glenbar clay loam, wet
108	Holtville loam
109	Holtville silty clay
110#	Holtville silty clay, wet
117	Indio loam
118#	Indio loam, wet
119	Indio-Vint complex
120	Laveen loam
122#	Meloland very fine sandy loam, wet
123#	Meloland and Holtville loams, wet
137	Rositas silt loam, 0 to 2 percent slopes
139*	Superstition loamy fine sand
142#	Vint loamy very fine sand, wet

IMPERIAL VALLEY AREA Continued

Symbol	Name
143	Vint fine sandy loam
144#	Vint and Indio very fine sandy loams, wet

* Prime Farmland is managed so that in all horizons within a depth of 40 inches (1 meter), during part of each year the conductivity of the saturation extract is less than 4 mmhos/cm and the exchangeable sodium percentage (ESP) is less than 15.

\# Prime Farmland if drained

Note: Soils 107 (Glenbar complex), 132 (Rositas fine sand, 0 to 2 percent slopes), 133 (Rositas fine sand, 2 to 5 percent slopes), 135 (Rositas fine sand, wet, 0 to 2 percent slopes), 136 (Rositas loamy fine sand, 0 to 2 percent slopes) and 138 (Rositas and Superstition loamy fine sands) have been moved from the Prime Farmland list to the Farmland of Statewide Importance list per NRCS in 1995.

YUMA-WELLTON AREA (Imperial County portion)

Symbol	Name
8[#]	Gadsden clay
10[#]	Glenbar silty clay loam
12[#]	Holtville clay
13[#]	Indio silt loam
17	Kofa clay
24	Ripley silt loam

[#] Prime Farmland if reclaimed of excess salts and sodium.

Notes: *Soil 8* (Gadsden clay) was moved from the Farmland of Statewide Importance list to the Prime Farmland list per AZ NRCS letter of September 27, 2004.
Soil 19 (Lagunita silt loam) was removed from the Prime Farmland list per AZ NRCS letter of September 27, 2004.

PALO VERDE AREA

Symbol	Name
Ac	Aco gravelly loamy sand
Af	Aco sandy loam
Gb	Gilman fine sandy loam
Gc	Gilman silty clay loam
Ge	Glenbar silty clay loam
Hb*	Holtville fine sandy loam
Hc*	Holtville silty clay
Id*	Indio very fine sandy loam
Ie*	Indio silty clay loam
Oc*	Orita fine sand
Og*	Orita gravelly loamy sand
Or*	Orita gravelly fine sandy loam
Rb*	Ripley very fine sandy loam
Rc*	Ripley silty clay loam
RoA	Rositas fine sand, 0 to 2 percent slopes
RoB	Rositas fine sand, 2 to 9 percent slopes
RtA	Rositas silty clay loam, 0 to 2 percent slopes
9#	*Gadsden clay*

PALO VERDE AREA Continued

Symbol	Name
9A[#]	*Gadsden loam*
36[#]	*Indio silt loam*

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[*] Prime Farmland if reclaimed of excess salts and sodium.

[#] Prime Farmland if either protected from flooding or not frequently flooded during the growing season.

IMPERIAL COUNTY
FARMLAND OF STATEWIDE
IMPORTANCE SOILS

U.S. DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE
DAVIS, CALIFORNIA 95616

THESE SOIL MAPPING UNITS MEET THE CRITERIA FOR FARMLAND OF STATEWIDE IMPORTANCE AS OUTLINED IN THE U.S. DEPARTMENT OF AGRICULTURE'S LAND INVENTORY AND MONITORING (LIM) PROJECT FOR THE IMPERIAL VALLEY AREA, YUMA-WELLTON AREA (WINTERHAVEN), AND PALO VERDE AREA SOIL SURVEYS.

IMPERIAL VALLEY AREA

Symbol	Name
107	Glenbar complex
111	Holtville-Imperial silty clay loams
112	Imperial silty clay
113	Imperial silty clay, saline
114	Imperial silty clay, wet
115	Imperial-Glenbar silty clay loams, wet, 0 to 2 percent slopes
116	Imperial-Glenbar silty clay loams, 2 to 5 percent slopes
121	Meloland fine sand
124	Niland gravelly sand
125	Niland gravelly sand, wet
126	Niland fine sand
127	Niland loamy fine sand
128	Niland-Imperial complex, wet
130	Rositas sand, 0 to 2 percent slopes

IMPERIAL VALLEY AREA Continued

Symbol	Name
131	Rositas sand, 2 to 5 percent slopes
132	Rositas fine sand, 0 to 2 percent slopes
133	Rositas fine sand, 2 to 9 percent slopes
135	Rositas fine sand, wet, 0 to 2 percent slopes
136	Rositas loamy fine sand, 0 to 2 percent slopes
138	Rositas-Superstition loamy fine sands

YUMA-WELLTON AREA (Imperial County Portion)

Symbol	Name
14*	Indio silt loam, saline
16*	Indio-Lagunita-Ripley complex
18*	Lagunita loamy sand
25*	Rositas sand

* Due to insufficient documentation of qualifying criteria, these units were dropped from the Farmland of Statewide Importance list per the Arizona office of NRCS (September 27, 2004).

Note: *Soil 8* (Gadsden Clay) was moved to the Prime Farmland list from the Farmland of Statewide Importance list per AZ NRCS letter of September 27, 2004.

PALO VERDE AREA

Symbol	Name
Co	Cibola fine sandy loam
Cs	Cibola silty clay loam
Ib	Imperial fine sandy loam
Ic	Imperial silty clay
Md	Meloland fine sandy loam
Me	Meloland silty clay loam
RsA	Rositas gravelly loamy sand, 0 to 2 percent slopes

Appendix E

Project Description

Calexico Solar Farm II Phases A and B

PROJECT DESCRIPTION

89MA 8ME, LLC
Sponsor: 8minutenergy Renewables LLC
10100 Santa Monica Boulevard, Suite 300
Los Angeles, CA 90067
(213) 281-9771

With Technical Assistance By:
GS Lyon Consultants, Inc.
780 North 4th Street
El Centro, CA 92243
(760) 337-1100

July 2011

Table of Contents

PROJECT INFORMATION

Project Name: Calexico Solar Farm II

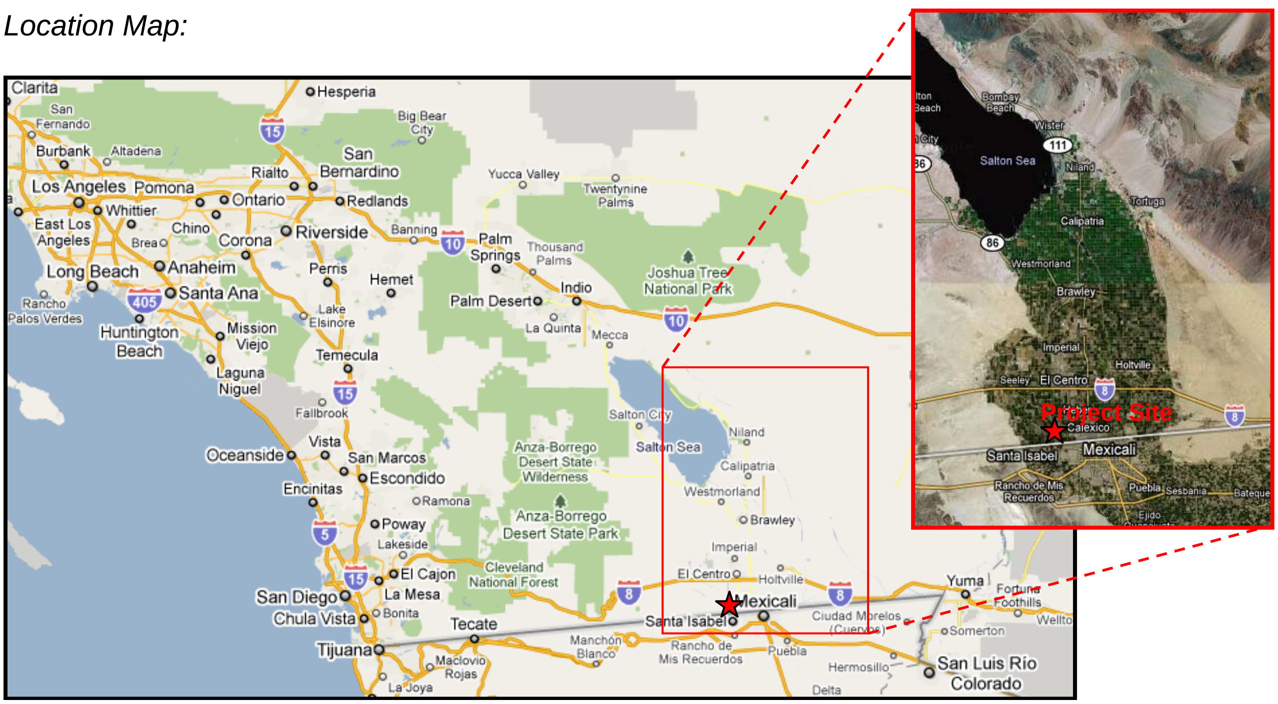
General Location: The project will be located approximately two miles west of Calexico, California in southern Imperial County. The project comprises several agricultural parcels totaling approximately 1,500 acres, generally located between Kubler Road to the north and the US-Mexico border to the south, and between Hammers Road to the east and a private road to the west (½ mile west of Corda Road). The land used by the project is owned by several land owners. Agricultural lands lie to the immediate north, south, east, and west of the project, with the exception of isolated residential and/or commercial structures and a small crop duster airstrip that transects a portion of CSF-II Phase A.

Calexico Solar Farm I comprises two phases (Phase A and Phase B), each requesting approval of a separate CUP.

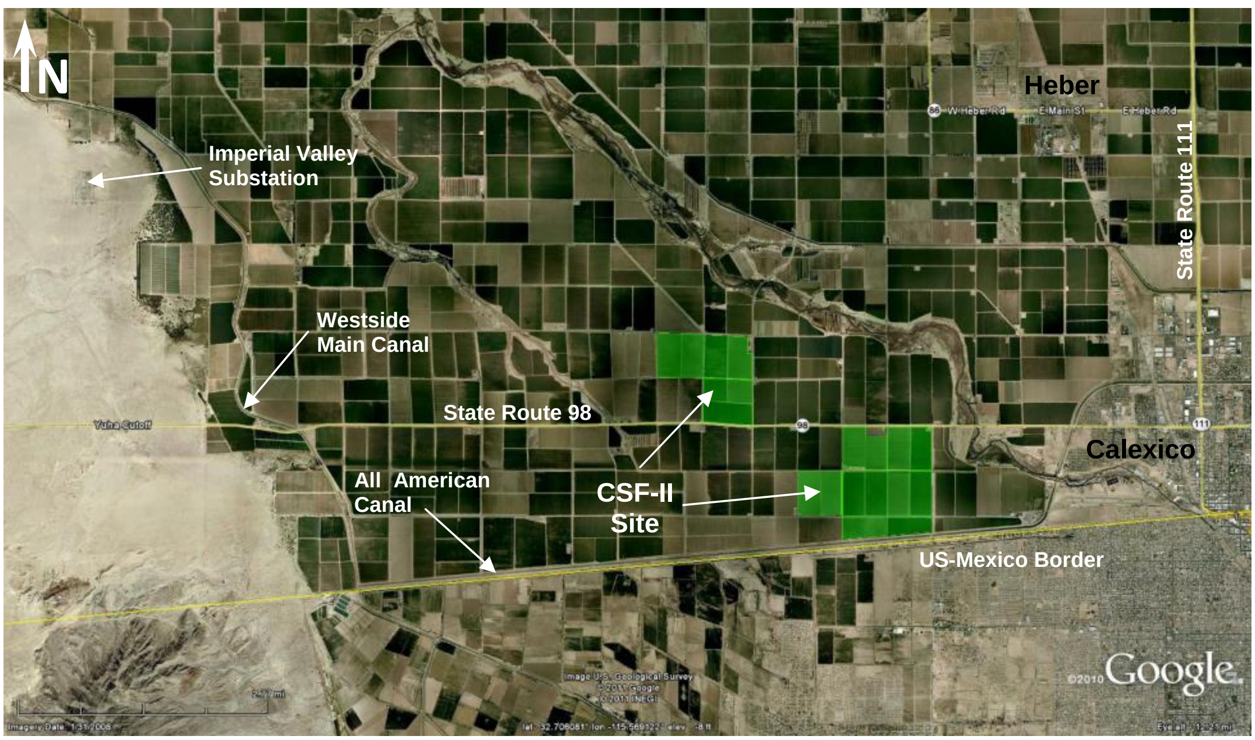
Assessor's Parcel Numbers:

- Phase A (~940 AC): 059-110-006, 059-110-008, 059-130-003, 059-110-003, 059-110-007
- Phase B (~530 AC): 052-180-043, 052-180-044, 052-180-022, 052-180-050, 052-180-051

Location Map:



Vicinity Map:



DESCRIPTION OF PROPOSED PROJECT

89MA 8ME, LLC and 8minutenergy Renewables LLC (the "Applicant") are seeking approval of two Conditional Use Permits (CUP) from Imperial County for the development of an up to 200 MW Calexico Solar Farm II ("CSF-II") solar farm located west of Calexico (see "Vicinity Map" above). The Applicant plans to develop this project in two phases: Phase A and Phase B, each with a separate CUP, and each intended to generate up to 100 MW. The Applicant further intends for each phase to have its own O&M building and onsite substation.

Project Phases

An interconnection application process for the entire CSF-II project with the California Independent System Operator (CAISO) has been initiated, and a queue position with CAISO has been secured for a total of 200 MW, which will be shared by the two phases of the CSF-II project. The Applicant intends for each CUP application of the project's two phases to produce up to 100 MW. However, each phase and CUP may produce up to 200 MW if the other phase and CUP either does not get built at all or does not get built for its full 100 MW share. The total output of both CUPs and phases combined will not exceed a total of 200 MW in any scenario.

The land requirements of a solar farm can vary significantly depending on the mounting structures used (e.g., fixed-tilt vs. tracking) and the efficiency of the modules selected. In general, on a per-MW basis, less land is required for higher efficiency modules (which may not be available cost effectively at the time of construction) with fixed-tilt mounts than for lower efficiency modules with tracking mounts. Thus, by using high efficiency modules and fixed-tilt mounts, a single phase and CUP of CSF-II could accommodate up to 200 MW itself. It is entirely possible that each phase and CUP ends up with a mix of fixed tilt and/or tracking mounts and different module efficiencies.

Therefore, the Applicant requests the approval of two CUPs for the CSF-II project: one CUP for Phase A, and a second CUP for Phase B. The CUP term requested for each phase and CUP is 40 years. The Applicant proposes to construct, own, operate, and fund the CSF-II project. The The Applicant expects both phases of the CSF-II project to produce power by 2014.

CSF-II's interconnection will occur at the 230 kV side of the SDG&E Imperial Valley (IV) Substation, located approximately 7 miles northwest of the project site. The Applicant intends to interconnect via 230 kV transmission facilities shared with one or more solar projects in the vicinity; several suitable transmission facilities are currently planned in CSF-II's immediate area. CSF-II intends to transfer electrical power from both of its onsite substations (one each on Phase A and Phase B land) to IV Substation via an offsite shared substation and transmission facility constructed, owned, operated, and funded by Mount Signal Solar Farm I (82LV 8me, LLC), which has a Right-of-Way (ROW) application being processed by the Bureau of Land Management (BLM). Alternatively, CSF-II may:

1. Build a single onsite substation located in one of CSF-II's phases, which would collect power generated by both phases of CSF-II and transmit that power to IV Substation via the method described above; or

2. "Host" a shared substation onsite in one of CSF-II's phases, which c/would receive power from the other phase as well as from another nearby solar project(s). Power would then be transmitted to IV Substation via shared transmission facilities constructed, owned, operated, and funded by a separate legal entity; or

3. Utilize the transmission, substation, and/or O&M facilities of another legal entity(ies) other than those of Mount Signal Solar Farm I, such as another neighboring solar project or a Special Purpose Vehicle (SPV) created to accommodate multiple solar projects' shared transmission, substation, and/or O&M facilities.

In the above alternative scenarios, CSF-II's onsite transmission, substation, and/or O&M facilities c/would be reduced or eliminated, and those areas c/would instead by covered with solar panels.

Any necessary authorization or agreement to share facilities would be obtained from the appropriate legal entity(ies) prior to CSF-II's construction.

The Applicant has considered the following in its selection of the CSF-II site for detailed evaluation:

- Land availability (approximately 1,500 acres);
- Zoning (the CSF-II will be sited on land currently zoned "A-2" General Agriculture and "A-2-R" General Agriculture Rural Zone);
- Minimal environmental consequences (CSF-II will be located on disturbed land currently used for agriculture);
- Water availability (no water wells required);
- Primarily (95%+) low production agricultural land (Farmland of Statewide Importance);
- Long-term land lease (25-year lease commencing with entitlements with a 15-year extension for a total of 40 years)

Map of CSF-II Photo Locations

#1 Looking SW

#2 Looking NW


#3 Looking NE


#4 Looking NE


#5 Looking SE


#6 Looking SE


#7 Looking SE


#8 Looking NW

#9 Looking NE

#10 Looking NE

#11 Looking SE

#12 Looking SW

Up to twelve (12) full time employees will operate the entire CSF-II project (split roughly evenly between phases, and between daytime and nighttime shifts). Typically, up to six (6) staff total for both phases combined will work during the day shift (sunrise to sunset), and the remainder during the night shifts and weekend. As noted earlier, it is possible that one phase of CSF-II would simply feed its power to the other phase. In that scenario, CSF-II's phases would share personnel, thereby reducing the staff required for CSF-II as a whole to a total of approximately ten (10) staff. It is also possible that CSF-II would share another legal entity's O&M facilities. In that scenario, CSF-II c/would also share personnel with that legal entity, thereby reducing or eliminating the onsite staff required for CSF-II.

CSF-II will export and sell the generated electricity via the CAISO grid. After the useful life of the project (up to 40 years) the panels will be disassembled from the steel mounting frames and the site restored to its pre-development condition. CSF-II as a whole is planned to generate up to 200 MW AC of electricity during peak daylight hours (up to 100 MW planned for each phase, or up to 200 MW if technology permits or is available; total for CSF-II as a whole would not exceed 200 MW in either case).

CSF-II will utilize non-reflective photovoltaic (PV) panels (or modules) to convert sunlight directly into electricity. Individual panels will be installed on either fixed-tilt or tracker mount systems, which will stand up to 15 feet high (depending on the mount) while either flat or tilted up to approximately 40 degrees from horizontal. The solar array field will be arranged in grids, and each grid will include an inverter container and a pad-mounted transformer near the center. CSF-II will also have several electrical control containers throughout the project. CSF-II as a whole will require the installation of up to 1.6 million photovoltaic panels to generate up to 200 MW AC (direct current ("DC") nameplate capacity of approximately 264 MW DC). The initial energy production of CSF-II as a whole will be up to approximately 480,000 MWh per year, sufficient to power over 68,000 homes and displacing over 270,000 tons of CO_2 emissions per year when compared to a gas-fired power plant or 540,000 tons when compared to a coal-fired power plant. This displacement of CO_2 emissions is equivalent to planting approximately 11 to 22 million trees or removing approximately 50,000 to 100,000 cars from the roads, respectively.

Fixed-tilt solar panels

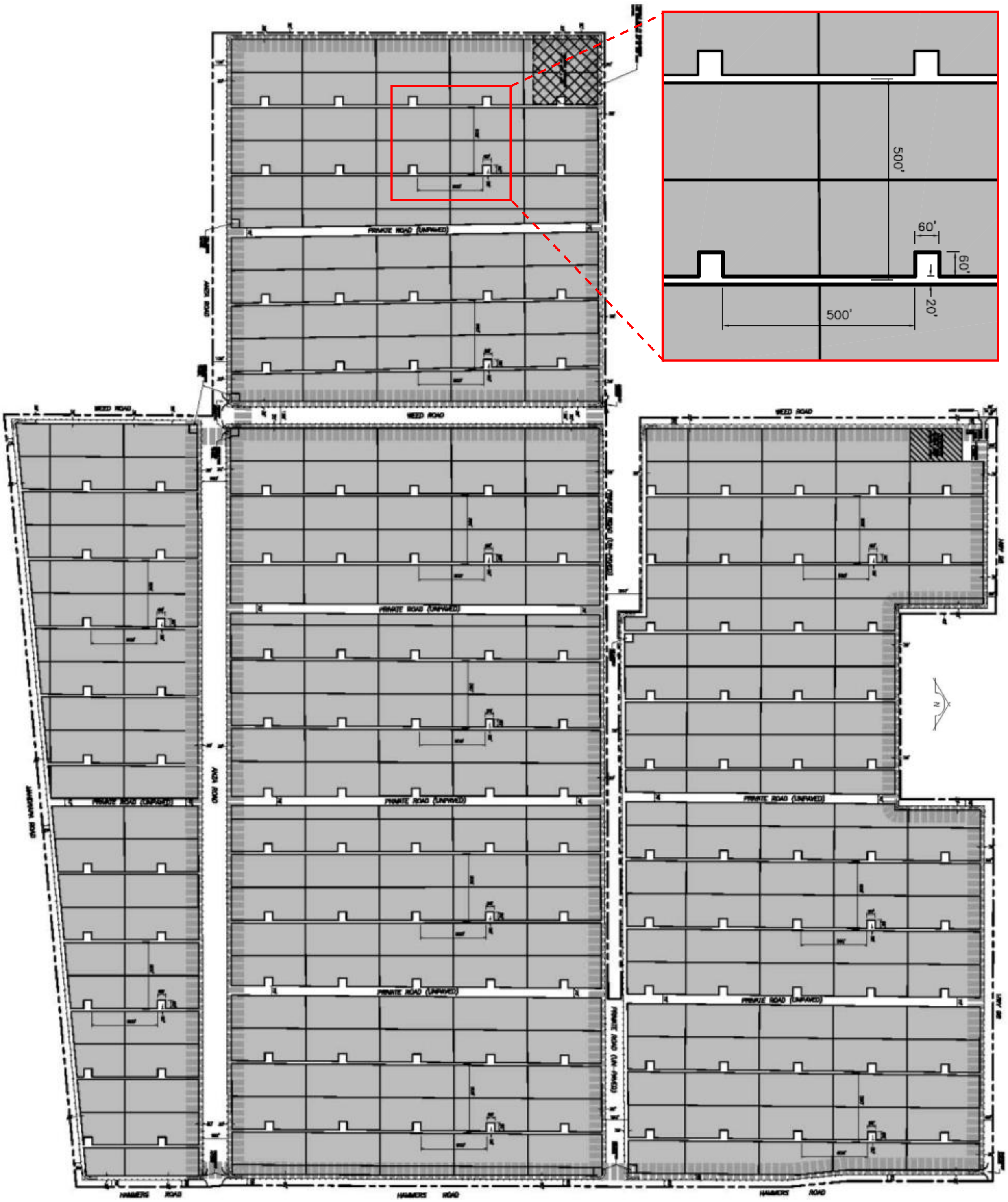
Typical fixed-tilt solar panel rows

Typical single-axis tracking solar panels

Typical single-axis tracking solar panel rows

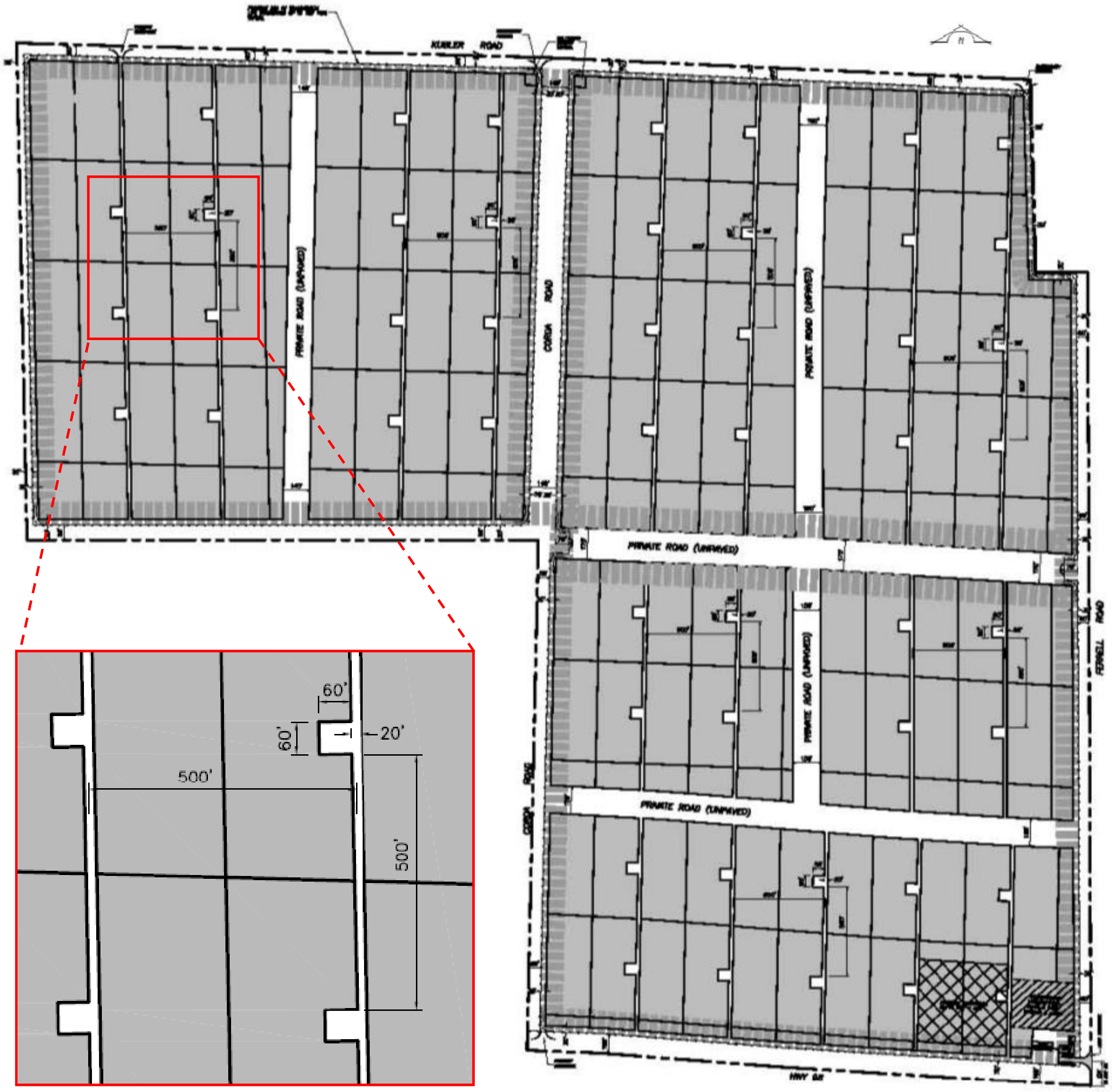
Typical single-axis tracking solar panel rows

Typical azimuth tracking solar panel rows



Project Site Layout – Phase A[1]

[1] See Appendix for enlarged version



Project Site Layout – Phase B[1]

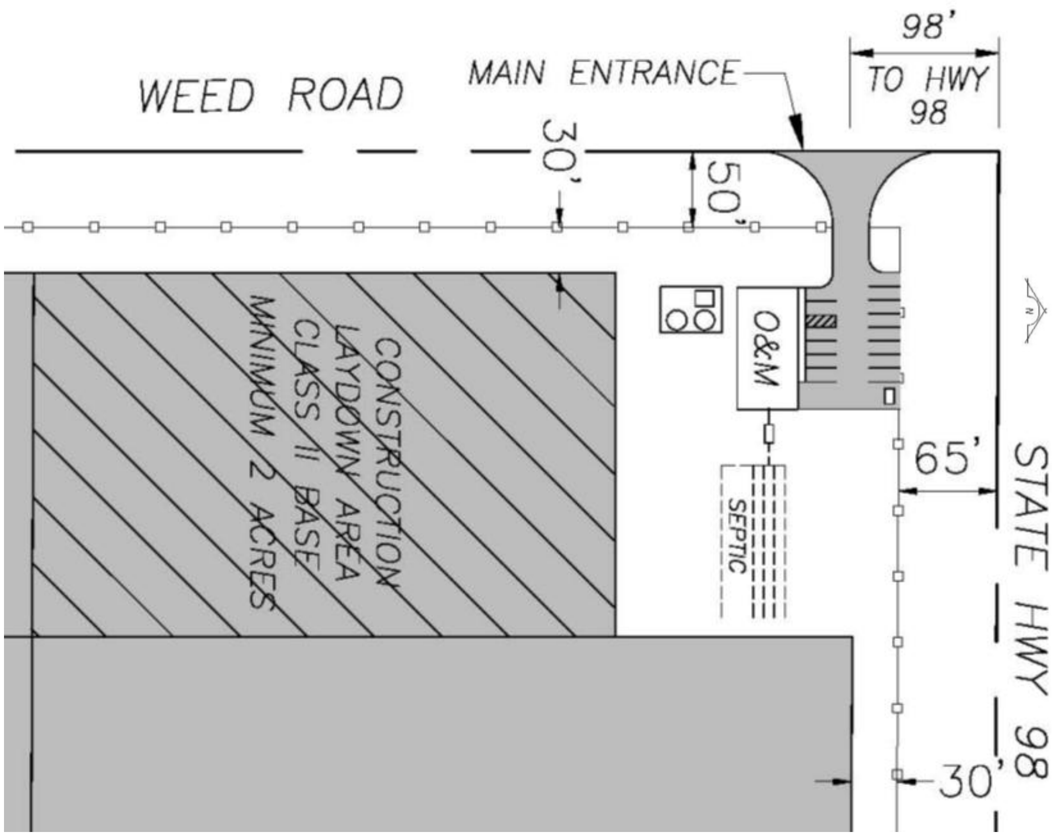
The Applicant proposes to situate the solar array on agricultural lands generally located between Kubler to the north and the US-Mexico border to the south, and between Hammers Road to the east and a private road to the west (½ mile west of Corda Road). Any Imperial Irrigation District (IID) irrigation canals and drains will remain in place, including maintenance access roads as per IID easements.

The Applicant intends for each phase of CSF-II to have a separate operations and maintenance ("O&M") building (up to approximately 320 square feet each, or 40' x 80' each), with associated parking, which will be constructed near the southeast corner of Weed Road and SR-98 for

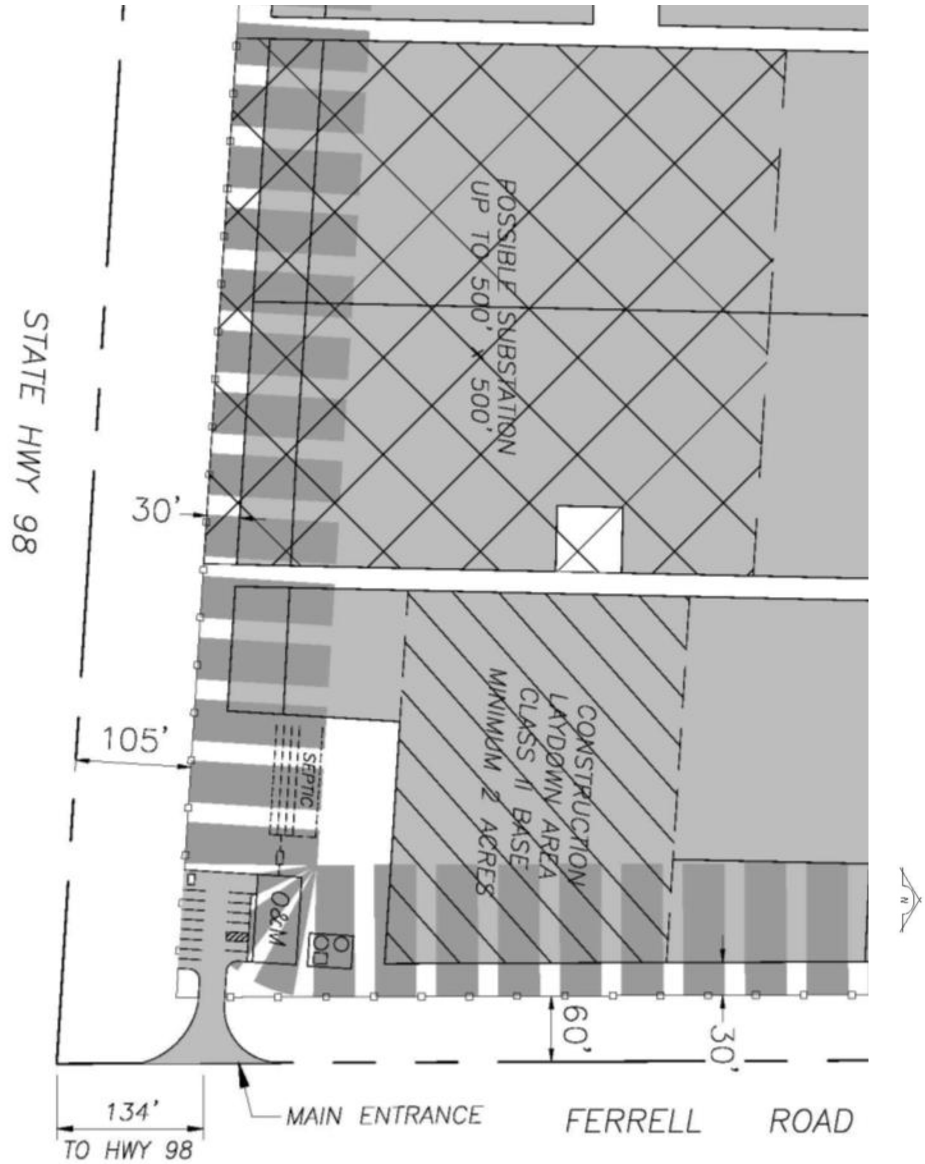
[1] See Appendix for enlarged version

Phase A and the northwest corner of Ferrell Road and SR-98 for Phase B (see Site Layout in the Appendix). The O&M buildings will be steel framed, with metal siding and roof panels, painted to match the surrounding setting (desert sand). Each O&M building site will have a septic tank and leach field for wastewater disposal. A water system and small water treatment plant will be placed at each O&M building to provide onsite de-ionized water for panel washing.

Panel washing requires about one quart of water for each panel per month. It is estimated that water demand from the IID canal for panel washing and domestic use will not exceed 80 acre-feet per year for CSF-II as a whole (split between phases roughly in proportion to their respective acreages). A total of approximately 20,000 to 70,000 gallons of water for CSF-II as a whole (split between phases roughly in proportion to their respective acreages) will be stored in steel tank(s) placed above ground onsite at the water treatment area, under a metal shade structure. 10,000 gallons of water for each O&M building will be exclusively dedicated for O&M firefighting purposes, i.e., to protect the O&M building only. The Applicant intends to also order and obtain a portion of the landlords' agricultural water allocations (roughly 8,000 acre-feet) from the IID to irrigate and maintain a cover crop (saltgrass or similar) on the disturbed portions of the CSF-II site; alternatively or in addition, a soil stabilizer may also be used. If a cover crop is used onsite, it is estimated that water usage to maintain that cover crop would be up to approximately 370 acre-feet per year (split between phases roughly in proportion to their respective acreages).



Operations and Maintenance (O&M) Building Area – Phase A



Operations and Maintenance (O&M) Building Area – Phase B

Access to the CSF-II is via existing paved roads (SR-98, Ferrell Road, and Weed Road). The site will be enclosed with a low voltage, 8-foot high enhanced security fence with perimeter landscaping along public roads. The fencing will be screened with neutral colored slats (or similar) along public roads. The fence and landscaping would largely screen the project from view and beautify the project's frontages to ensure that the project would not adversely impact scenic resources or the visual character of the site and its surroundings. Each O&M building's parking lot and access driveway from will be paved (not curbed). The roads, driveways and parking lots will meet the Department of Public Works and Fire/OES Standards as well as those of the Air Pollution Control District. Alternatively, CSF-II may share the cost of a Wildland Type II (or similar) fire truck with other nearby solar projects to permit the fire department access throughout the site. Parking spaces and walkways will be concreted to meet all California Accessibility Regulations.

The solar array areas will have low lying grass and/or a soil stabilizer to control dust and storm water erosion. A small (48”x 96”) metal sign will be mounted at the entrances to CSF-II that identifies the project.

As noted earlier, it is possible that one phase of CSF-II would simply feed its power to the other phase. In that scenario, CSF-II’s phases would share O&M facilities and would therefore require only one set of O&M facilities (O&M building with associated parking area, water tank(s), dedicated 10,000 gallons of fire-fighting water to protect the O&M building, etc.). The other O&M building area would instead be covered by solar panels. It is also possible that CSF-II would share another legal entity’s O&M facilities. In that scenario, CSF-II’s own onsite O&M facility needs c/would therefore be reduced or eliminated, and any unused O&M building area depicted in the Site Layout c/would instead be covered by solar panels.

TECHNICAL STUDIES[1]

Hazardous Materials (Phase I Environmental Site Assessment)

A Phase I Environmental Site Assessment (ESA) was completed for the CSF-II site by GS Lyon Consultants, Inc. in April 2011. The assessment revealed two Recognized Environmental Conditions (RECs) in connection with the property:

- A small crop duster airstrip and operations base transects a portion of CSF-II Phase A (but falls outside Phase A's project boundaries); no further action was deemed necessary.
- A small (less than 2 acres) farm shop is located in the northeast corner of CSF-II Phase A, and hydrocarbon stains were found on surface soils; a Phase II ESA was recommended for the farm shop site.

A follow-up technical memo in April 2011 (subsequent to the preparation of the above report) noted that the conclusions reached in the original report were the same regardless of whether the project is developed in one or two phases. The Applicant noted that while the identified RECs remain regardless of phasing, they pertain only to Phase A of CSF-II since Phase B is located more than one mile west Phase A.

Geotechnical and GeoHazards Study

A geologic hazards survey was completed for the CSF-II site by Landmark Consultants, Inc. (El Centro, CA) in April 2011. No geologic hazards exist on or within the near vicinity of the site.

A follow-up technical memo in April 2011 (subsequent to the preparation of the above report) noted that the conclusions reached in the original report were the same regardless of whether the project is developed in one or two phases.

Transportation Impact Analysis

In April 2011, Linscott, Law & Greenspan, Engineers completed a Traffic Impact Analysis to assess the impact of the construction and operation of the solar farm to the roadways and intersections that will be utilized by the Project. The study estimated traffic volumes, including projected construction and operations traffic, would remain below the acceptable traffic volume thresholds identified by the County.

Visualization Study

In April 2011, Modative completed a visualization study to determine the aesthetic impacts of the proposed solar farm to the surrounding area. As shown in the visualization, the project will not damage any scenic resources or have a significant impact to the visual character of the site and its surroundings.

[1] See appendix for technical studies and reports

Glare Analysis for Ground Traffic

In April 2011, Good Company completed a reflectivity study to assess the project's potential for glare along nearby traffic corridors. The study concluded that the panels' orientation for either fixed-tilt or single-axis tracking solar panels results in angles of reflection well above the built environment and nearby traffic corridors. At the project's proposed perimeter fence, which lies 30 feet from the first solar panels, the minimum height of the reflection is already at 35.8 feet or higher (depending on the time of year). At farther distances, the height of reflection is higher.

Glare Analysis for Air Traffic

In April 2011, Aztec Engineering completed a reflectivity study to assess the project's potential for glare and glint affecting air traffic to and from Calexico Airport. The study concluded that neither fixed-tilt nor tracking solar panels at CSF-II will have any relevant effect for airplanes landing at or taking off from the airport. In the few days in the year when there is some glint produced by the project's solar panels, airplanes will also be directly facing the sun (which will render the glint effect negligible), so the panels will not have a relevant effect on airplanes' visibility, nor deteriorate the actual approaching or launching flight conditions.

Biological Survey

In April 2011, Barrett's Biological Surveys (El Centro, CA) completed a Biological Resources Technical Report for the CSF-II site. Eleven (11) burrowing owls and eight (8) burrows were observed onsite for CSF-II. Of these, two (2) owls and three (3) burrows were found on CSF-II Phase A land, while nine (9) owls and five (5) burrows were found on CSF-II Phase B land. Nine (9) burrowing owls and eight (8) burrows were found in the buffer zone of CSF-II, which includes IID canals, drains, and roads. Of these, two (2) owls and three (3) burrows were found in the buffer zone of CSF-II Phase A, while seven (7) owls and five (5) burrows were found in the buffer zone of CSF-II Phase B. A cover crop could be maintained onsite, which would provide a foraging habitat for the burrowing owls.

In addition, two mesquite trees were found on CSF-II Phase A land (one in an IID right-of-way).

Cultural Analysis

In April 2011, AECOM (formerly EDAW) completed cultural literature review of the CSF-II project site and a one-mile radius around the site. A records search and literature review identified two (2) cultural resources recorded within one mile of CSF-II (but not in the project area itself). A historic mesquite thicket was found within one mile of Phase B, while segments of the All-American Canal were found within one mile of Phase A.

DESCRIPTION OF THE CSF-II ARRAY

The Applicant estimates that CSF-II will utilize approximately 800,000 to 1.6 million PV panels (roughly half allocated to each phase), depending on the power rating of the panels procured; this range may change somewhat as PV technology continues to change and improve. These panels will be mounted on frameworks made of galvanized steel or aluminum in continuous rows of up to 500 feet in length. The arrays are grouped to create grids of up to 500' x 500' (typ), with inverter modules and a transformer near the center of each grid. The grids produce approximately 1.1 MW to 1.4 MW direct electrical current (DC), which is converted to alternating electrical current (AC) at the inverter module. Each grid's inverter modules and transformer will be housed within an up to roughly 160 square foot container or similar structure. CSF-II will also have several electrical control containers which would look similar to inverter containers.

Typical Inverter Container

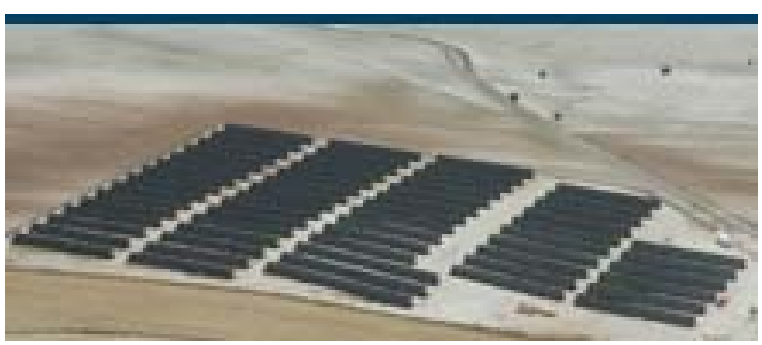
The approximate 20 kV to 70 kV output from the transformer will be transferred to each phase of CSF-II's respective onsite electrical substation (one substation is planned for each phase), which will step up the voltage to a maximum of 230 kV. The power will then be transferred to the Imperial Valley Substation using one of the methods described earlier.

Each onsite substation will be fed via buried electrical conduits, electrical conductor wires, and/or up to a maximum of 230 kV overhead electrical transmission lines that run along the CSF-II property line, roads, or parcel boundaries in some cases. Each onsite substation will occupy an area of up to 500' x 500', located in the southeast corner of two private roads (½ mile west of Weed Road and ½ mile south of SR-98) for Phase A and the northwest corner of Ferrell Road and SR-98 for Phase B.

As noted earlier, it is possible that one phase of CSF-II would simply feed its power to the other phase; this would occur via electrical transmission facilities described above. In that scenario, CSF-II's phases would share a substation designed to accommodate both phases. The other phase would therefore not require its own substation, and this area would instead be covered by solar panels. It is also possible that CSF-II would share facilities with one or more separate legal entities. In such a scenario, CSF-II c/would either "host" a shared substation located onsite or transmit its power to a shared substation located offsite. If an offsite substation is used, the potential CSF-II onsite substation locations depicted in the Site Layout (see Appendix) c/would instead be covered by solar panels.

An up to 230 kV transmission line designed to interconnect CSF-II with other nearby solar projects may traverse CSF-II land along the edge(s) of the project, and may connect to CSF-II's onsite substation(s). Please see Site Layout in the Appendix for the location of an up to 120-foot wide corridor that could accommodate an up to 230 kV power line.

A 20-foot wide all-weather gravel road will be located within each 500 feet of solar panels to provide County fire/emergency vehicle access within the facility and to allow access to the DC to AC electrical inverter modules. Additionally, a 20-foot wide all-weather gravel road will also exist between the perimeter fence and the solar panels with additional space in the corners for turning radii for a County fire truck. Alternatively, CSF-II may share the cost of a Wildland Type II (or similar) fire truck with other nearby solar projects to permit the fire department access throughout the site.



Solar PV Power Plant Examples (Greece and Spain)

Typical Solar PV Mounting Structure

Onsite Substations

The onsite substations will occupy an area of up to 500' x 500', located in the southeast corner of two private roads (½ mile west of Weed Road and ½ mile south of SR-98) for Phase A and the northwest corner of Ferrell Road and SR-98 for Phase B. The onsite substations will have breakers, step-up transformers, and other necessary electrical equipment such as an electrical control container. The substation areas will be secured separately by an additional 8-foot high enhanced security chain-link fence.

As noted earlier, it is possible that one phase of CSF-II would simply feed its power to the other phase; this would occur via electrical transmission facilities described earlier. In that scenario, CSF-II's phases would share a substation designed to accommodate both phases. The other phase would therefore not require its own substation, and this area would instead be covered by solar panels. It is also possible that CSF-II would share facilities with one or more separate legal entities. In such a scenario, CSF-II would either "host" a shared substation located onsite or transmit its power to a shared substation located offsite. If an offsite substation is used, the potential CSF-II onsite substation locations depicted in the Site Layout (see Appendix) c/would instead be covered by solar panels

In the event that one phase "hosts" an onsite substation to be shared by one or more nearby solar projects, the substation's equipment would be designed to accommodate up to 230 kV electrical output from each of those projects. A 230 kV gen-tie line designed to interconnect CSF-II with other nearby solar projects may traverse CSF-II land along the edge(s) of the project or parcel boundaries and may connect to CSF-II's onsite substation(s). Please see Site Layout in the Appendix for the location of an up to 120-foot wide corridor that could accommodate an up to 230 kV transmission line.

Typical Substation Design

Typical Substation Design (Midway Substation)

Annual Production and In-Service-Date

The CSF-II facility will provide maximum electrical output during daylight hours. Peak electricity demand in California corresponds with air conditioning use on summer afternoons when ambient temperatures are high. CSF-II's peak generating capacity corresponds to this time-period when the peak solar energy, solar insulation value, is highest. There is no generating capacity between sunset and sunrise due to the lack of solar energy.

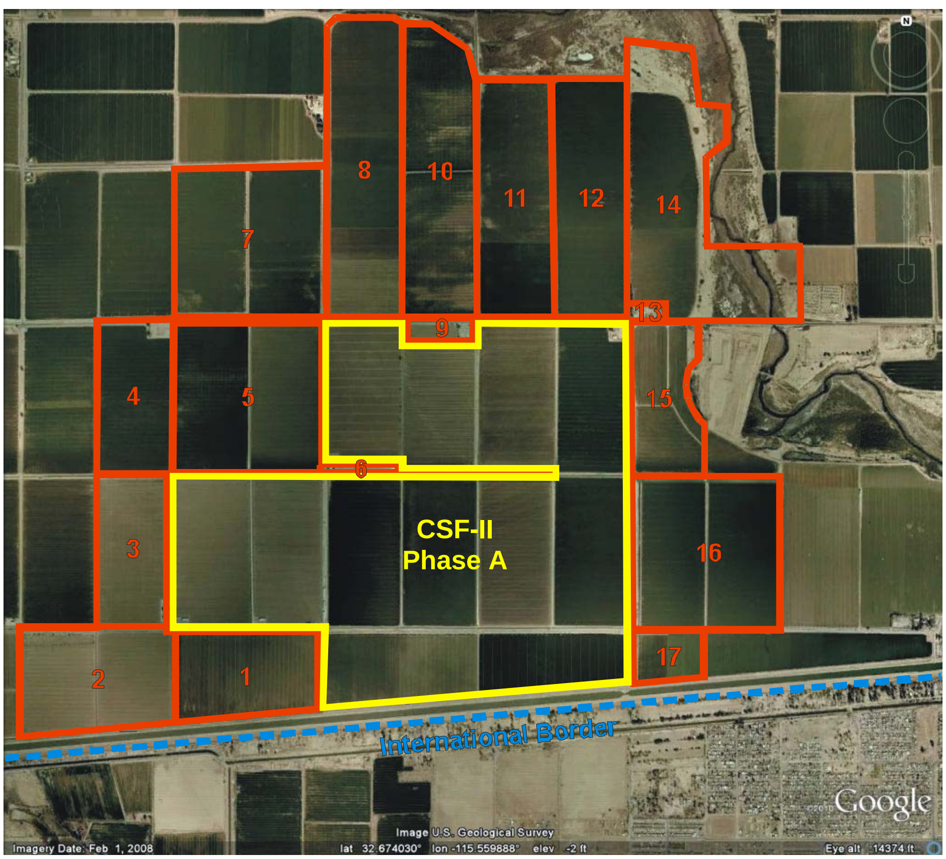
CSF-II as a whole will have a total power output of up to 200 MW AC (up to 100 MW planned for each of two phases) with an annual production of up to approximately 480,000 MWh per year. Construction of CSF-II will be phased in blocks as interconnection becomes available, with the full 200 MW capacity scheduled to be available by 2014 ("In-Service-Date"). The In-Service-Date assumes that, permitting, financing, power purchase agreement ("PPA") negotiations and interconnection and transmission availability are in accordance with the project schedule.

SURROUNDING PROPERTIES

CSF-II abuts mostly agricultural land uses to the north, south, east, and west, with the exception of isolated residential and/or commercial structures and a small crop duster airstrip that transects a portion of CSF-II Phase A. In addition, the US-Mexico border is located just beyond the southern boundary of the project, and SR-98 runs between CSF-II Phase A and Phase B. The project is located approximately two miles west of the city of Calexico.

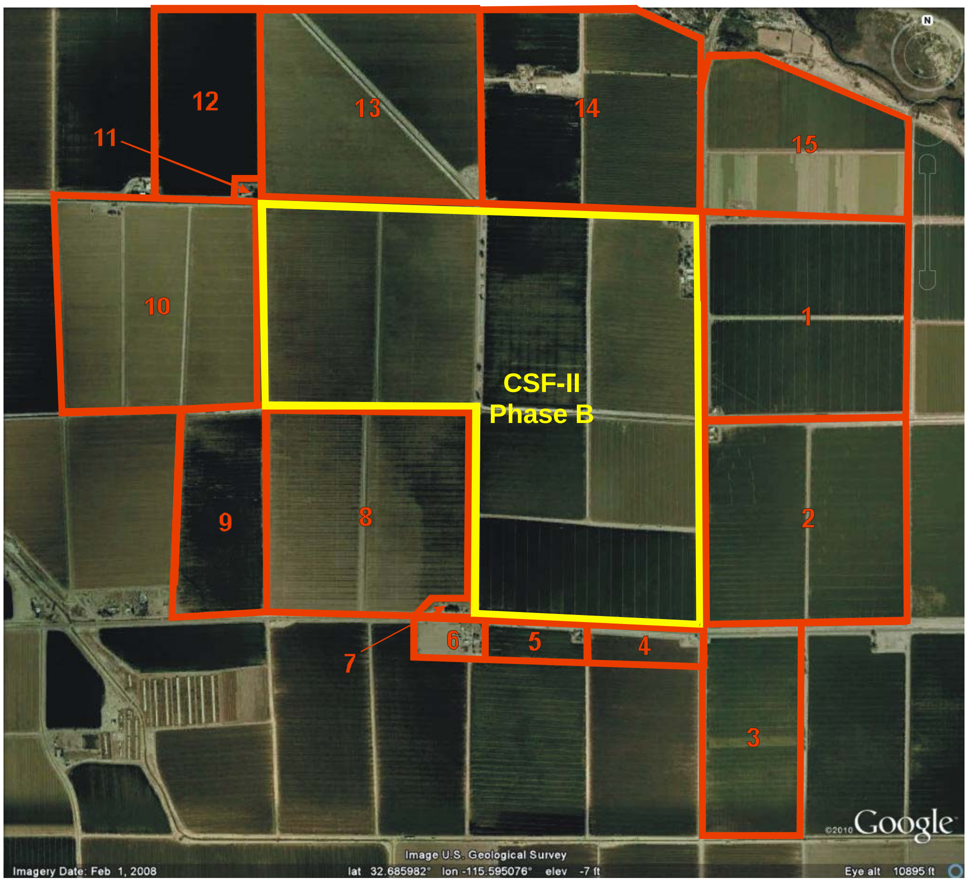
Adjacent Owners List/APN List

Phase A No.	Assessor's Parcel No.	Owner	Owner's Address
1	059-130-004	Calexico West Inc.	9590 Chesapeake Dr Ste 101, San Diego, CA 92123
2	059-130-005	Calexico West Inc.	5540 Ruffin Rd #A, San Diego, CA 92123
3	059-130-002	Calexico West Inc.	9590 Chesapeake Dr Ste 101, San Diego, CA 92123
4	059-120-003	West-Gro Farms Inc	PO Box 1748, El Centro, CA 92244
5	059-120-004	West-Gro Farms Inc	PO Box 1748, El Centro, CA 92244
6	059-110-004	Frontier Agriculture Service Inc	PO Box 1768, Calexico, CA 92231
7	059-050-003	Joy Johnson	2140 El Camino Rinconado, Tuscon, AZ 85749
8	059-060-007	Joy Phoenix	2140 N. El Camino Rinconado, Tuscon, AZ 85749
9	059-110-001	Mabel C. Rocamora	3163 Quiet Hills Dr, Escondido, CA 92029
10	059-060-006	Joy Phoenix	2140 El Camino Rinconado, Tuscon, AZ 85749
11	059-060-005	Joy Phoenix	2140 El Camino Rinconado, Tuscon, AZ 85749
12	059-060-004	Joy Phoenix	2140 N. El Camino Rinconado, Tuscon, AZ 85749
13	059-070-015	C & G Farms, Inc.	PO Box 2216 Gonzales, CA 93926
14	059-070-014	Joy Phoenix	2140 N. El Camino Rinconado, Tuscon, AZ 85749
15	059-100-029	Calexico West Inc	5540 Ruffin Rd #A, San Diego, CA 92123
16	059-100-013	John Carter	PO Box 1945, El Centro, CA 92244
17	059-100-028	Calexico West Inc.	5540 Ruffin Rd #A, San Diego, CA 92123



Adjacent Owners Map

Phase B No.	Assessor's Parcel No.	Owner	Owner's Address
1	059-050-001	Joy Johnson	2140 El Camino Rinconado, Tuscon, AZ 85749
2	059-120-001	Joy Johnson	2140 El Camino Rinconado, Tuscon, AZ 85749
3	059-120-002	James A & Dorothy G Ellis	1301 S. Grade Rd, Alpine, CA 91901
4	052-210-035	Calexico West, Inc	PO Box 421217, San Diego, CA 92142
5	052-210-034	Calexico West, Inc	PO Box 421217, San Diego, CA 92142
6	052-210-033	Mariana Gonzalez Valle	698 W. HWY 98, Calexico, CA 92231
7	052-180-065	NL Mora, T Mora Aguilar, L Mora Chavez	704 W. HWY 98, Calexico, CA 92231
8	052-180-064	Monica & Jason Salma	PO Box 2978, Riverside, CA 92516
9	052-180-040	Monica & Jason Salma	PO Box 2978, Riverside, CA 92516
10	052-180-048	Monica & Jason Salma	PO Box 2978, Riverside, CA 92516
11	052-180-055	Maria Othon	603 George Rd, Calexico, CA 92231
12	052-180-054	C & G Farms	PO Box 2216, Gonzales, CA 93926
13	052-180-018	Jim Preece	246 E. Dealwood Rd, El Centro, CA 92243
14	052-180-042	Graig Andrew Corda	690 Corda Rd, Calexico, CA 92231
15	059-040-013	D Bingham, D Adamek, D Wheeler	1223 Westwind Dr, El Centro, CA 92243

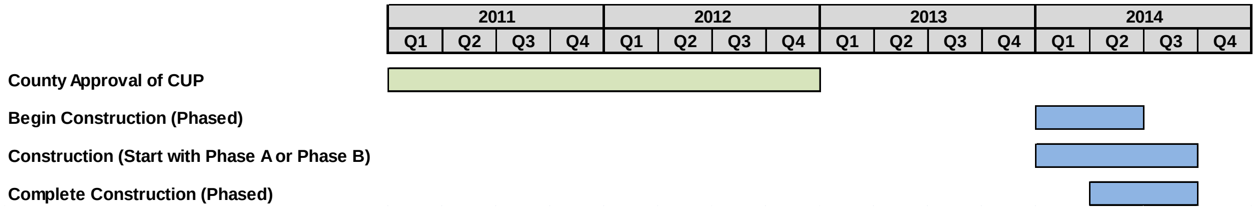


Adjacent Owners Map

No roadways will be affected by CSF-II, except during the project's 6 to 9 month construction (for the project as a whole). Construction truck traffic will reach CSF-II via SR-98, Weed Road, and Ferrell Road. Despite the increased traffic during construction of the proposed project (inclusive of Phase A and Phase B combined), a Traffic Impact Analysis found that the traffic volumes on these roads are still below the volume thresholds identified by the County.

DEVELOPMENT SCHEDULE

It is anticipated that permitting, construction, and operation of the CSF-II facility will generally adhere to the following schedule:



Note that either Phase A or Phase B may be constructed first.

PUBLIC UTILITIES AND SERVICES

The CSF-II is expected to be serviced as follows:

1) *Refuse* – Allied Waste Management/Palo Verde Valley Disposal
2) *Sewer* – On-site Septic System
3) *Water* – IID supply/onsite treatment
4) *Police* – Imperial County Sheriff Department
5) *Fire* – Imperial County Fire Station
6) *Electric* – Imperial Irrigation District
7) *Telephone* – AT&T

PROJECT FEATURES AND BEST MANAGEMENT PRACTICES (BMPs)

The following sections describe standard project features and best management practices that will be applied during construction and long-term operation of CSF-II in an effort to avoid negative environmental impacts.

Aesthetics

The project will have an enhanced security perimeter fence no less than 8 feet high, and will be screened with neutral colored (desert sand) PVC slats (or similar) along each public road. Perimeter landscaping will be provided along each public road.

Erosion Control and Storm Water Drainage

Earthmoving activities will be limited to the construction of the access roads, O&M buildings, the electrical substations and any storm water protection or storage (detention) facilities. Final grading may include revegetation with low lying grass or applying earth-binding materials to disturbed areas.

Site Drainage during Construction and Operation

To the extent possible and economically feasible, site drainage during construction will follow predevelopment flow patterns. Ultimate site discharge will be at the low corners of the project parcels. The incremental storm water run-off attributed to construction of foundations for solar panel mounting frames, foundations within the substations, inverter modules, control containers, and the O&M building area will be contained by ditches, drains, and/or elevated roadways at the low corner of the project parcels, which will prevent offsite migration of storm water and allow sedimentation and absorption with ultimate discharge at the low corner of the project parcels. Designs will be based upon the State's Construction General Permit (2009-0009DWQ) for erosion and sediment control. All storm water storage areas will be designed to absorb or discharge within 72 hours (mosquito abatement measure). CSF-II intends avoid any existing tile drainage, if possible.

Temporary Erosion and Sedimentation Control Measures

Temporary erosion and sedimentation control measures to be used during construction will be designed to prevent sediments from being displaced and carried offsite by storm water runoff. Prior to beginning excavation activities, a silt fence, straw bales, or other BMP will be installed where appropriate where minor runoff to offsite areas could occur. The silt fence will filter sediments from construction runoff. During construction, the extent of earth disturbances will be minimized as much as practical. Temporary BMP control measures will be maintained as necessary throughout the construction period. A sediment trap will be constructed for the major site runoff discharge. The sediment trap will be located immediately upstream of the site boundary.

Waste and Hazardous Materials Management

The CSF-II will have minimal levels of materials on site that have been defined as hazardous under 40CFR, Part 261. The following materials will be used during the construction, operation, and long term maintenance of CSF-II:

- Insulating oil – used for electrical equipment
- Lubricating oil – used for maintenance vehicles
- Various solvents/detergents – equipment cleaning
- Gasoline – used for maintenance vehicles

Wastes will be managed in accordance with applicable regulations of the approved CSF-II facility as follows:

- Any hazardous wastes will be maintained at quantities below the threshold requiring a Hazardous Material Management Program (HMMP) (one 55 gallon drum per phase, if operated separately).
- All waste drums will be stored in accordance with good practice and applicable regulations, and will be protected from environmental conditions, including rain, wind, and direct heat and physical hazards such as vehicle traffic and sources of heat and impact.
- Waste lubricating oils will be recovered and reclaimed by a waste oil-recycling contractor.

- Spent lubricating oil filters from vehicles will be disposed at an authorized waste disposal facility.
- Batteries will be reclaimed and recycled by authorized facilities.
- Any hazardous waste generation, handling, and storage areas will be inspected and monitored on a regular basis.
- California-authorized and certified hazardous waste haulers will transport hazardous wastes to registered waste treatment, storage, disposal, and recycling facilities.
- Emergency response and reporting will be performed per written procedures that follow government and industry requirements and standards.
- Workers will be trained to handle hazardous wastes generated at the site.
- If 55 gallons of hazardous waste or more should accumulate onsite, storage of such hazardous waste will at no time exceed 90 days from the date of initial accumulation exceeding 55 gallons, and a HMMP shall be developed as described below.

The storage, use, and handling of any hazardous materials will be in accordance with applicable regulations and will include the following items:

- Facility personnel will be trained in hazardous materials and hazardous waste awareness, handling, and management as required for their level of responsibility.
- Bulk chemicals will be stored in the original shipping container provided by and returned to the chemical provider.
- Chemical storage areas and feed/transfer areas will be equipped with secondary containment sufficient in size to contain the volume of the largest container or tank including an allowance for rainwater.
- Small-quantity chemicals used for maintenance tasks will be kept in appropriate flammable material or corrosive material storage lockers following applicable regulations.
- Periodic inspections will ensure that all containers are secure and properly marked.
- Sanitary wastewater generated at the facility cannot be conveyed to an existing sewage public treatment facility. There are no public entities that manage sanitary wastewater flows for locations in the vicinity of the project site.

Should onsite storage of hazardous materials exceed one 55 gallon drum per phase, if operated separately, CSF-II will implement a Hazardous Materials Management Program (HMMP) developed for the CSF-II construction and operation stages, and will include, at a minimum, procedures for:

1. Hazardous materials handling, use and storage,
2. Emergency response,
3. Spill control and prevention,
4. Employee training,
5. Record keeping and reporting.

The HMMP (if required) will be developed and implemented prior to start of construction or prior to the storage on-site of an excess of 55 gallons of hazardous materials per phase. The program will be revised and updated as required in a timely manner. Employees will be trained and the program implemented prior to the start of commercial operation. The procedures outlined in the HMMP will be in accordance with all applicable regulations.

Spill Prevention and Containment

Spill prevention and containment for construction and operation of CSF-II will adhere as follows to EPA's guidance on Spill Prevention Control and Countermeasures (SPCC) as any hazardous materials stored onsite will be in quantities of less than 55 gallons per phase, if operated separately.

> *Regularly scheduled inspections, evaluations, and testing by qualified personnel are critical parts of discharge prevention. Their purpose is to prevent, predict, and readily detect discharges. They are conducted not only on containers, but also on associated piping, valves, and appurtenances, and on other equipment and components that could be a source or cause of an oil release.*

Waste Water/Septic System

A standard onsite septic tank and leach field will be used for each project phase (unless the phases share O&M facilities, or CSF-II shares another legal entity's O&M facilities) to dispose sanitary wastewater, designed to meet operation and maintenance guidelines required by Imperial County laws, ordinances, regulations and standards. Any necessary replacement leach field will be adjacent to the primary field.

Inert Solids

Inert solid wastes resulting from construction activities may include recyclable items such as paper, cardboard, solid concrete and block, metals, wire, glass, type 1-4 plastics, drywall, wood, and lubricating oils. Non-recyclable items include insulation, other plastics, food waste, vinyl flooring and base, carpeting, paint containers, packing materials, and other construction wastes. All packaging materials for components of the solar farm shall be crated and recycled offsite. No crating or packaging materials will be placed in local landfills. Management practices require recycling of contractor waste when possible, and proper storage of non-recyclable waste and debris to prevent wind dispersion, and weekly pickup of non-recyclable wastes with disposal at a local approved landfill.

Chemical storage tanks (if any) will be shop-fabricated, double-walled construction meeting applicable regulations. These tanks, as well as portable drums (if any), will be provided with appropriate anchors or cradles and placed within spill containment basins.

Any wastes classified as hazardous such as solvents, degreasing agents, concrete curing compounds, paints, adhesives, chemicals, or chemical containers will be stored (in an approved storage facility/shed/structure) and disposed of as required by local and state regulations. Material quantities of hazardous wastes are not expected.

FIRE PROTECTION

Each phase of CSF-II will have onsite fire-protection systems and will be supported by local fire protection services. Portable and fixed fire suppression equipment and systems will be included in the project. Portable fire extinguishers will be located at strategic locations throughout the project site. The fixed fire protection system will also include 10,000 gallons of dedicated water from onsite storage tank(s) and wet fire-department connection for protection of the O&M

building only. Pressurized waterlines or fire department connections are not planned for the solar arrays.

As noted earlier, it is possible that one phase of CSF-II would simply feed its power to the other phase. In that scenario, CSF-II's phases would share O&M facilities and would therefore require only one O&M building area and associated water tank(s), with 10,000 gallons for the project as a whole dedicated to protecting the O&M building. The other O&M building area would instead be covered by solar panels. It is also possible that CSF-II would share another legal entity's O&M facilities. In that scenario, CSF-II's own onsite O&M facility needs c/would therefore be reduced or eliminated, and any unused O&M building area depicted in the Site Layout c/would instead be covered by solar panels

Employees will be given fire safety training including instruction in fire prevention, the use of portable fire extinguishers and the reporting of fires to the local fire department. Employees will only suppress fires in their incipient stage.

Service roads along the perimeter and within the property will be minimum 20-foot wide, all-weather gravel roads capable of supporting a 75,000 pound load imposed by a fire apparatus. Alternatively, CSF-II may share the cost of a Wildland Type II (or similar) fire truck with other nearby solar projects to permit the fire department access throughout the site. Interior roads with a minimum width of 20 feet will be spaced approximately 500 feet from each other. Each of these roads will have a turnaround area with a minimum 60' x 60' dimension (or 60' x 80' including the service road) approximately every 500 feet from each other or the perimeter fire service road.

If a cover crop (saltgrass or similar) is used onsite, it will be maintained at a reasonably low height to avoid the potential for a fire incident.

SITE SECURITY AND FENCING

An onsite security system will be installed. Controlled access gates will be maintained at the entrances to CSF-II.

Perimeter security fencing and access gates will be provided for CSF-II. The security fencing will be low voltage and provided with warning reflective signage. Regular site security vehicular patrols will be conducted to provide additional site security. Site access will be provided to offsite emergency response teams that respond in the event of an "after-hours" emergency. Access to the property will either be via swinging or sliding gates with a minimum width of 20 feet. Entry into CSF-II by fire department or emergency units will be handled on a manual override basis. If the gates are manual, a key for the gate will be provided in a key box at the gate location.

HEALTH AND SAFETY

Safety precautions and emergency systems will be implemented as part of the design and construction of the CSF-II facility to ensure safe and reliable operation. Administrative controls will include classroom and hands-on training in operating and maintenance procedures, general safety items, and a planned maintenance program. These will work with the system design and monitoring features to enhance safety and reliability.

All employees shall be provided with communication devices, cell phones, or walkie-talkies, to aid in the event of an emergency situation on-site.

Safety, Auxiliary and Emergency Systems

Safety, auxiliary, and emergency systems may consist of lighting, grounding, backup UPS systems and diesel power generators, fire and hazardous materials safety systems, security systems, chemical safety systems, and emergency response teams. The O&M building will include its own utilities and services, such as emergency power, fire suppression, and treated water systems.

CSF-II will implement programs to assure compliance with federal and state occupational safety and health program requirements. In addition to compliance with these programs, CSF-II will identify and implement plant-specific programs that effectively assess potential hazards and mitigate them on a routine basis.

As discussed above, hazardous materials may be stored and used at CSF-II during construction and operation, but will be restricted to less than one 55 gallon drum per phase (if operated separately). The design and construction of any hazardous materials storage and dispensing systems will be in accordance with applicable regulations. Hazardous materials storage areas will be designed with curbs or other containment measures like double-walled storage tanks, if applicable, to contain spills and leaks. If hazardous materials exceed 55 gallons, a Hazardous Material Management Program will be developed as described above.

Emergency eyewashes and showers (if required by fire or safety codes) will be provided at appropriate locations. Appropriate Personal Protective Equipment (PPE) will be provided during both construction and operation of the CSF-II facility.

Emergency Response Plan

CSF-II will have an Emergency Response Plan (ERP). The ERP will address potential emergencies including chemical releases, fires, and injuries. The ERP will describe emergency response equipment and equipment locations, evacuation routes, procedures for reporting to local emergency response agencies, responsibilities for emergency response, and other required actions to be taken in the event of an emergency.

Employee response to an emergency will be limited to an immediate response to minimize the risk of escalation of the accident or injury. Employees will be trained to respond to fires, spills, earthquakes, and injuries. A first aid facility with adequate first-aid supplies and personnel qualified in first aid treatment will be onsite.

ADDITIONAL INFORMATION

Project Construction

Construction of the CSF-II as a whole will require approximately 6 to 9 months. This section describes major components during the design, layout, and construction processes.

Project Engineering, Procurement, Construction, and Compliance

The engineering, procurement, and construction of the CSF-II will be accomplished as follows:

1. AES Solar has been selected to provide detailed engineering, preparation of drawings and specifications for permitting. The Applicant will provide project management. Long lead equipment will be procured by AES Solar in advance of the start of construction.
2. A Construction Manager Contractor at Risk (CMAR) for site preparation, buildings, services, power collection, and transmission will be identified in advance of the start of construction for value engineering input, construction preparation, and procurement.
3. A Prime Equipment Supplier (PES) or Suppliers will be identified for the manufacturing, assembly, and installation of the PV arrays and inverters.

The overall detailed construction schedule will be prepared and coordinated through the prime CMAR contractor with input from the Applicant. Detailed construction operating plans will be included in the Project Execution Plan (PEP) as follows:

1. A project specific Occupational Safety and Health Plan will be developed to specify worker safety procedures and the Applicant's and CMAR's responsibilities in order to prevent incidents involving personnel on the project site.
2. The PEP will address roles, responsibilities and identify primary contacts, procedures, and actions required during the design, procurement, and construction stages of the work.
3. A project specific Quality Assurance / Control Plan will be developed by the CMAR Contractor(s)' QA/QC Departments with input from appropriate representatives of the Contractor(s)' Project Team, the Applicant, and major equipment suppliers.
4. During construction, construction trades personnel parking will be located within the lay-down area. The parking area will be fenced and controlled by security personnel during normal work hours.
5. A temporary gravel area of minimum two acres will be located adjacent to each O&M building. This area will be located near the southeast corner of SR-98 and Weed Road for Phase A and near the northwest corner of SR-98 and Ferrell Road for Phase B. It will be devoted to equipment and materials lay-down, storage, parking of construction equipment, small fabrication areas and office trailers. If one phase of CSF-II's O&M building is not necessary, its temporary lay-down area would instead be covered by solar panels.
6. The CMAR contractor(s) will have at least one Safety Coordinator who will prepare a site-specific safety plan. Emergency services will be coordinated with the nearby fire department.
7. All contractors, subcontractors, and consultants will participate in comprehensive health, safety, environmental, HMMP (if required), and emergency procedures training prior to any initial site activities.

Site Preparation, Surveying and Staking

Site preparation, surveying, and staking of the project site will begin following the Applicant's receipt of Imperial County's approval to implement CSF-II. Activities that will be included in this phase include:

1. Land surveying activities (including benchmarks),
2. Staking of construction limits (lay-down yards, access roads, temporary use areas),
3. Briefing of contractors.

Temporary Lay Down Yard

A minimum two-acre lay down yard will be required for PV panel offloading and steel frame assembly. It is assumed that the PV panel arrays will be assembled in parallel with the construction of the O&M building and the electrical substation. Upon completion of the project, the lay down yard will be revegetated in low lying grass or with a soil stabilizer, and the area will be filled with solar panels as shown in the Site Layout. If CSF-II's phases share O&M, a single lay down yard may be used for the entire CSF-II project. If CSF-II shares another legal entity's facilities, a separate lay down yard may not be needed for CSF-II; alternatively, the lay down yard area needed may be reduced.

Site Clearing

The proposed project will be designed in such a manner to minimize ground disturbances and resulting environmental impacts.

PV Panel Steel Mounting Frames Installation

Foundations for mounting frames typically consist of a 12 to 15 inch diameter drilled pier extending up to 10 feet below ground surface.

PV Solar Array Field

To the extent possible and economically feasible, the site layout will attempt to maintain predevelopment drainage patterns. Discharge from the site will be at the low corners of the project parcels. If an onsite O&M building is constructed, the 20-foot wide paved entry road will be designed to convey nuisance runoff to drainage channels/swales. It is expected that storm water runoff will flow over the crown of any paved roadway, which is typically less than six inches from swale flow line to crown at centerline of roadway, thus allowing drainage during storms. Interior access roads (e.g., between PV panel grids) will be all-weather gravel roads, as noted earlier. Alternatively, CSF-II may share the cost of a Wildland Type II (or similar) fire truck with other nearby solar projects to permit the fire department access throughout the site. Unpaved access areas between PV panel rows may be planted with saltgrass (or similar), which would be watered infrequently, thus not requiring mowing or cutting, yet maintaining binding of the soil with the grass root system. As an alternative to the cover crop, a permeable soil stabilizing polymer may be used as a dust suppressant.

It is anticipated that specialized trades and higher skill level construction personnel will commute to the CSF-II construction site(s) on a daily basis from within the Imperial Valley area

and, in the case of those travelling from longer distances, may stay in temporary housing or apartments during the week for the duration of construction of the proposed project.

Heavy construction will be scheduled to occur between 6:00 am and 5:00 pm, Monday through Friday. Additional hours may be necessary to make up schedule deficiencies or to complete critical construction activities. There is estimated to be up to 60 workers per day during the construction of the project.

Some activities may continue 24 hours per day, seven days per week. These activities include, but are not limited to, refueling equipment, staging material for the following day's construction activities, quality assurance/control, and commissioning.

Materials and supplies will be delivered to the site by truck. Truck deliveries will normally occur during daylight hours. However, there will be offloading and/or transporting to the site on weekends and during evening hours.

O&M Building

It is anticipated that an O&M Building (up to approximately 320 square feet, or 40' x 80') will be required for each phase of CSF-II. The O&M buildings will include:

1. Office
2. Repair Building/Parts Storage
3. Electrical/Array Control Room
4. Restrooms
5. Water Treatment Facility

As noted earlier, it is possible that one phase of CSF-II would simply feed its power to the other phase. In that scenario, CSF-II's phases would share O&M facilities and would therefore require only one O&M building area with associated parking area, which would be sized appropriately to accommodate both phases. The other O&M building area would instead be covered by solar panels. It is also possible that CSF-II would share another legal entity's O&M facilities. In that scenario, CSF-II's own onsite O&M facility needs c/would therefore be reduced or eliminated, and any unused O&M building area depicted in the Site Layout c/would instead be covered by solar panels

Work Force

It is expected that CSF-II will be operated with a staff of up to twelve (12) full-time employees for both phases combined (split roughly evenly between phases). The facility will operate seven days per week, generating electricity during normal daylight hours when the solar energy is available. Maintenance activities will occur seven days a week, 24 hours a day to ensure PV Panel output when solar energy is available. As noted earlier, these employees may be shared by both phases, in which case the number of staff would be reduced to approximately ten (10). It is also possible that CSF-II would share another legal entity's O&M facilities. In that scenario, CSF-II c/would also share personnel with that legal entity, thereby reducing or eliminating the onsite staff required for CSF-II.

Project Lighting

The project will be compliant with the Imperial County Zoning Ordinance. Day lighting will supplement energy-efficient fluorescent lighting in the O&M building(s). Emergency egress identification and path lighting will be provided per building code requirements.

Electrical Grounding

The facility will be designed in accordance with National Electrical Code requirements including MAG amendments. The electrical system may experience unit ground potential rise due to ground fault, lightning strike, or switching surges. A grounding system will be installed to permit dissipation of ground fault currents and minimize ground potential rise.

The grounding grid will be designed with adequate capacity to dissipate heat produced by ground current under fault conditions and be designed to maintain safe voltage gradients. Ground resistivity testing and calculations will be performed during detailed design to determine the number and type of grounding electrodes and the grid spacing necessary to ensure safe step and touch potentials under fault conditions. Each PV panel string within the solar field will be bonded to the foundation to provide localized grounding of each string.

Within project buildings, grounding conductors will bond building structural steel, metallic piping, and non-energized metallic parts of electrical equipment to the building grounding systems. Isolated grounding conductors will connect sensitive control systems to the building grounding systems.

If required, a cathodic protection system will be designed and installed to control electrochemical corrosion of exterior surfaces of underground carbon steel, copper, aluminum, and stainless steel. Bottoms of soil- or sand-pad-mounted steel tanks and exterior surfaces of underground ductile or cast-iron pipe will be protected against corrosion. The type of cathodic protection system (galvanic or impressed current) will be based on soil characteristics, the amount of material to be protected, and the interference effects of any nearby cathodic protection systems.

Lightning protection will follow the National Fire Protection Association (NFPA) 780 guidelines and will be provided where required for project structures and pumps.

Heating, Ventilation, and Air-Conditioning

Heating, ventilation, and air-conditioning (HVAC) will consist of heat pump ground-mounted units with code-required fresh make-up air capabilities for the office and control area of the O&M building(s). Mechanical ventilation will be provided for the maintenance areas.

Temperature control will be provided for both personnel and equipment areas, and humidity control will be provided in the control and communications equipment rooms.

Operations and Maintenance

Operation and Facility Maintenance Needs

Once CSF-II is constructed, minimal maintenance needs are required and are generally limited to the following:

1. Washing of PV panels
2. Monitoring electricity generation
3. Providing site security
4. Facility maintenance (e.g., replacing or repairing PV modules, wiring, control equipment and inverters)
5. Site maintenance, including but not limited to:
    a. Cover crop (if any) c/would be maintained via periodic flood irrigation
    b. Landscaping will be maintained via drip irrigation, sprinklers, and/or bubblers, as appropriate

Maintenance Activities

PV panel washing, operations dust control, domestic water use, and water treatment under regular maintenance routines will require up to 80 acre-feet (26 million gallons) of water per year for the entire CSF-II project (split between phases roughly in proportion to their respective acreages). Backwash water from the reverse osmosis water treatment plant will equal the clean process water volume. Backwash water will be applied to any required landscaped areas along the perimeter fence. A very low speed is anticipated for maintenance vehicles.

Access roads and solar array long-term maintenance will include:

1. Temporary soil stabilization techniques, such as scheduling construction sequences to minimize land disturbance during the rainy and non-rainy seasons and employing BMPs appropriate for the season.
2. Sediment control techniques, such as using silt fences, straw bales, and/or fiber rolls to intercept and slow the flow of sediment-laden runoff such that sediment settles before runoff leaves the site.
3. Wind erosion control by maintaining low lying grass over or dust palliatives, as required, to prevent or alleviate windblown dust.
4. Other measures, as appropriate, to comply with Imperial County laws, ordinances, regulations and standards.

EXISTING CONDITIONS OF PROJECT SITE

CALEXICO SOLAR FARM II PHASES A & B

(89MA 8ME, LLC)

Figure 1: Satellite view (Google Earth)

Figure 2: Project phases

Figure 3: Photo locations

Figure 4: Phase A, location #1 looking southwest

Figure 5: Phase A, location #2 looking northwest

Figure 6: Phase A, location #3 looking northeast

Figure 7: Phase A, location #4 looking northeast

Figure 8: Phase A, location #5 looking southeast

Figure 9: Phase A, location #6 looking southeast

Figure 10: Phase A, location #7 looking southeast

Figure 11: Phase B, location #8 looking northwest

Figure 12: Phase B, location #9 looking northeast

Figure 13: Phase B, location #10 looking northeast

Figure 14: Phase B, location #11 looking southeast

Figure 15: Phase B, location #12 looking southwest

Appendix F

Land Evaluation and Site Assessment (LESA) Model

LESA ASSESSMENT
CALEXICO SOLAR FARM II
PHASE B PROJECT AREA

CALEXICO SOLAR FARM II PHASE B PROJECT

(NW/4 Section 12, W/2 NE/4 Section 12,
E/2 NE/4 (portion) Section 12, SE/4 Section 12, T17S R13E SBB&M)

IMPERIAL COUNTY, CALIFORNIA

April 2011

EMA Report No. 2176-02B

Prepared for:

89MA 8ME, LLC
10100 Santa Monica Boulevard, Suite 300
Los Angeles, California 90067

EMA

ENVIRONMENTAL MANAGEMENT ASSOCIATES

LAND EVALUATION AND SITE ASSESSMENT MODEL

CALEXICO SOLAR FARM II PHASE B PROJECT

**(NW/4 Section 12, W/2 NE/4 Section 12,
E/2 NE/4 (portion) Section 12, SE/4 Section 12, T17S R13E SBB&M)**

IMPERIAL COUNTY, CALIFORNIA

The Land Evaluation and Site Assessment (LESA) model is an approach for rating the relative quality of land resources based upon specific measurable features. The LESA model was first developed by the federal Natural Resources Conservation Service (NRCS) in 1981. It was subsequently adapted in 1990 by the California Department of Conservation to evaluate land use decisions that affect the conversion of agriculture lands in California. The formulation of the California LESA Model is intended to provide lead agencies under the California Environmental Quality Act (CEQA) with an optional methodology to ensure that significant effects on the environment of agricultural land conversions are quantitatively and consistently considered in the environmental review process.

For determining the potential CEQA significance resulting from the conversion of agricultural lands to some other purpose, the California Agricultural LESA Model has developed Scoring Thresholds which are used to compare the Final LESA Score and the Weighted Factor Scores for the Project with suggested Scoring Decisions. These LESA Scores do not take into consideration any proposed mitigation measures or other factors that might affect a lead agency's determination of the significance of the agricultural lands conversion impact under CEQA.

The information provided on the following pages present documentation of the LESA assessment prepared using the California Agricultural LESA Model for the proposed Calexico Solar Farm II Phase B Project (Project) (APN 052-180-022-000; 052-180-043-000 [portion]; 052-180-044-000; 052-180-050-000; and 052-180-051-000). The proposed Project would be constructed on approximately 528 acres of privately owned land located about six miles west of the city of Calexico, California (Figure 1). The Project is bounded on the south by California State Highway 98, bounded on the east by Ferrell Road and bounded on the north by Kubler Road, which are Imperial County roads (Figure 1).

LESA ASSESSMENT

89MA 8ME, LLC
CALEXICO SOLAR FARM II PHASE B PROJECT
IMPERIAL COUNTY, NEVADA

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Figure 1 : Location Map

Land Evaluation Worksheet							
A	B	C	D	E	F	G	H
Soil Map Unit*	**Project Acres**	**Proportion of Project Area**	**LCC** (irrigated)**	**LCC Rating (irrigated)*****	**LCC Score (C x E)**	**Storie Index****	**Storie Index Score (C x G)**
110	6.87	0.013	IIw	80	1.04	45	0.59
114	231.85	0.439	IIIw	60	26.34	42	18.44
115	289.42	0.548	IIIw	60	32.88	67	36.72
Totals	528	1.000		**LCC Total Score**	60	**Storie Index Total Score**	56
Total Project Area (acres)=	528						

* The Soil Map Unit information and acreage were determined from the current soil survey information available at the USDA Natural Resources Conservation Service website: http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx (Figure 2).

** The Land Capability Classification and Storie Index information was obtained from the current soil survey information available at the USDA Natural Resources Conservation Service website: http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx (Appendix A).

*** The LCC Rating for irrigated land was determined from the LCC Point Rating Table 2 from the LESA Instruction Manual (California Department of Conservation 1997).

Imperial County, California, Imperial Valley Area (CA683)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
110	HOLTVILLE SILTY CLAY, WET	6.7	1.3%
114	IMPERIAL SILTY CLAY, WET	230.4	43.9%
115	IMPERIAL-GLENBAR SILTY CLAY LOAMS, WET, 0 TO 2 PERCENT SLOPES	287.8	54.8%
Totals for Area of Interest		524.9	100.0%

*Adjusted to 528 acres

Figure 2 : Project Area Soils Map

	Site Assessment Worksheet 1		
	Project Size Score*		
	I	J	K
	LCC Class I-II	LCC Class III	LCC Class IV-VIII
Project Acres per LCC Class	6.87	231.85	
Project Acres per LCC Class		289.42	
Project Acres per LCC Class			
Project Acres per LCC Class			
Project Acres per LCC Class			
Total Project Acres per LCC Class	**7**	**521.27**	**0**
**** Project Size Scores***	**0**	**100**	**0**
Highest Project Size Score	**100**		

* Project Size Score was determined from the Project Size Scoring Table from the LESA Instruction Manual (California Department of Conservation 1997).

Site Assessment Worksheet 2 Water Resources Availability				
A	**B**	**C**	**D**	**E**
Project Portion	**Water Source**	**Proportion of Project Area**	**Water Availability Score***	**Weighted Availability Score (C x D)**
1	Irrigation District Only	1.0	100	100
2				
3				
4				
5				
6				
		(Must Sum to 1.0)	***Total Water Resource Score***	100

* The Water Availability Score was determined using the Water Resources Availability Scoring Table from the LESA Instruction Manual (California Department of Conservation 1997).

Site Assessment Worksheet 3						
Surrounding Agricultural Land & Surrounding Protected Resource Land						
A	**B**	**C**	**D**	**E**	**F**	**G**
Zone of Influence*					**Surrounding Agricultural Land Score (From LESA Manual Table 6)**	**Surrounding Protected Resource Land Score (From LESA Manual Table 7)****
Total Acres	**Acres in Agriculture**	**Acres of Protected Resource Land**	**Percent in Agriculture (B/A)**	**Percent Protected Resource Land (C/A)**		
2297.2	2206	0	96	0	100	0

* In conformance with the instructions in the LESA Instruction Manual (California Department of Conservation 1997), the Zone of Influence was determined by drawing the smallest rectangle that could completely encompass the entire Project Area. A second rectangle was then drawn which extended one quarter mile on all sides beyond the first rectangle. The Zone of Influence is represented by the entire area of all parcels with any lands inside the outer rectangle, less the area of the proposed project (Figure 3).

** The LESA Instruction Manual (California Department of Conservation 1997) describes *Protected Resource Land* as those lands with long term use restrictions that are compatible with or supportive of agricultural uses of land. Included among them are the following: Williamson Act contracted lands; Publicly owned lands maintained as park, forest, or watershed resources; and Lands with agricultural, wildlife habitat, open space, or other natural resource easements that restrict the conversion of such land to urban or industrial uses.

Surrounding Parcels***	Acres	Protected Resource Land?	Percent Protected Resource Land	Acres in Protected Land	Agricultural Land?	Percent Agricultural Land	Acres of Agriculture
052-180-040	67.9	N	0	0	Y	100	67.9
052-180-048	170.7	N	0	0	Y	100	170.7
052-180-054	82.7	N	0	0	Y	100	82.7
052-180-055	1.1	N	0	0	Y	100	1.1
052-180-018	346.3	N	0	0	Y	100	346.3
052-180-042	204.0	N	0	0	Y	100	204.0
059-040-013	128.4	N	0	0	Y	90	115.6
052-180-064	157.7	N	0	0	Y	100	157.7
052-180-065	2.2	N	0	0	Y	100	2.2
052-210-033	10.3	N	0	0	N	0	0.0
052-210-034	14.3	N	0	0	Y	100	14.3
052-210-035	14.6	N	0	0	Y	100	14.6
059-050-001	163.1	N	0	0	Y	100	163.1
059-120-001	167.2	N	0	0	Y	100	167.2
059-120-002	78.7	N	0	0	Y	100	78.7

Surrounding Parcels***	Acres	Protected Resource Land?	Percent Protected Resource Land	Acres in Protected Land	Agricultural Land?	Percent Agricultural Land	Acres of Agriculture	
059-120-003	82.1	N	0	0	Y	100	82.1	
052-180-039	152.4	N	0	0	Y	95	144.8	
052-180-049	11.8	N	0	0	N	0	0.0	
052-210-028	71.7	N	0	0	Y	40	28.7	
052-210-036	364.0	N	0	0	Y	100	364.0	
052-180-043 (PORTION)	6.0	N	0	0	N	0	0.0	
Total	**2297.2**		**Total**	**0**		**Total**	**2205.6**	

**The Imperial County Assessors website was accessed to identify the surrounding parcel numbers (http://imperialcounty.net/Assessor/index.html). The percentage of agriculture was determined from a map overlay used to estimate the proportion of land in agriculture and the California Department of Conservation Important Farmland Map Series.

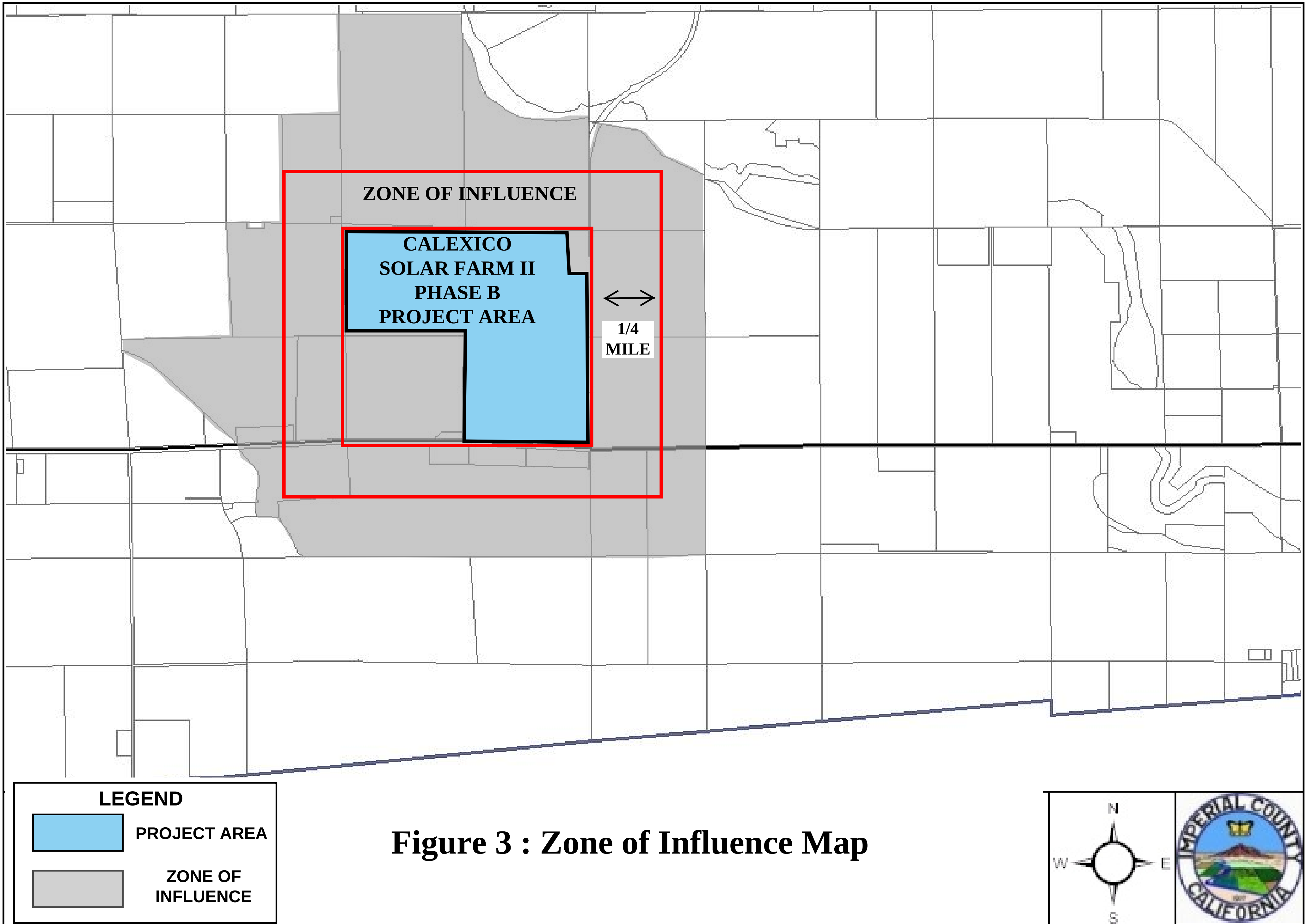


Figure 3 : Zone of Influence Map

This map represents a visual display of related geographic information. Data provided hereon is not a guarantee of actual field conditions. To be sure of complete accuracy, please contact IMPERIALCOUNTY_PUBLIC staff for the most up-to-date information.

Final LESA Score Sheet			
	Factor Scores	**Factor Weight**	**Weighted Factor Scores**
LE Factors			
Land Capability Classification	60.26	0.25	15.07
Storie Index	55.74	0.25	13.93
LE subtotal		0.50	29.00
SA Factors			
Project Size	100	0.15	15.00
Water Resource Availability	100	0.15	15.00
Surrounding Agricultural Land	100	0.15	15.00
Protected Resource Land	0	0.05	0.00
SA Subtotal		0.50	45.00
		Total LESA Score	**74.00**

California LESA Model Scoring Thresholds	
Total LESA Score	**Scoring Decision**
0 to 39 Points	Not Considered Significant
40 to 59 Points	Considered Significant only if LE and SA subscores are each greater than or equal to 20 points
60 to 79 Points	Considered Significant unless either LE or SA subscore is less than 20 points
80 to 100 Points	Considered Significant

APPENDIX A: CALEXICO SOLAR FARM II PHASE B PROJECT SOILS DETAILS

Imperial County, California, Imperial Valley Area

110—HOLTVILLE SILTY CLAY, WET

Map Unit Setting

Elevation: -230 to 200 feet
Mean annual precipitation: 0 to 3 inches
Mean annual air temperature: 72 to 75 degrees F
Frost-free period: 300 to 350 days

Map Unit Composition

Holtville, wet, and similar soils: 85 percent
Minor components: 15 percent

Description of Holtville, Wet

Setting

Landform: Basin floors
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from mixed sources

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 5 percent
Maximum salinity: Nonsaline to slightly saline (2.0 to 8.0 mmhos/cm)
Sodium adsorption ratio, maximum: 10.0
Available water capacity: Moderate (about 7.6 inches)

Interpretive groups

Land capability classification (irrigated): 2w
Land capability (nonirrigated): 7w

Typical profile

0 to 17 inches: Silty clay
17 to 24 inches: Clay
24 to 35 inches: Silt loam
35 to 60 inches: Loamy very fine sand

Minor Components

Glenbar

Percent of map unit: 5 percent

Imperial

Percent of map unit: 5 percent

Indio

Percent of map unit: 3 percent

Vint

Percent of map unit: 2 percent

Data Source Information

Soil Survey Area: Imperial County, California, Imperial Valley Area
Survey Area Data: Version 5, Jul 25, 2008

Imperial County, California, Imperial Valley Area

114—IMPERIAL SILTY CLAY, WET

Map Unit Setting

Elevation: -230 to 200 feet
Mean annual precipitation: 0 to 3 inches
Mean annual air temperature: 72 to 75 degrees F
Frost-free period: 300 to 350 days

Map Unit Composition

Imperial, wet, and similar soils: 85 percent
Minor components: 15 percent

Description of Imperial, Wet

Setting

Landform: Basin floors
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Clayey alluvium derived from mixed sources and/or clayey lacustrine deposits derived from mixed sources

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 5 percent
Maximum salinity: Very slightly saline to slightly saline (4.0 to 8.0 mmhos/cm)
Sodium adsorption ratio, maximum: 20.0
Available water capacity: Moderate (about 8.3 inches)

Interpretive groups

Land capability classification (irrigated): 3w
Land capability (nonirrigated): 7w

Typical profile

0 to 12 inches: Silty clay
12 to 60 inches: Silty clay loam

Minor Components

Glenbar

Percent of map unit: 4 percent

Meloland

Percent of map unit: 4 percent

Holtville

Percent of map unit: 4 percent

Niland

Percent of map unit: 3 percent

Data Source Information

Soil Survey Area: Imperial County, California, Imperial Valley Area
Survey Area Data: Version 5, Jul 25, 2008

Imperial County, California, Imperial Valley Area

115—IMPERIAL-GLENBAR SILTY CLAY LOAMS, WET, 0 TO 2 PERCENT SLOPES

Map Unit Setting

Elevation: -230 to 200 feet
Mean annual precipitation: 0 to 3 inches
Mean annual air temperature: 72 to 75 degrees F
Frost-free period: 300 to 350 days

Map Unit Composition

Glenbar, wet, and similar soils: 40 percent
Imperial, wet, and similar soils: 40 percent
Minor components: 20 percent

Description of Imperial, Wet

Setting

Landform: Basin floors
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Clayey alluvium derived from mixed sources and/or clayey lacustrine deposits derived from mixed sources

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 5 percent
Maximum salinity: Very slightly saline to slightly saline (4.0 to 8.0 mmhos/cm)
Sodium adsorption ratio, maximum: 20.0
Available water capacity: Moderate (about 8.6 inches)

Interpretive groups

Land capability classification (irrigated): 3w
Land capability (nonirrigated): 7w

Typical profile

0 to 12 inches: Silty clay loam
12 to 60 inches: Silty clay loam

Description of Glenbar, Wet

Setting

Landform: Basin floors
Landform position (three-dimensional): Talf

Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from mixed

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 5 percent
Maximum salinity: Nonsaline to slightly saline (2.0 to 8.0 mmhos/cm)
Sodium adsorption ratio, maximum: 15.0
Available water capacity: High (about 10.8 inches)

Interpretive groups

Land capability classification (irrigated): 3w
Land capability (nonirrigated): 7w

Typical profile

0 to 13 inches: Silty clay loam
13 to 60 inches: Clay loam

Minor Components

Holtville

Percent of map unit: 10 percent

Meloland

Percent of map unit: 10 percent

Data Source Information

Soil Survey Area: Imperial County, California, Imperial Valley Area
Survey Area Data: Version 5, Jul 25, 2008

California Revised Storie Index Rating (CA)

The Storie Index is a soil rating based on soil properties that govern a soil's potential for cultivated agriculture in California.

The Storie Index asseses the productivity of a soil from the following four characteristics: Factor A, degree of soil profile development; factor B, texture of the surface layer; factor C, slope; and factor X, manageable features, including drainage, microrelief, fertility, acidity, erosion, and salt content. A score ranging from 0 to 100 percent is determined for each factor, and the scores are mukltiplied together to derive an index rating.

For simplification, Storie Index ratings have been combined into six grades classes as follows: Grade 1 (excellent), 100 to 80; grade 2 (good), 79 to 60; grade 3 (fair), 59 to 40; grade 4 (poor), 39 to 20; grade 5 (very poor), 19 to 10; and grade 6 (nonagricultural), less than 10.

Report—California Revised Storie Index Rating (CA)

The Storie Index is a soil rating based on soil properties that govern a soil map unit component's potential for cultivated agriculture. [Absence of an entry indicates that a Storie Index rating is not applicable or was not estimated]. For simplification, Storie Index ratings have been combined into six grades as follows: Grade 1 (Excellent): Soils that rate between 80 and 100 and which are suitable for a wide range of crops. Grade 2 (Good) Soils that rate between 60 and 79 and which are suitable for a wide range of crops. Grade 3 (Fair): Soils that range between 40 and 59. Soils in this grade may give good results with certain specialized crops. Grade 4 (Poor): Soils that rate between 20 and 39 and which have a narrow range in their agricultural potential. Grade 5 (Very Poor): Soil that rate between 10 and 19 and are of very limited agricultural use except for pasture because of adverse soil conditions. Grade 6 (Nonagricultural): Soils that rate less than 10. [The numbers in the "Limiting feature value" column range from 0.01 to 1.00. Soils with a smaller the value have a lower potential for cultivated agriculture. The table shows each of the sub-factors used to generate the Storie Index rating for each soil component].

California Revised Storie Index Rating (CA)– Imperial County, California, Imperial Valley Area				
Map symbol and soil name	Pct. of map unit	California Revised Storie Index (CA)		
		Storie index rating	Storie index grade and limiting features	Limiting feature value
110—HOLTVILLE SILTY CLAY, WET				
Holtville, wet	85	45	Grade Three - Fair	
			Rated Soil Order	1.00
			Profile Group	1.00
			Nearly level to gently sloping	0.98
			Wetness, flooding, ponding, drainage, erosion	0.90
			Toxicity	0.85

California Revised Storie Index Rating (CA)– Imperial County, California, Imperial Valley Area				
Map symbol and soil name	Pct. of map unit	California Revised Storie Index (CA)		
		Storie index rating	Storie index grade and limiting features	Limiting feature value
114—IMPERIAL SILTY CLAY, WET				
Imperial, wet	85	42	Grade Three - Fair	
			Rated Soil Order	1.00
			Profile Group	1.00
			Nearly level to gently sloping	0.98
			Wetness, flooding, ponding, drainage, erosion	0.90
			Toxicity	0.80
115—IMPERIAL-GLENBAR SILTY CLAY LOAMS, WET, 0 TO 2 PERCENT SLOPES				
Glenbar, wet	40	72	Grade Two - Good	
			Rated Soil Order	1.00
			Profile Group	1.00
			Nearly level to gently sloping	0.98
			USDA Texture	0.95
			Wetness, flooding, ponding, drainage, erosion	0.90
Imperial, wet	40	67	Grade Two - Good	
			Rated Soil Order	1.00
			Profile Group	1.00
			Nearly level to gently sloping	0.98
			USDA Texture	0.95
			Wetness, flooding, ponding, drainage, erosion	0.90

Data Source Information

Soil Survey Area: Imperial County, California, Imperial Valley Area
Survey Area Data: Version 5, Jul 25, 2008

Agricultural Restoration Plan

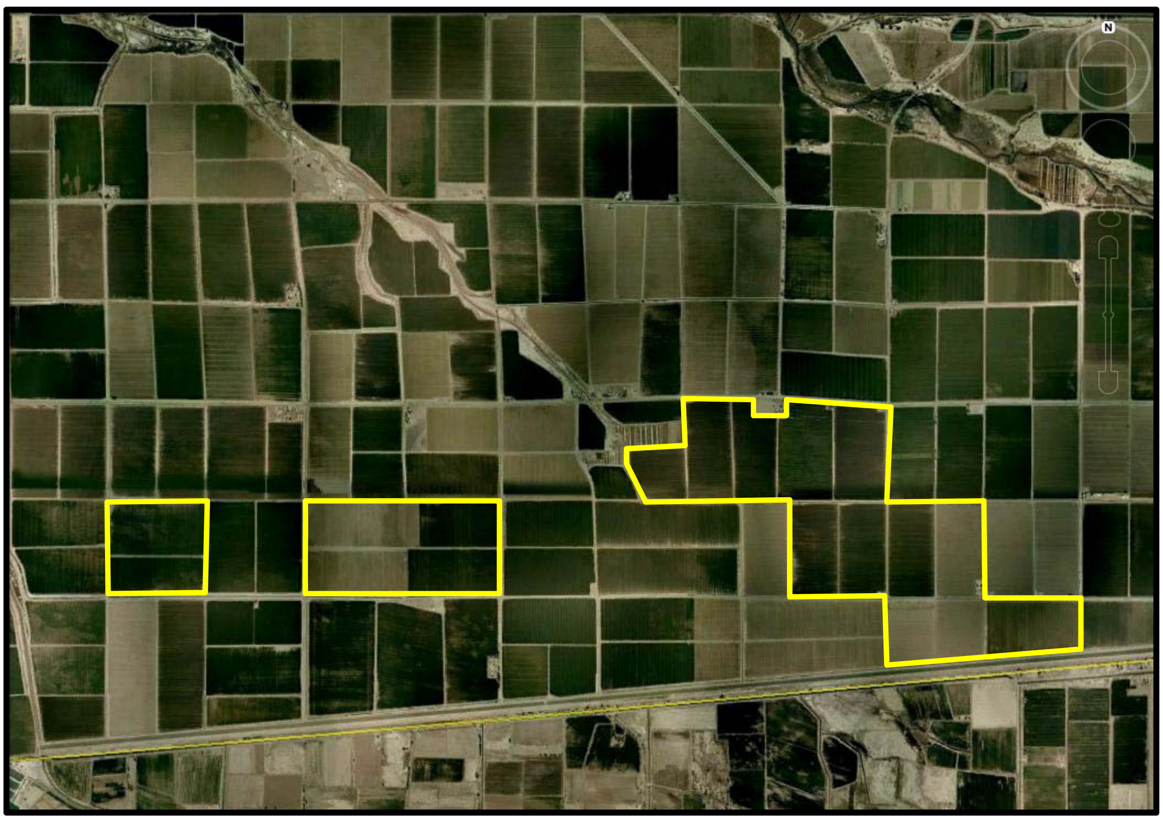
Mount Signal Solar Farm I

South of State Route 98 Weed to Pulliam Road

Calexico, California

Prepared for:

82LV 8ME, LLC
320 Hayward Avenue
Los Angeles, CA 94588



Prepared by:

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January 2012

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January 24, 2012

Mr. Tom Buttgenbach
82LV 8ME, LLC
320 Hayward Avenue
Los Angeles, CA 94588

Engineer's Estimate of Probable Costs
Agricultural Restoration Plan
Mount Signal Solar Farm I
Calexico, California
GSL Project No. GS1023

Dear Mr. Buttgenbach:

GS Lyon personnel have developed an Engineer's Estimate of Probable Costs to restore the agricultural lands to "farm ready conditions" at the Mount Signal Solar Farm I PV Solar Facility in southern Imperial County, California. The solar farm project consists of 200MW of PV solar generation and will encompass eighteen (18) farm fields totaling approximately 1,285 net acres (1,432 gross acres), generally located south of State Route 98 between Weed and Pulliam Roads about 2.5 to 7.5 miles west of Calexico.

The restoration plan exhibits indicate current conditions of the farm fields and the proposed solar power arrays. The estimate accounts for costs restore the land to farm-ready conditions upon ceasing the power facility operation. No crop planting is included in the restoration costs since customary farm practices do not include planting prior to leasing. Crop type and planting is each individual farmer's selection. Costs are provided for replacement of concrete irrigation ditches and subsurface agricultural tile drainage pipelines, deep chiseling (sub-soiling), discing, landplaning and restoration of irrigation land slopes (land–leveling).

This report also identifies Prime Farmland and Farmland of Statewide Importance as defined by the California Department of Conservation.

GS Lyon appreciates the opportunity to provide professional services in developing the restoration plan. Please contact our office with any questions or comments.

Sincerely Yours,
GS Lyon Consultants, Inc.

REGISTERED PROFESSIONAL ENGINEER
JEFFREY O. LYON
No. 31921
EXPIRES 12-31-12
CIVIL
STATE OF CALIFORNIA

Jeffrey O. Lyon, P.E.
Principal Engineer

Table of Contents

Appendices

1.0 Introduction

The Mount Signal Solar Farm I project will occupy eighteen (18) agricultural fields that are currently in agricultural crop production. The lands generally consist of silty clay to fat clay soil that require subsurface tile drains to maintain crop yields, normally used for growing field crops such as alfalfa, bermuda grass, sudan grass and wheat. Even though there are lands identified as "Prime Farmland" by the California Department of Conservation, the cropping patterns of all of the agricultural lands within the Mount Signal Solar Farm I have historically been "field crops". A complete Land Evaluation and Site Assessment (LESA) Model has been prepared for the project (see **Appendix F**).

The Mount Signal Solar Farm I project is expected to consist of 200MW of PV solar generation and extend a minimum of 25 years and may extend up to 40 years (see **Appendix E** – Project Description for project specifics). Without regular crop irrigation occurring during this period, there should be no increase in salts in the field (water table is not high enough to drive salts to the surface).

This restoration plan has been prepared to document the agricultural improvements of each farm field and to provide an estimate of the work (cost) required to return the land to agricultural production upon ceasing operation of the PV solar energy generating facility.

2.0 Restoration Methods

2.1 Irrigation Ditches - During extended periods of non-use (as has occurred recently as a result of the on-farm fallowing program), it has been found that the clay soils dry and shrink away from the concrete lining. The thin concrete lining (1.5 inches thick) is prone to cracking and breakage without support of moist soil behind the lining and the amount of ditch repairs required after extended non-use is generally extensive. It is generally more cost efficient to replace the ditch and field gates than to chase the problems created by fractured ditches.

2.2 Sub-surface Tile Drains - Tile drains that currently exist below the farm fields may be punctured by installation of PV panel frame support posts. In order to insure proper operation of the tile drainage system, a new system has been planned for each farm field. Should the steel support posts not be driven to the tile system depth, then only the red clay or concrete tile portions of the tile system would need to be replaced. The plastic tile lines have been found to be relatively unaffected by extended fallowing periods.

2.3 Ground Preparation - Without agricultural tillage over the 25 to 40 year span of the PV solar energy generating facility operation, the clay soils will become compacted. In order to insure crop growth, the fields will need to be sub-soiled (plow shanks extending to 36" to 42" below ground surface), re-leveled with laser controlled drag-scrapers, manure fertilizer applied, disced (2 directions) and landplaned (or tri-planed). A minimum of six (6) soil samples have been scheduled to be collected from each field and analyzed for agronomic minerals, salts and fertilizer compounds.

3.0 Cost Estimating/Unit Pricing

3.1 Irrigation Ditches - Contractors that routinely install concrete lined irrigation ditches in the Imperial Valley were contacted to develop unit pricing of a farm ditch. The overall cost of placing and compacting a 15 ft. by 2 ft. high ditch pad (native soil from the farm field), trenching for concrete lining, placement of concrete lining, installation of jack gates, installation of outlet pipes and slide gates were included into one cost per foot of concrete ditch construction.

3.2 Subsurface Tile Drains – A specialty tile drainage installation contractor in the Imperial Valley was consulted on the installation of tile drain baselines (8-inch diameter pipelines) and laterals (4-inch pipelines) to establish unit rate pricing of the tile system installations. The lengths of the laterals and baselines were taken from the existing tile drainage maps obtained from Imperial Irrigation District records.

3.3 Ground Preparation - Pricing from local farm service providers was used to determine the unit rate pricing for ground preparation prior to placement of irrigation borders and planting. Standard agricultural practices were used for the work to be performed. Land-leveling costs were developed by consultation with an agricultural land-leveling specialty contractor in the Imperial Valley.

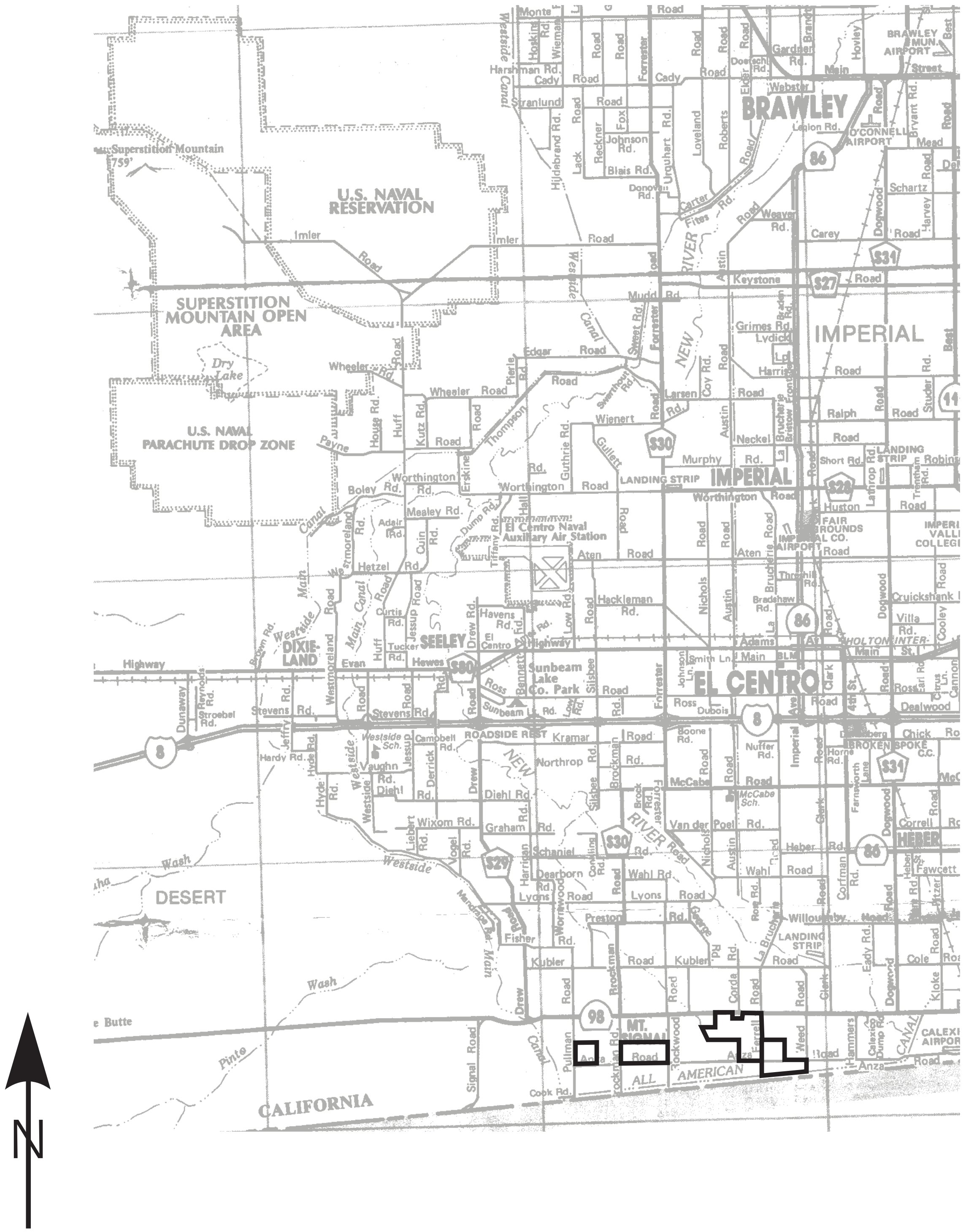
4.0 Prime Farmland and Farmland of State Importance

The California Department of Conservation has classified all agricultural lands in the Imperial Valley as identified in the FARMLAND MAPPING and MONITORING PROGRAM – 2008 Imperial County Important Farmland Map. The Soil Candidate Listing for Prime Farmland and Farmland of Statewide Importance-Imperial County (Rev. 2010) appends the Farmland Map, identifying each soil type described by the US Department of Agriculture, Natural Resources Conservation Service, Soil Survey of Imperial County, Imperial Valley Area, October 1981. The areas that make up Prime Farmland are identified as the Soil Survey Soil Mapping Units described in the Soil Candidate Listing (see **Appendix D**).

This report has identified **76 acres** within the Mount Signal Solar Farm I project site as being classified as **Prime Farmland**. Digital Google Earth™ maps overlain with Soil Survey soil mapping unit contours obtained from the USDA website were used to determine the currently farmed areas that were classified as Prime Farmland. The areas were digitally scaled using electronic mapping programs (see **Plates D5 and D6 – Appendix D**).

Appendix A

Project Location Maps and Maps of Existing Conditions

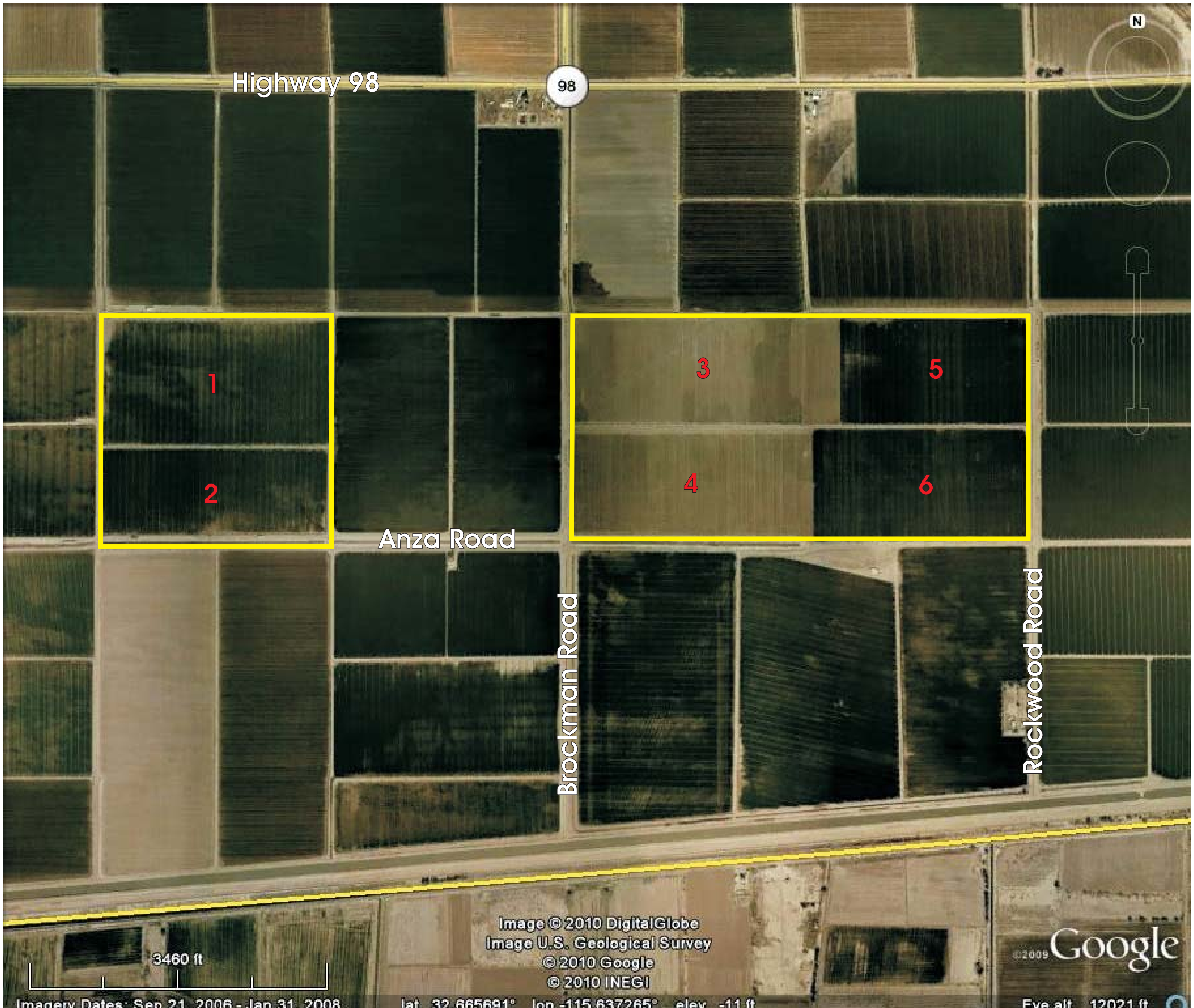


GS Lyon

Project No.: GS1023

Mount Signal Solar Farm I
Vicinity Map

Plate
A-1



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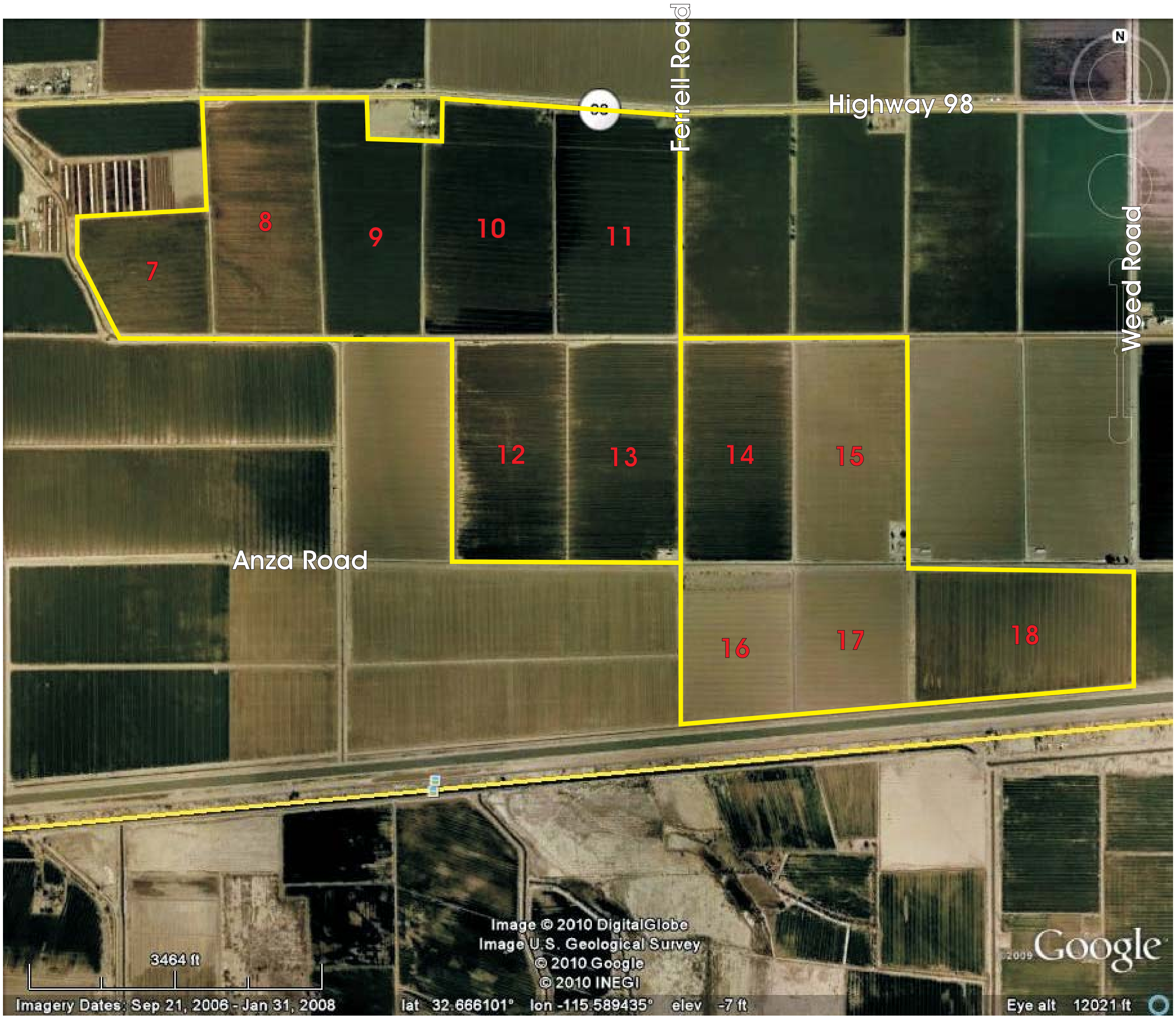
GS Lyon

Project No.: GS1023

Mount Signal Solar Farm I
Site Map

Plate
A-2



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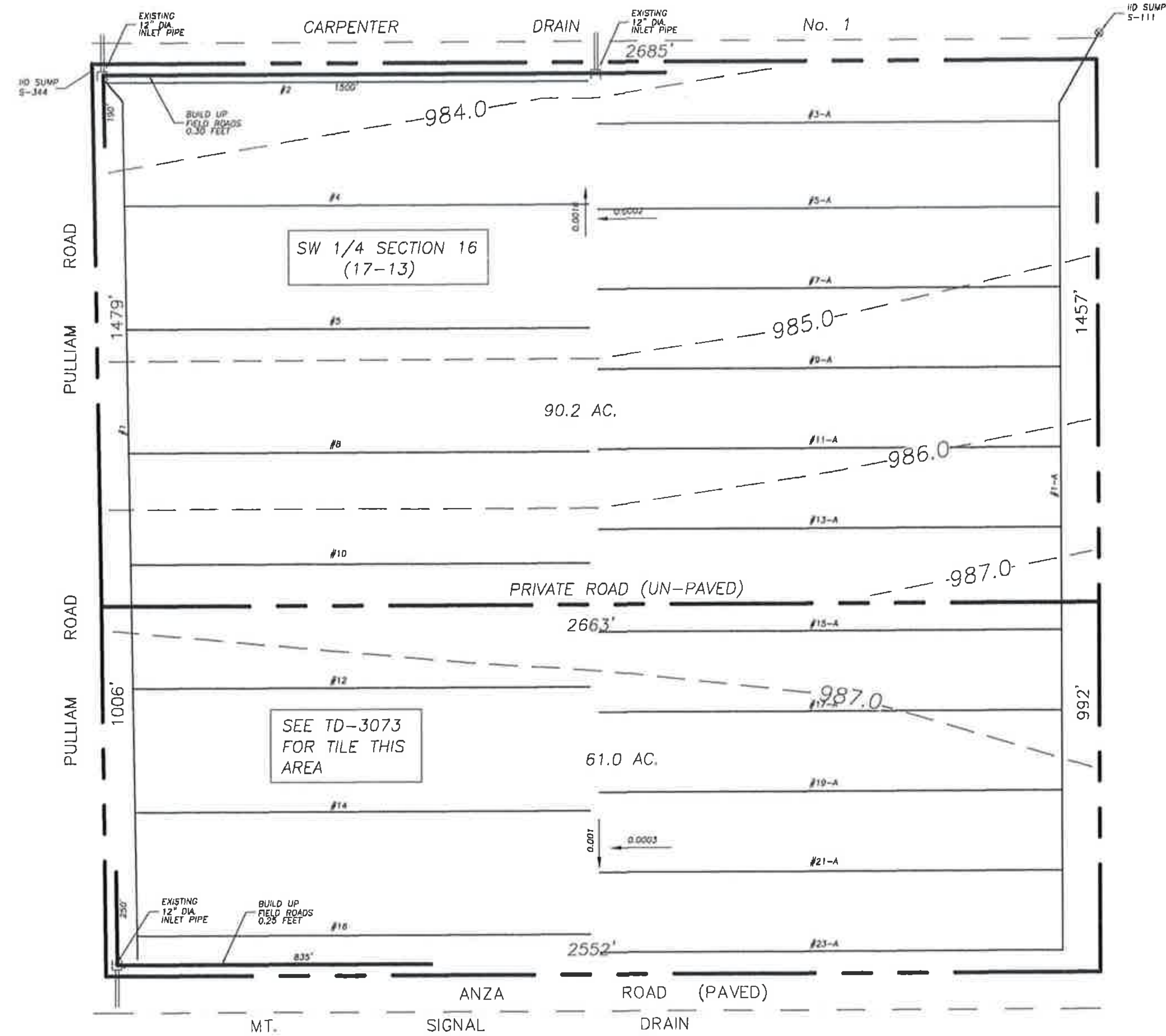
GS Lyon

Project No.: GS1023

Mount Signal Solar Farm I
Site Map

Plate
A-3



SCALE: 1"=200'

JBL JOB No.: J10056

PRINTED: 12/12/11

REV No.	REVISION	DATE

8minutenergy RENEWABLES

PREPARED UNDER THE DIRECT SUPERVISION OF:

JEFFREY O. LYON, R.C.E. 31,921 ENGINEER OF RECORD — DATE

REGISTERED PROFESSIONAL ENGINEER JEFFREY O. LYON RCE 31,921 EXP 12-31-12 CIVIL STATE OF CALIFORNIA

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Engineering & Construction Management
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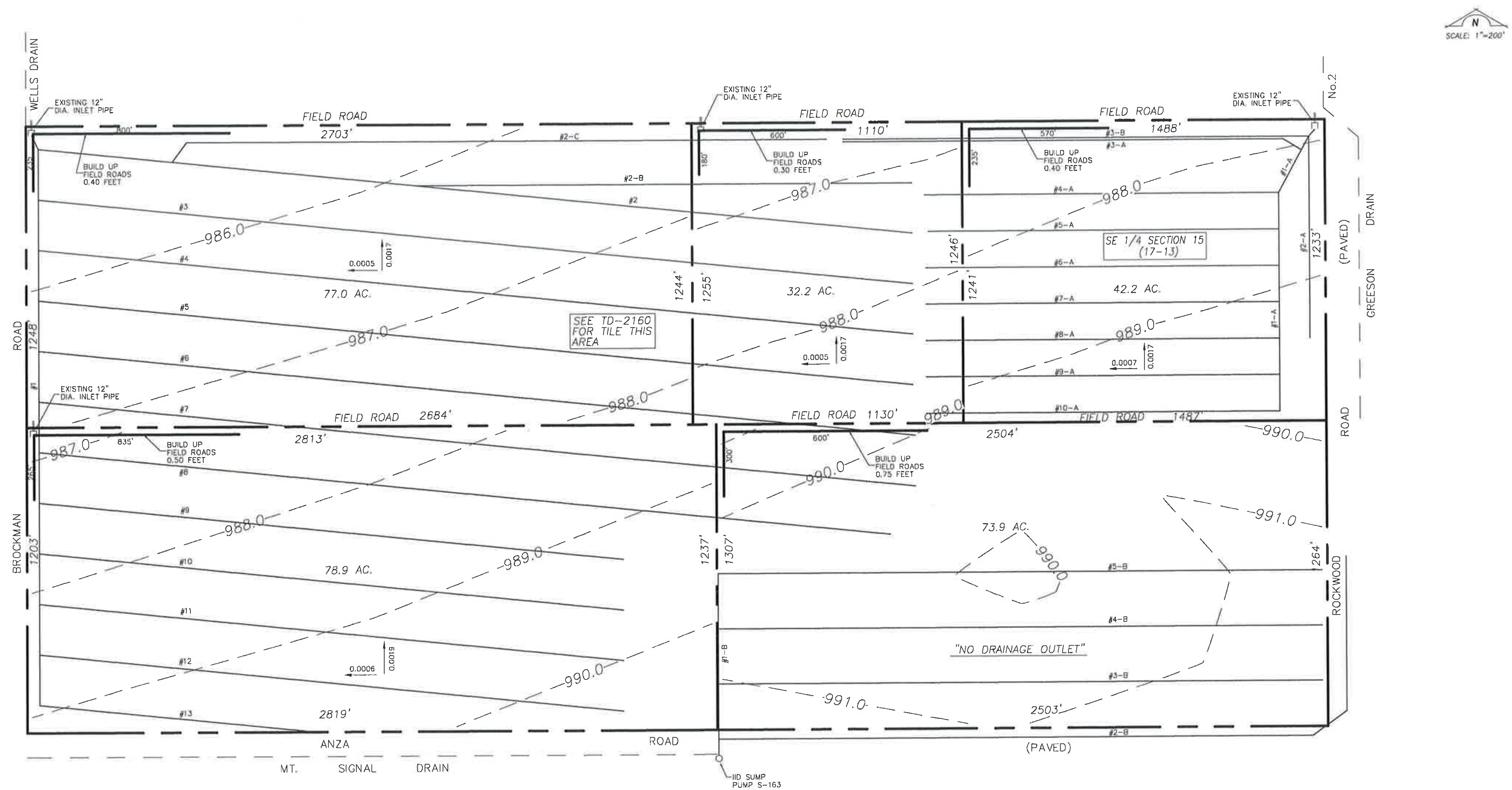
El Centro, CA 92243
(760) 370-3000
FAX (760) 337-8900

MOUNT SIGNAL SOLAR I
82LV – (WEST)

LOCATION CALEXICO, CA
SHEET TITLE EXISTING AG CONDITIONS
CLIENT 8MINUTENERGY RENEWABLES

SHEET No. 1
BY GMG
DATE 8/9/11
JOB # GS1024



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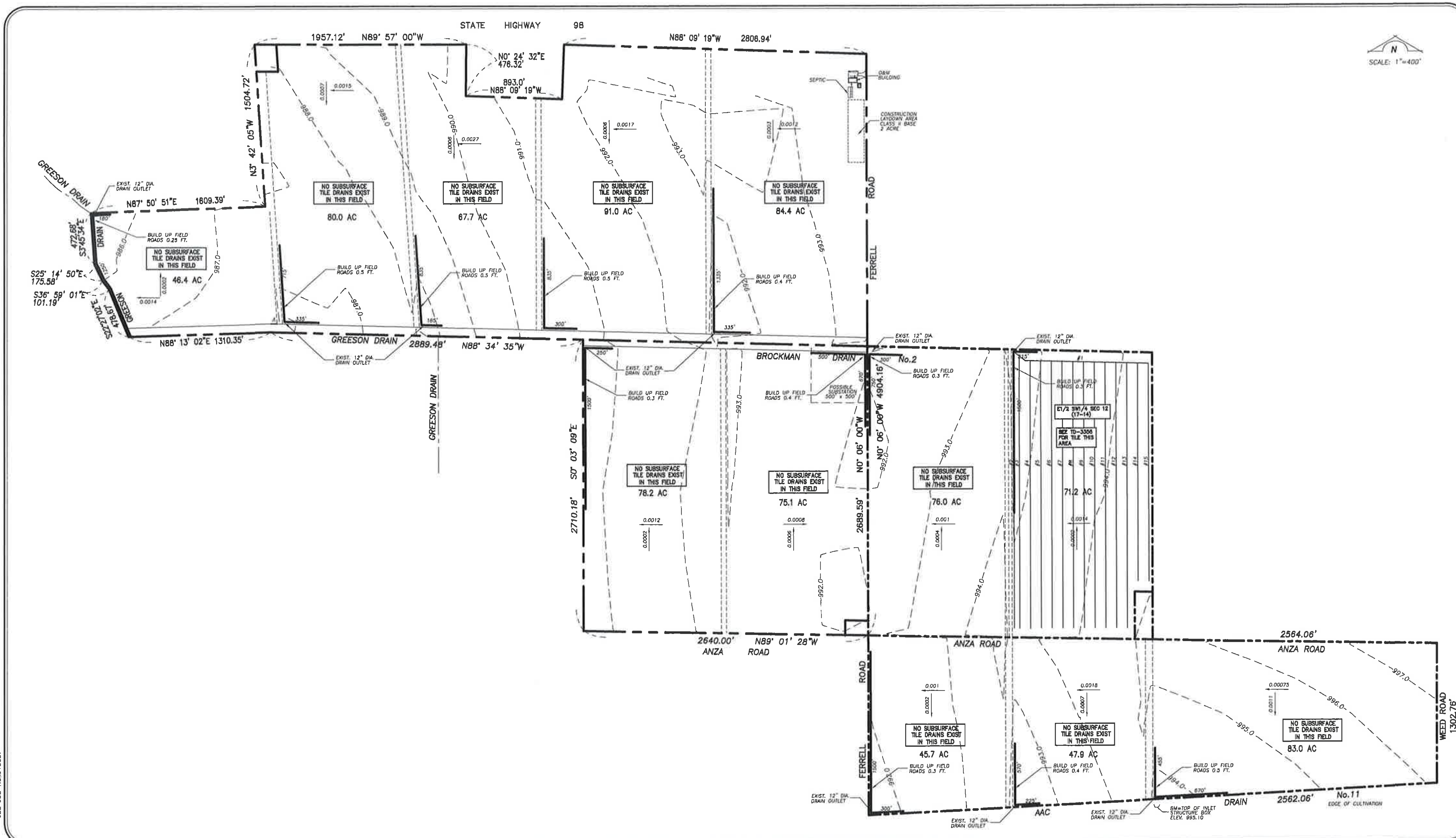
MOUNT SIGNAL SOLAR 1
82LV – (WEST)
LOCATION CALEXICO, CA
SHEET TITLE EXISTING AG CONDITIONS
CLIENT 8MINUTENERGY RENEWABLES

SHEET No. 1
BY GMG
DATE 8/9/11
JOB # GS1024



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ENGINEER OF RECORD

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MOUNT SIGNAL SOLAR I (82LV)

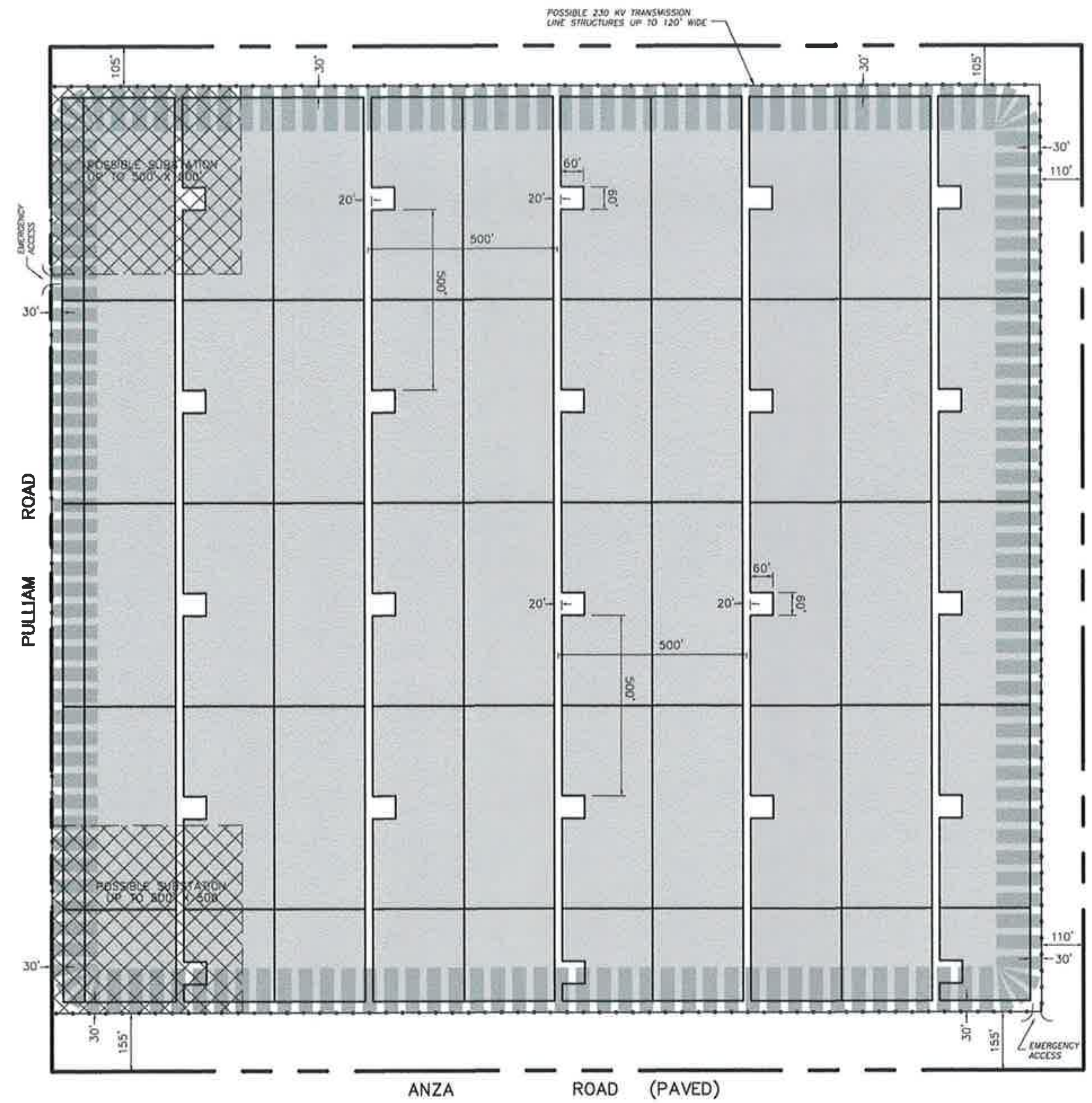
LOCATION CALEXICO, CA
SHEET TITLE EXISTING AG CONDITIONS
CLIENT 8MINUTENERGY RENEWABLES

SHEET No. 1
BY GMG
DATE 7/29/11
JOB # GS1023

Appendix B

Solar Farm Improvements

SCALE: 1"=200'



JBL JOB No. J10056

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ENGINEER OF RECORD

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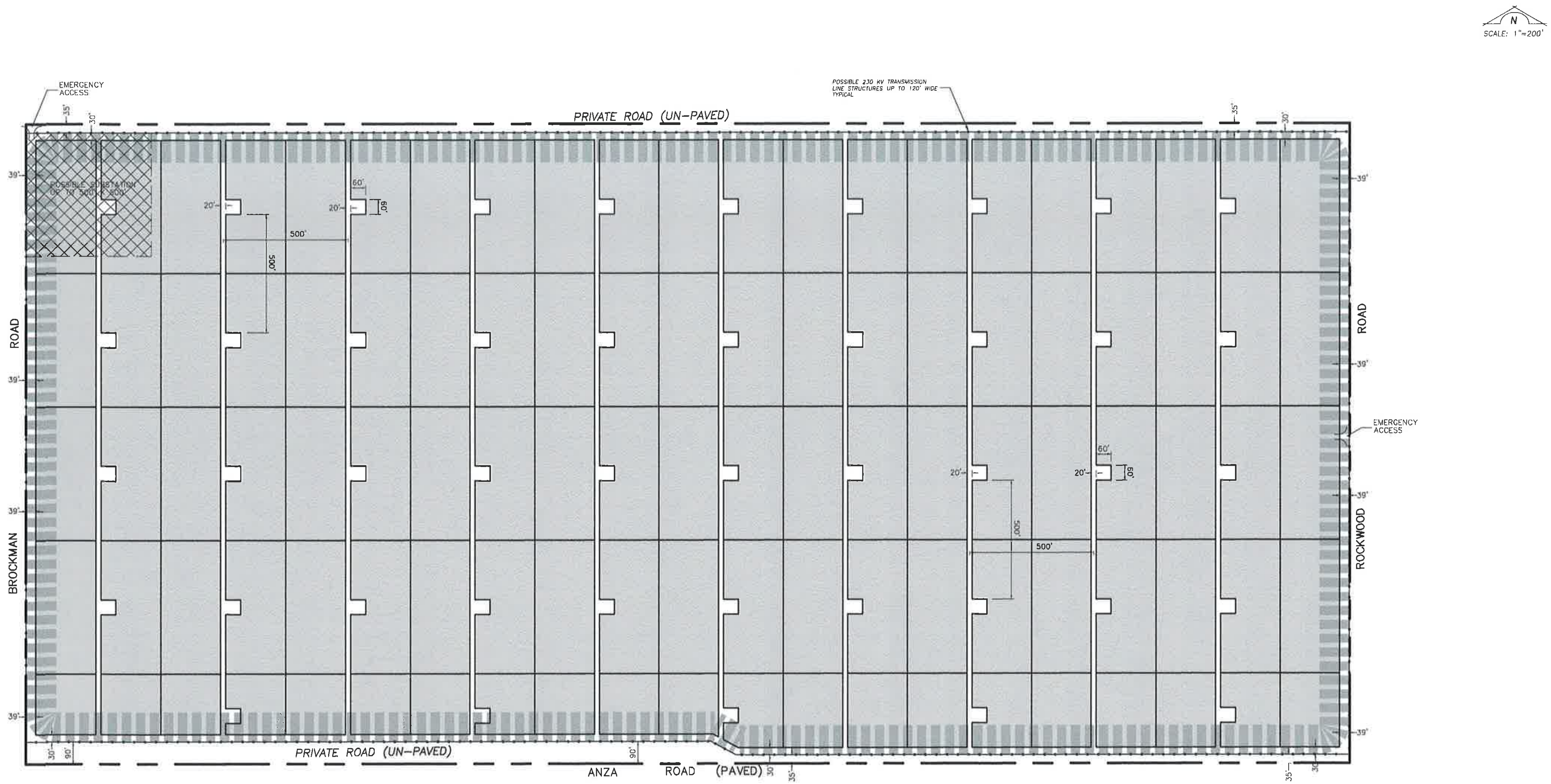
MOUNT SIGNAL SOLAR 1 – 82LV (WEST)

LOCATION CALEXICO, CA
SHEET TITLE SOLAR ARRAY
CLIENT 8MINUTENERGY RENEWABLES

SHEET No. 1
BY GMG
DATE 8/9/11
JOB # GS1024



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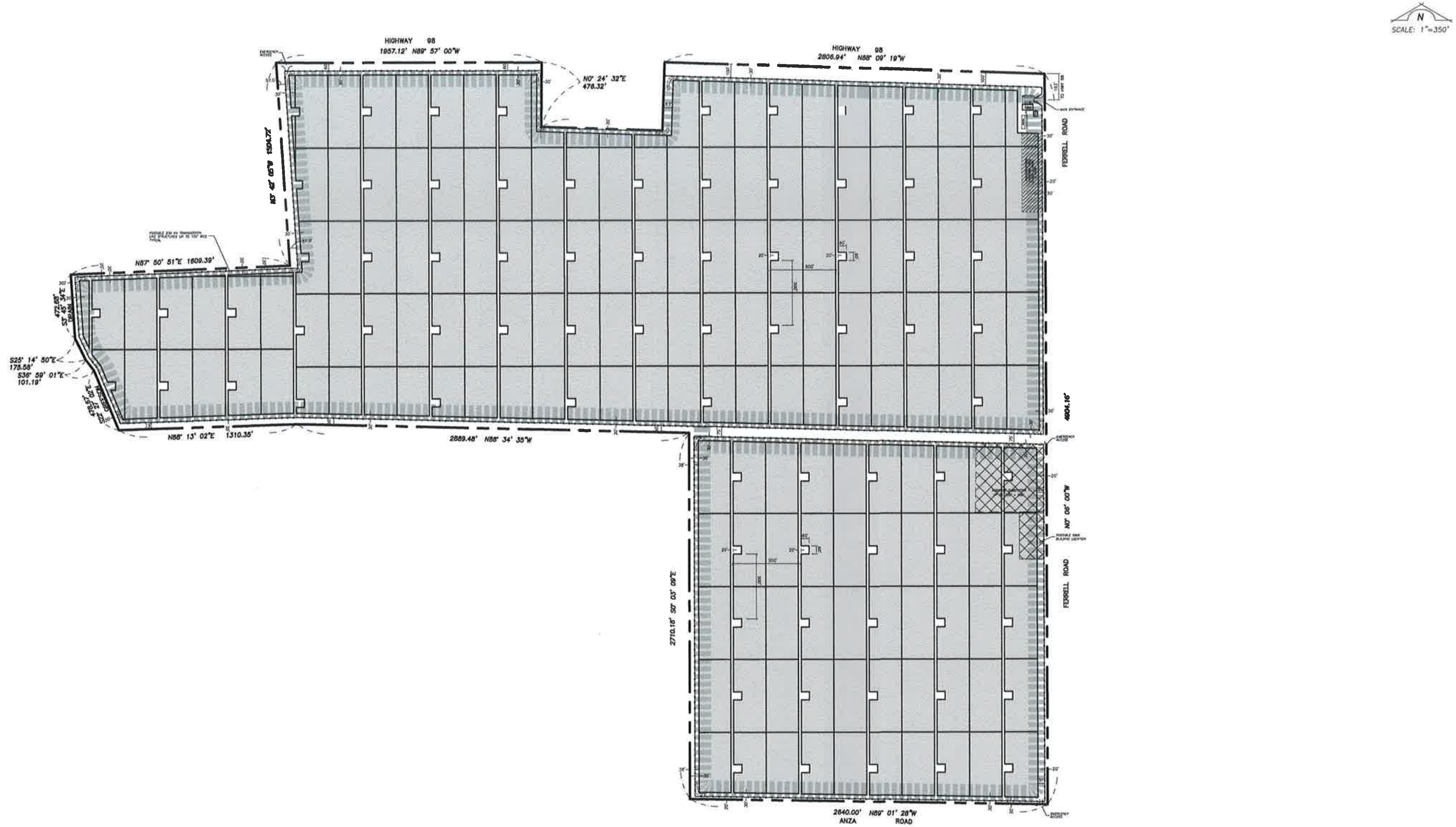
MOUNT SIGNAL SOLAR 1 – 82LV (WEST)

LOCATION CALEXICO, CA
SHEET TITLE SOLAR ARRAY
CLIENT 8MINUTENERGY RENEWABLES

SHEET No. 1
BY GMG
DATE 8/9/11
JOB # GS1024



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ENGINEER OF RECORD

REGISTERED PROFESSIONAL ENGINEER JEFFREY O. LYON RCE 31,921 EXP 12-31-12 CIVIL STATE OF CALIFORNIA

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Engineering & Construction Management
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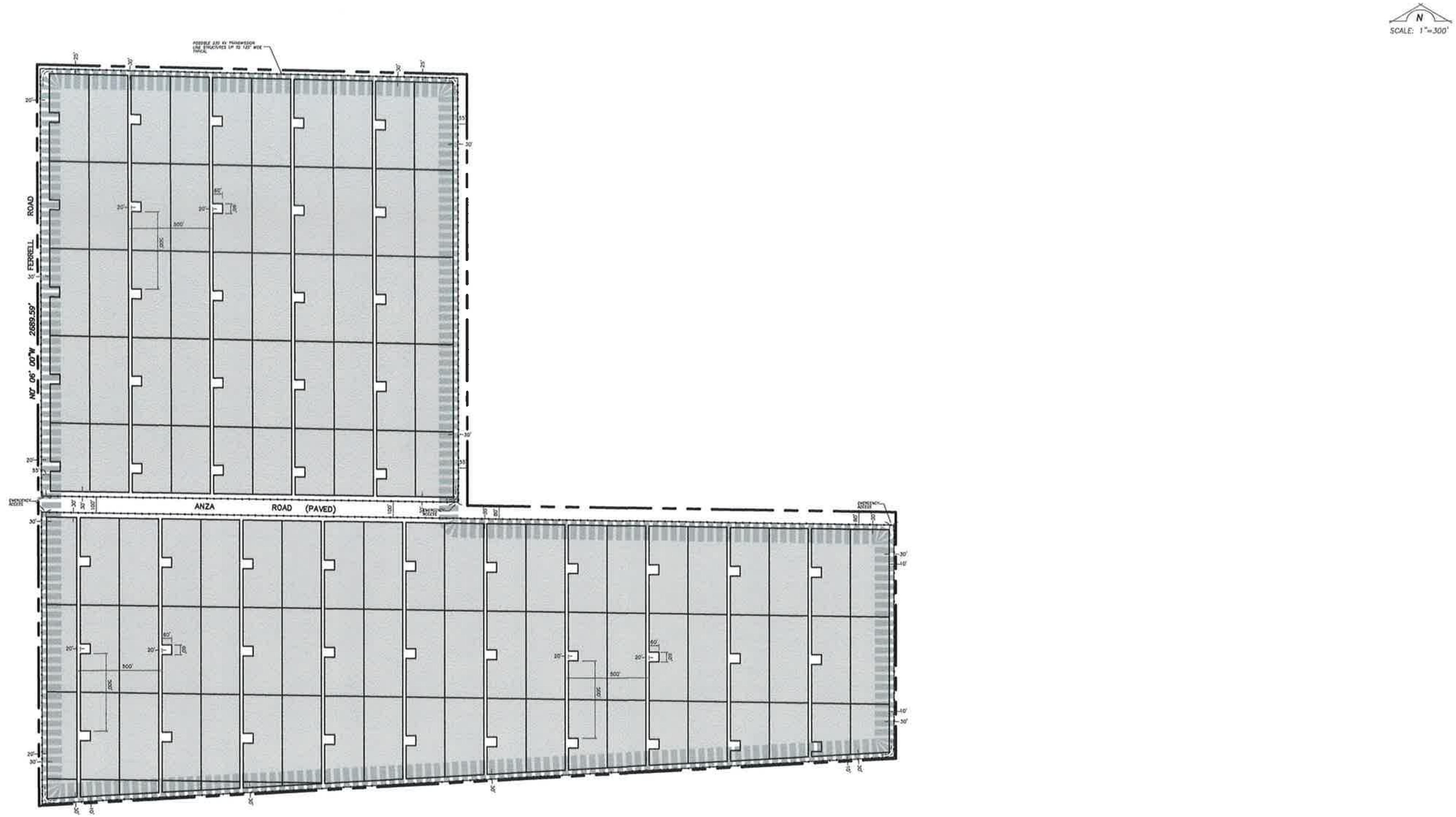
MOUNT SIGNAL SOLAR FARM 1
(82 LV)

LOCATION CALEXICO, CA
SHEET TITLE OVERALL SITE PLAN
CLIENT 8MINUTENERGY RENEWABLES

SHEET No. 1
BY GMG
DATE 10/19/10
JOB # GS1023



PRINTED: 6/30/11

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MOUNT SIGNAL SOLAR FARM 1

LOCATION CALIPATRIA, CA
SHEET TITLE OVERALL SITE PLAN
CLIENT 8MINUTENERGY RENEWABLES

SHEET No. 1
BY GMG
DATE 10/19/10
JOB # GS1023

Appendix C

Restoration Cost Summary

Mount Signal Solar Farm I (82LV)

Field No. 1 - 052-190-012 (North Field) (78.9 ac)

Subsurface Tile Drainage System - Baseline	2,901	LF	$	7.65	$	22,192.65
Subsurface Tile Drainage System - Laterals	14,035	LF	$	2.25	$	31,578.75
Irrigation Ditch/Pad and Outlets/Gates/Slide Gates	2,600	LF	$	62.25	$	161,850.00
Land Leveling	78.9	ac	$	150.00	$	11,835.00
Ground Work (Subsoil/ Stubble Disc/Landplane)	78.9	ac	$	130.00	$	10,257.00
Manure Application	78.9	ac	$	75.00	$	5,917.50
Agronomic Soil Sampling	1	LS	$	800.00	$	800.00
			Total		**$**	**244,430.90**
			Cost/Ac.		**$**	**3,097.98**

Field No. 2 - 052-190-012 (South Field) (51.5 ac)

Subsurface Tile Drainage System - Baseline	2,073	LF	$	7.65	$	15,858.45
Subsurface Tile Drainage System - Laterals	10,162	LF	$	2.25	$	22,864.50
Irrigation Ditch/Pad and Outlets/Gates/Slide Gates	0	LF	$	62.25	$	-
Land Leveling	51.5	ac	$	150.00	$	7,725.00
Ground Work (Subsoil/ Stubble Disc/Landplane)	51.5	ac	$	130.00	$	6,695.00
Manure Application	51.5	ac	$	75.00	$	3,862.50
Agronomic Soil Sampling	1	LS	$	800.00	$	800.00
			Total		**$**	**57,805.45**
			Cost/Ac.		**$**	**1,122.44**

Field No. 3 - 052-210-016 (Northwest Field) (85.3 ac)

Subsurface Tile Drainage System - Baseline	0	LF	$	7.65	$	-
Subsurface Tile Drainage System - Laterals	0	LF	$	2.25	$	-
Irrigation Ditch/Pad and Outlets/Gates/Slide Gates	3,111	LF	$	62.25	$	193,659.75
Land Leveling	85.3	ac	$	150.00	$	12,795.00
Ground Work (Subsoil/ Stubble Disc/Landplane)	85.3	ac	$	130.00	$	11,089.00
Manure Application	85.3	ac	$	75.00	$	6,397.50
Agronomic Soil Sampling	1	LS	$	800.00	$	800.00
			Total		**$**	**224,741.25**
			Cost/Ac.		**$**	**2,634.72**

Field No. 4 - 052-210-016 (Southwest Field) (87.3 ac)

Subsurface Tile Drainage System - Baseline	4,236	LF	$	7.65	$	32,405.40
Subsurface Tile Drainage System - Laterals	50,209	LF	$	2.25	$	112,970.25
Irrigation Ditch/Pad and Outlets/Gates/Slide Gates	2,820	LF	$	62.25	$	175,545.00
Land Leveling	87.3	ac	$	150.00	$	13,095.00
Ground Work (Subsoil/ Stubble Disc/Landplane)	87.3	ac	$	130.00	$	11,349.00
Manure Application	87.3	ac	$	75.00	$	6,547.50
Agronomic Soil Sampling	1	LS	$	800.00	$	800.00
			Total		**$**	**352,712.15**
			Cost/Ac.		**$**	**4,040.23**

Field No. 5 - 052-210-016 (Northeast Field) (61.9 ac)

Subsurface Tile Drainage System - Baseline	0	LF	$	7.65	$	-
Subsurface Tile Drainage System - Laterals	0	LF	$	2.25	$	-
Irrigation Ditch/Pad and Outlets/Gates/Slide Gates	2,194	LF	$	62.25	$	136,576.50
Land Leveling	61.9	ac	$	150.00	$	9,285.00
Ground Work (Subsoil/ Stubble Disc/Landplane)	61.9	ac	$	130.00	$	8,047.00
Manure Application	61.9	ac	$	75.00	$	4,642.50
Agronomic Soil Sampling	1	LS	$	800.00	$	800.00
			Total		**$**	**159,351.00**
			Cost/Ac.		**$**	**2,574.33**

Field No. 6 - 052-210-016 (Southeast Field) (77.4 ac)

Subsurface Tile Drainage System - Baseline	1,709	LF	$	7.65	$	13,073.85
Subsurface Tile Drainage System - Laterals	14,057	LF	$	2.25	$	31,628.25
Irrigation Ditch (Common with Field No. 5)	2,515	LF	$	62.25	$	156,558.75
Land Leveling	77.4	ac	$	150.00	$	11,610.00
Ground Work (Subsoil/ Stubble Disc/Landplane)	77.4	ac	$	130.00	$	10,062.00
Manure Application	77.4	ac	$	75.00	$	5,805.00
Agronomic Soil Sampling	1	LS	$	800.00	$	800.00
			Total		**$**	**229,537.85**
			Cost/Ac.		**$**	**2,965.61**

Field No. 7 - 052-210-036 (West Field) (39.3 ac)

Subsurface Tile Drainage System - Baseline	0	LF	$	7.65	$	-
Subsurface Tile Drainage System - Laterals	0	LF	$	2.25	$	-
Irrigation Ditch/Pad and Outlets/Gates/Slide Gates	1,412	LF	$	62.25	$	87,897.00
Land Leveling	39.3	ac	$	150.00	$	5,895.00
Ground Work (Subsoil/ Stubble Disc/Landplane)	39.3	ac	$	130.00	$	5,109.00
Manure Application	39.3	ac	$	75.00	$	2,947.50
Agronomic Soil Sampling	1	LS	$	800.00	$	800.00
			Total		**$**	**102,648.50**
			Cost/Ac.		**$**	**2,611.92**

Field No. 8 - 052-210-036 (Center West Field) (72 ac)

Subsurface Tile Drainage System - Baseline	0	LF	$	7.65	$	-
Subsurface Tile Drainage System - Laterals	0	LF	$	2.25	$	-
Irrigation Ditch (Common with Field No. 7)	2,761	LF	$	62.25	$	171,872.25
Land Leveling	72.0	ac	$	150.00	$	10,800.00
Ground Work (Subsoil/ Stubble Disc/Landplane)	72.0	ac	$	130.00	$	9,360.00
Manure Application	72.0	ac	$	75.00	$	5,400.00
Agronomic Soil Sampling	1	LS	$	800.00	$	800.00
			Total		**$**	**198,232.25**
			Cost/Ac.		**$**	**2,753.23**

Field No. 9 - 052-210-036 (Center Field) (63.6 ac)

Subsurface Tile Drainage System - Baseline	0	LF	$	7.65	$	-
Subsurface Tile Drainage System - Laterals	0	LF	$	2.25	$	-
Irrigation Ditch/Pad and Outlets/Gates/Slide Gates	2,828	LF	$	62.25	$	176,043.00
Land Leveling	63.6	ac	$	150.00	$	9,540.00
Ground Work (Subsoil/ Stubble Disc/Landplane)	63.6	ac	$	130.00	$	8,268.00
Manure Application	63.6	ac	$	75.00	$	4,770.00
Agronomic Soil Sampling	1	LS	$	800.00	$	800.00
			Total		**$**	**199,421.00**
			Cost/Ac.		**$**	**3,135.55**

Field No. 10 - 052-210-036 & 034 (Center East Field) (90.6 ac)

Subsurface Tile Drainage System - Baseline	0	LF	$	7.65	$	-
Subsurface Tile Drainage System - Laterals	0	LF	$	2.25	$	-
Irrigation Ditch/Pad and Outlets/Gates/Slide Gates	2,656	LF	$	62.25	$	165,336.00
Land Leveling	90.6	ac	$	150.00	$	13,590.00
Ground Work (Subsoil/ Stubble Disc/Landplane)	90.6	ac	$	130.00	$	11,778.00
Manure Application	90.6	ac	$	75.00	$	6,795.00
Agronomic Soil Sampling	1	LS	$	800.00	$	800.00
			Total		**$**	**198,299.00**
			Cost/Ac.		**$**	**2,188.73**

Field No. 11 - 052-210-036 & 035 (East Field) (87.4 ac)

Subsurface Tile Drainage System - Baseline	0	LF	$	7.65	$	-
Subsurface Tile Drainage System - Laterals	0	LF	$	2.25	$	-
Irrigation Ditch/Pad and Outlets/Gates/Slide Gates	2,544	LF	$	62.25	$	158,364.00
Land Leveling	87.4	ac	$	150.00	$	13,110.00
Ground Work (Subsoil/ Stubble Disc/Landplane)	87.4	ac	$	130.00	$	11,362.00
Manure Application	87.4	ac	$	75.00	$	6,555.00
Agronomic Soil Sampling	1	LS	$	800.00	$	800.00
			Total		**$**	**190,191.00**
			Cost/Ac.		**$**	**2,176.10**

Field No. 12 - 052-210-013 (West Field) (77.8 ac)

Subsurface Tile Drainage System - Baseline	0	LF	$	7.65	$	-
Subsurface Tile Drainage System - Laterals	0	LF	$	2.25	$	-
Irrigation Ditch/Pad and Outlets/Gates/Slide Gates	2,569	LF	$	62.25	$	159,920.25
Land Leveling	77.8	ac	$	150.00	$	11,670.00
Ground Work (Subsoil/ Stubble Disc/Landplane)	77.8	ac	$	130.00	$	10,114.00
Manure Application	77.8	ac	$	75.00	$	5,835.00
Agronomic Soil Sampling	1	LS	$	800.00	$	800.00
			Total		**$**	**188,339.25**
			Cost/Ac.		**$**	**2,420.81**

Field No. 13 - 052-210-013 (East Field) (79.4 ac)

Subsurface Tile Drainage System - Baseline	0	LF	$	7.65	$	-
Subsurface Tile Drainage System - Laterals	0	LF	$	2.25	$	-
Irrigation Ditch (Common with Field No. 12)	0	LF	$	62.25	$	-
Land Leveling	79.4	ac	$	150.00	$	11,910.00
Ground Work (Subsoil/ Stubble Disc/Landplane)	79.4	ac	$	130.00	$	10,322.00
Manure Application	79.4	ac	$	75.00	$	5,955.00
Agronomic Soil Sampling	1	LS	$	800.00	$	800.00
			Total		**$**	**28,987.00**
			Cost/Ac.		**$**	**365.08**

Field No. 14 - 059-130-001 (78.2 ac)

Subsurface Tile Drainage System - Baseline	0	LF	$	7.65	$	-
Subsurface Tile Drainage System - Laterals	0	LF	$	2.25	$	-
Irrigation Ditch/Pad and Outlets/Gates/Slide Gates	2,579	LF	$	62.25	$	160,542.75
Land Leveling	78.2	ac	$	150.00	$	11,730.00
Ground Work (Subsoil/ Stubble Disc/Landplane)	78.2	ac	$	130.00	$	10,166.00
Manure Application	78.2	ac	$	75.00	$	5,865.00
Agronomic Soil Sampling	1	LS	$	800.00	$	800.00
			Total		**$**	**189,103.75**
			Cost/Ac.		**$**	**2,418.21**

Field No. 15 - 059-130-002 (78.3 ac)

Subsurface Tile Drainage System - Baseline	1,260	LF	$	7.65	$	9,639.00
Subsurface Tile Drainage System - Laterals	34,000	LF	$	2.25	$	76,500.00
Irrigation Ditch/Pad and Outlets/Gates/Slide Gates	2,775	LF	$	62.25	$	172,743.75
Land Leveling	78.3	ac	$	150.00	$	11,745.00
Ground Work (Subsoil/ Stubble Disc/Landplane)	78.3	ac	$	130.00	$	10,179.00
Manure Application	78.3	ac	$	75.00	$	5,872.50
Agronomic Soil Sampling	1	LS	$	800.00	$	800.00
			Total		**$**	**287,479.25**
			Cost/Ac.		**$**	**3,671.51**

Field No. 16 - 059-130-005 (West Field) (47.5 ac)

Subsurface Tile Drainage System - Baseline	0	LF	$	7.65	$	-
Subsurface Tile Drainage System - Laterals	0	LF	$	2.25	$	-
Irrigation Ditch/Pad and Outlets/Gates/Slide Gates	1,656	LF	$	62.25	$	103,086.00
Land Leveling	47.5	ac	$	150.00	$	7,125.00
Ground Work (Subsoil/ Stubble Disc/Landplane)	47.5	ac	$	130.00	$	6,175.00
Manure Application	47.5	ac	$	75.00	$	3,562.50
Agronomic Soil Sampling	1	LS	$	800.00	$	800.00
			Total		**$**	**120,748.50**
			Cost/Ac.		**$**	**2,542.07**

Field No. 17 - 059-130-005 (East Field) (43.5 ac)

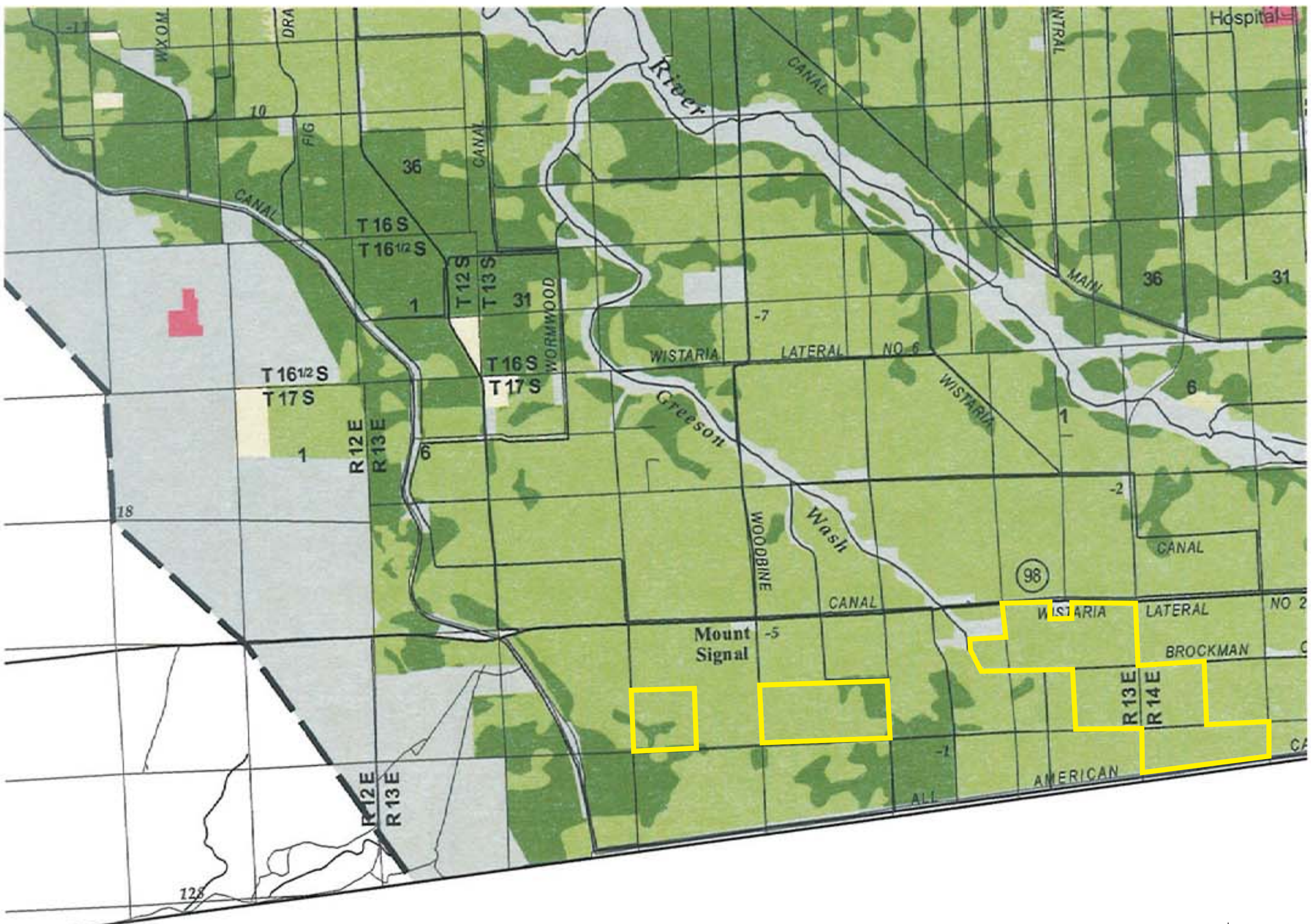
Subsurface Tile Drainage System - Baseline	0	LF	$	7.65	$	-
Subsurface Tile Drainage System - Laterals	0	LF	$	2.25	$	-
Irrigation Ditch (Common with Field No. 16)	1,555	LF	$	62.25	$	96,798.75
Land Leveling	43.5	ac	$	150.00	$	6,525.00
Ground Work (Subsoil/ Stubble Disc/Landplane)	43.5	ac	$	130.00	$	5,655.00
Manure Application	43.5	ac	$	75.00	$	3,262.50
Agronomic Soil Sampling	1	LS	$	800.00	$	800.00
			Total		**$**	**113,041.25**
			Cost/Ac.		**$**	**2,598.65**

Field No. 18 - 059-130-004 (84.6 ac)

Subsurface Tile Drainage System - Baseline	0	LF	$	7.65	$	-
Subsurface Tile Drainage System - Laterals	0	LF	$	2.25	$	-
Irrigation Ditch/Pad and Outlets/Gates/Slide Gates	2,602	LF	$	62.25	$	161,974.50
Land Leveling	84.6	ac	$	150.00	$	12,690.00
Ground Work (Subsoil/ Stubble Disc/Landplane)	84.6	ac	$	130.00	$	10,998.00
Manure Application	84.6	ac	$	75.00	$	6,345.00
Agronomic Soil Sampling	1	LS	$	800.00	$	800.00
			Total		**$**	**192,807.50**
			Cost/Ac.		**$**	**2,279.05**
			TOTAL		**$**	**3,277,876.85**

Appendix D

Prime Farmland and Farmland of Statewide Importance



*Legend on following page

GS Lyon

Project No.: GS1023

Mount Signal Solar Farm I
Imperial County Important Farmland 2010

Plate
D-1

PRIME FARMLAND - 195,589 acres

PRIME FARMLAND HAS THE BEST COMBINATION OF PHYSICAL AND CHEMICAL FEATURES ABLE TO SUSTAIN LONG-TERM AGRICULTURAL PRODUCTION. THIS LAND HAS THE SOIL QUALITY, GROWING SEASON, AND MOISTURE SUPPLY NEEDED TO PRODUCE SUSTAINED HIGH YIELDS. LAND MUST HAVE BEEN USED FOR IRRIGATED AGRICULTURAL PRODUCTION AT SOME TIME DURING THE FOUR YEARS PRIOR TO THE MAPPING DATE.

FARMLAND OF STATEWIDE IMPORTANCE - 311,048 acres

FARMLAND OF STATEWIDE IMPORTANCE IS SIMILAR TO PRIME FARMLAND BUT WITH MINOR SHORTCOMINGS, SUCH AS GREATER SLOPES OR LESS ABILITY TO STORE SOIL MOISTURE. LAND MUST HAVE BEEN USED FOR IRRIGATED AGRICULTURAL PRODUCTION AT SOME TIME DURING THE FOUR YEARS PRIOR TO THE MAPPING DATE.

UNIQUE FARMLAND - 2,196 acres

UNIQUE FARMLAND CONSISTS OF LESSER QUALITY SOILS USED FOR THE PRODUCTION OF THE STATE'S LEADING AGRICULTURAL CROPS. THIS LAND IS USUALLY IRRIGATED, BUT MAY INCLUDE NONIRRIGATED ORCHARDS OR VINEYARDS AS FOUND IN SOME CLIMATIC ZONES IN CALIFORNIA. LAND MUST HAVE BEEN CROPPED AT SOME TIME DURING THE FOUR YEARS PRIOR TO THE MAPPING DATE.

FARMLAND OF LOCAL IMPORTANCE - 32,109 acres

UNIRRIGATED AND UNCULTIVATED LANDS WITH PRIME AND STATEWIDE SOILS.

URBAN AND BUILT-UP LAND - 27,709 acres

URBAN AND BUILT-UP LAND IS OCCUPIED BY STRUCTURES WITH A BUILDING DENSITY OF AT LEAST 1 UNIT TO 1.5 ACRES, OR APPROXIMATELY 6 STRUCTURES TO A 10-ACRE PARCEL. COMMON EXAMPLES INCLUDE RESIDENTIAL, INDUSTRIAL, COMMERCIAL, INSTITUTIONAL FACILITIES, CEMETERIES, AIRPORTS, GOLF COURSES, SANITARY LANDFILLS, SEWAGE TREATMENT, AND WATER CONTROL STRUCTURES.

OTHER LAND - 458,829 acres

OTHER LAND IS LAND NOT INCLUDED IN ANY OTHER MAPPING CATEGORY. COMMON EXAMPLES INCLUDE LOW DENSITY RURAL DEVELOPMENTS, BRUSH, TIMBER, WETLAND, AND RIPARIAN AREAS NOT SUITABLE FOR LIVESTOCK GRAZING, CONFINED LIVESTOCK, POULTRY, OR AQUACULTURE FACILITIES, STRIP MINES, BORROW PITS, AND WATER BODIES SMALLER THAN 40 ACRES. VACANT AND NONAGRICULTURAL LAND SURROUNDED ON ALL SIDES BY URBAN DEVELOPMENT AND GREATER THAN 40 ACRES IS MAPPED AS OTHER LAND.

WATER - 1,029 acres

PERENNIAL WATER BODIES WITH AN EXTENT OF AT LEAST 40 ACRES.

(All acreages are totals for Imperial County)

GS Lyon **Project No.: GS1023**	**Mount Signal Solar Farm I** **I.C. Important Farmland 2010 Legend**	**Plate** **D-2**

Prime Farmlands

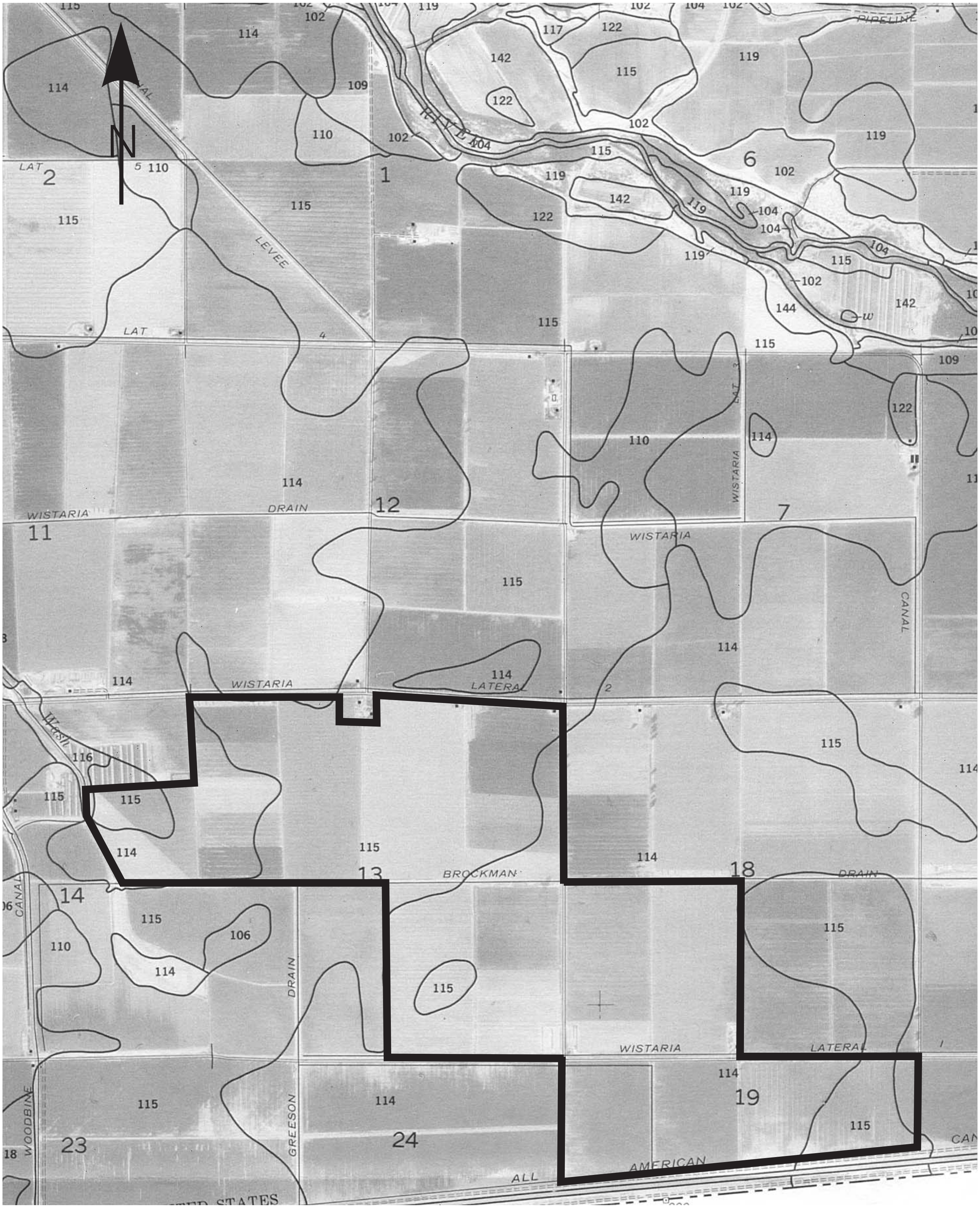
N

GS Lyon

Project No.: GS1023

Mount Signal Solar Farm I
Soil Survey Map

Plate
D-3

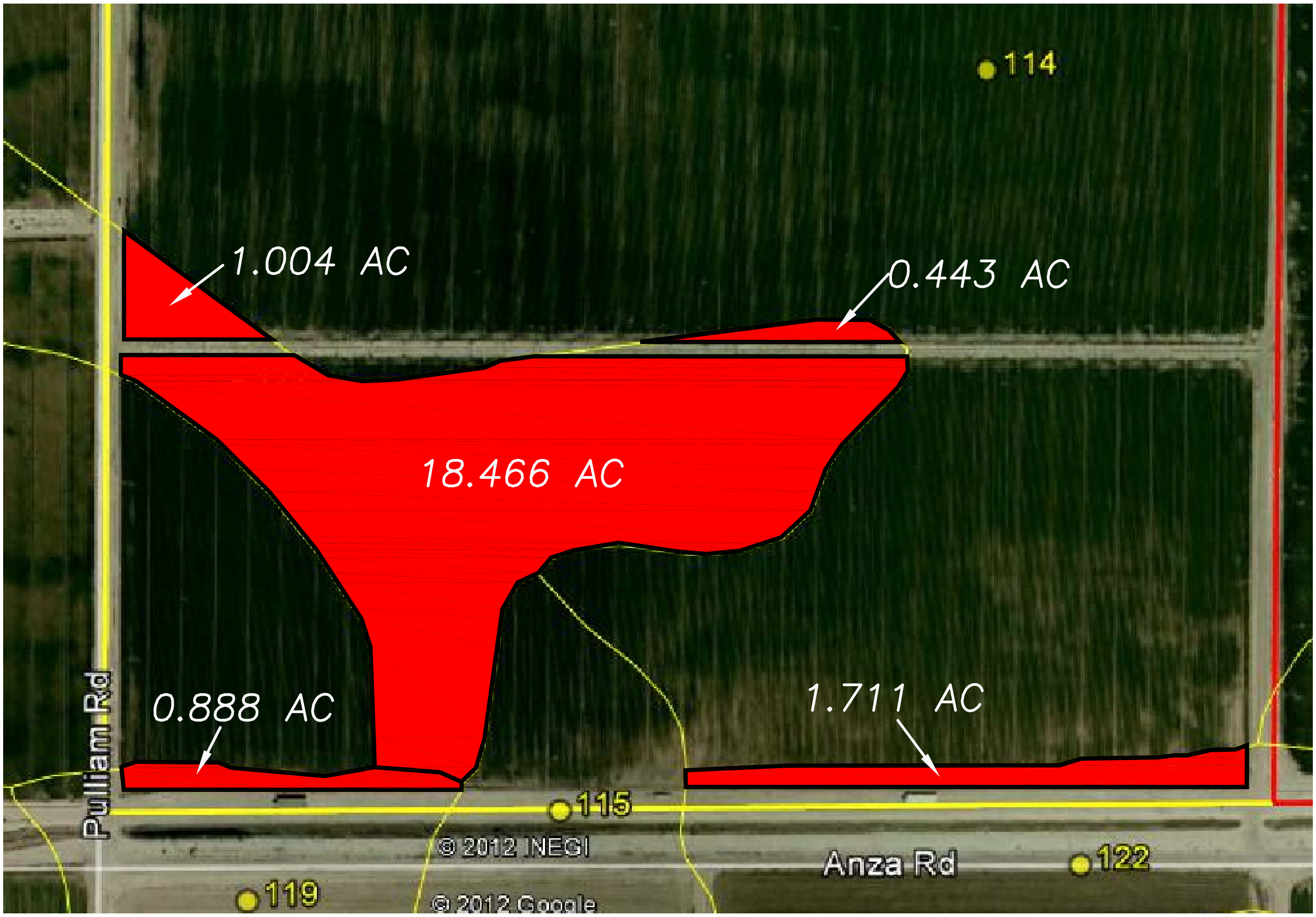


GS Lyon

Project No.: GS1023

Mount Signal Solar Farm I
Soil Survey Map

Plate
D-4



Prime Farmland Area - 22.51 Acres

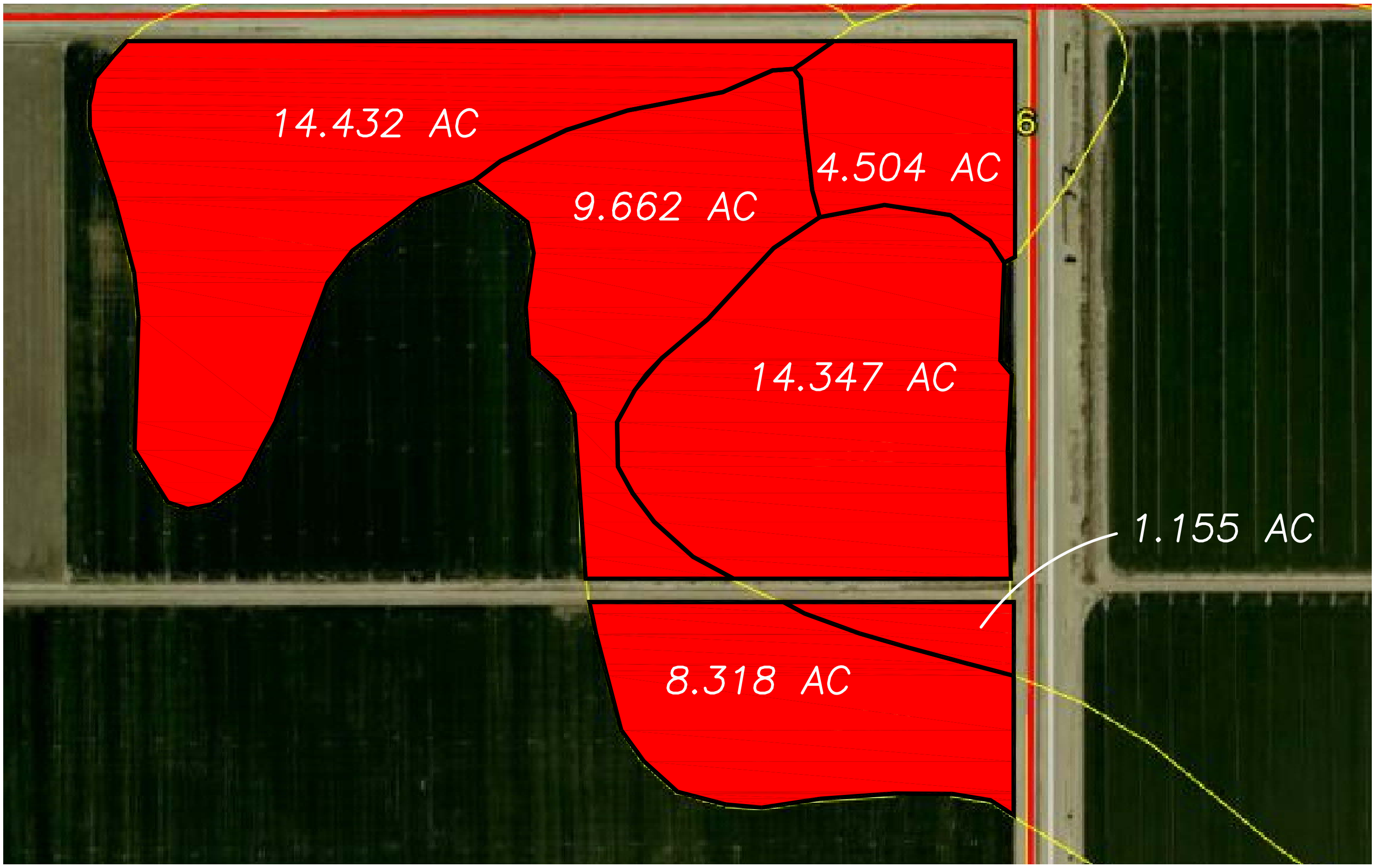
N

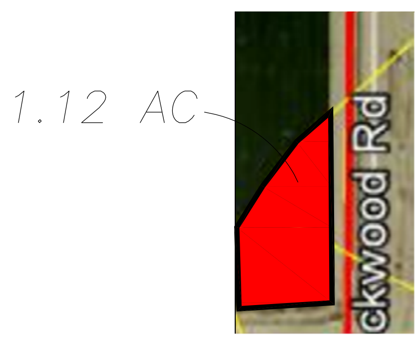
GS Lyon

Project No.: GS1023

Mount Signal Solar Farm I
Prime Farmland Area

Plate
D-5





Prime Farmland Area - 53.52 Acres

N

GS Lyon

Project No.: GS1023

Mount Signal Solar Farm I (82LV)
Prime Farmland Area

Plate
D-6

California Department of Conservation

FARMLAND MAPPING AND MONITORING PROGRAM

SOIL CANDIDATE LISTING

for

PRIME FARMLAND AND FARMLAND OF STATEWIDE IMPORTANCE

IMPERIAL COUNTY

U.S. Department of Agriculture, Natural Resources Conservation Service, soil surveys for Imperial County include:

Soil Survey of Imperial County, California, Imperial Valley Area, October 1981

Soil Survey of Yuma-Wellton Area: Parts of Yuma County, Arizona, and Imperial County, California, December 1980

Soil Survey of Palo Verde Area, California, September 1974

Beginning in 2002, SSURGO digital soil information has been incorporated into the Imperial County Important Farmland Map. Prior versions of the map have not been modified.

The SSURGO data includes Imperial County, Imperial Valley Area (published 3/22/2004), Yuma-Wellton Area (published 08/11/2004) and Palo Verde Area (published 4/20/2004). The digital surveys contain additional soil units beyond those published in the original paper surveys. Soils on the Prime and Statewide lists that only occur in the SSURGO data are appended to this list in italics.

For more information on the NRCS SSURGO data, please see: http://soils.usda.gov/survey/geography/ssurgo/

7/12/95, updated 06/02/2010

IMPERIAL COUNTY
PRIME FARMLAND SOILS

U.S. DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE
DAVIS, CALIFORNIA 95616

THESE SOIL MAPPING UNITS MEET THE CRITERIA FOR PRIME FARMLAND AS OUTLINED IN THE U.S. DEPARTMENT OF AGRICULTURE'S LAND INVENTORY AND MONITORING (LIM) PROJECT FOR THE IMPERIAL VALLEY AREA, YUMA-WELLTON AREA (WINTERHAVEN), AND PALO VERDE AREA SOIL SURVEYS.

IMPERIAL VALLEY AREA

Symbol	Name
100	Antho loamy fine sand
101*	Antho-Superstition complex
105	Glenbar clay loam
106[#]	Glenbar clay loam, wet
108	Holtville loam
109	Holtville silty clay
110[#]	Holtville silty clay, wet
117	Indio loam
118[#]	Indio loam, wet
119	Indio-Vint complex
120	Laveen loam
122[#]	Meloland very fine sandy loam, wet
123[#]	Meloland and Holtville loams, wet
137	Rositas silt loam, 0 to 2 percent slopes
139*	Superstition loamy fine sand
142[#]	Vint loamy very fine sand, wet

IMPERIAL VALLEY AREA Continued

Symbol	Name
143	Vint fine sandy loam
144[#]	Vint and Indio very fine sandy loams, wet

---

[*] Prime Farmland is managed so that in all horizons within a depth of 40 inches (1 meter), during part of each year the conductivity of the saturation extract is less than 4 mmhos/cm and the exchangeable sodium percentage (ESP) is less than 15.

[#] Prime Farmland if drained

Note: Soils 107 (Glenbar complex), 132 (Rositas fine sand, 0 to 2 percent slopes), 133 (Rositas fine sand, 2 to 5 percent slopes), 135 (Rositas fine sand, wet, 0 to 2 percent slopes), 136 (Rositas loamy fine sand, 0 to 2 percent slopes) and 138 (Rositas and Superstition loamy fine sands) have been moved from the Prime Farmland list to the Farmland of Statewide Importance list per NRCS in 1995.

YUMA-WELLTON AREA (Imperial County portion)

Symbol	Name
8[#]	Gadsden clay
10[#]	Glenbar silty clay loam
12[#]	Holtville clay
13[#]	Indio silt loam
17	Kofa clay
24	Ripley silt loam

[#] Prime Farmland if reclaimed of excess salts and sodium.

Notes: *Soil 8* (Gadsden clay) was moved from the Farmland of Statewide Importance list to the Prime Farmland list per AZ NRCS letter of September 27, 2004.
Soil 19 (Lagunita silt loam) was removed from the Prime Farmland list per AZ NRCS letter of September 27, 2004.

PALO VERDE AREA

Symbol	Name
Ac	Aco gravelly loamy sand
Af	Aco sandy loam
Gb	Gilman fine sandy loam
Gc	Gilman silty clay loam
Ge	Glenbar silty clay loam
Hb*	Holtville fine sandy loam
Hc*	Holtville silty clay
Id*	Indio very fine sandy loam
Ie*	Indio silty clay loam
Oc*	Orita fine sand
Og*	Orita gravelly loamy sand
Or*	Orita gravelly fine sandy loam
Rb*	Ripley very fine sandy loam
Rc*	Ripley silty clay loam
RoA	Rositas fine sand, 0 to 2 percent slopes
RoB	Rositas fine sand, 2 to 9 percent slopes
RtA	Rositas silty clay loam, 0 to 2 percent slopes
9#	*Gadsden clay*

PALO VERDE AREA Continued

Symbol	Name
9A#	*Gadsden loam*
36#	*Indio silt loam*

---

* Prime Farmland if reclaimed of excess salts and sodium.

Prime Farmland if either protected from flooding or not frequently flooded during the growing season.

IMPERIAL COUNTY
FARMLAND OF STATEWIDE
IMPORTANCE SOILS

U.S. DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE
DAVIS, CALIFORNIA 95616

THESE SOIL MAPPING UNITS MEET THE CRITERIA FOR FARMLAND OF STATEWIDE IMPORTANCE AS OUTLINED IN THE U.S. DEPARTMENT OF AGRICULTURE'S LAND INVENTORY AND MONITORING (LIM) PROJECT FOR THE IMPERIAL VALLEY AREA, YUMA-WELLTON AREA (WINTERHAVEN), AND PALO VERDE AREA SOIL SURVEYS.

IMPERIAL VALLEY AREA

Symbol	Name
107	Glenbar complex
111	Holtville-Imperial silty clay loams
112	Imperial silty clay
113	Imperial silty clay, saline
114	Imperial silty clay, wet
115	Imperial-Glenbar silty clay loams, wet, 0 to 2 percent slopes
116	Imperial-Glenbar silty clay loams, 2 to 5 percent slopes
121	Meloland fine sand
124	Niland gravelly sand
125	Niland gravelly sand, wet
126	Niland fine sand
127	Niland loamy fine sand
128	Niland-Imperial complex, wet
130	Rositas sand, 0 to 2 percent slopes

IMPERIAL VALLEY AREA Continued

Symbol	Name
131	Rositas sand, 2 to 5 percent slopes
132	Rositas fine sand, 0 to 2 percent slopes
133	Rositas fine sand, 2 to 9 percent slopes
135	Rositas fine sand, wet, 0 to 2 percent slopes
136	Rositas loamy fine sand, 0 to 2 percent slopes
138	Rositas-Superstition loamy fine sands

YUMA-WELLTON AREA (Imperial County Portion)

Symbol	Name
14*	Indio silt loam, saline
16*	Indio-Lagunita-Ripley complex
18*	Lagunita loamy sand
25*	Rositas sand

* Due to insufficient documentation of qualifying criteria, these units were dropped from the Farmland of Statewide Importance list per the Arizona office of NRCS (September 27, 2004).

Note: *Soil 8* (Gadsden Clay) was moved to the Prime Farmland list from the Farmland of Statewide Importance list per AZ NRCS letter of September 27, 2004.

PALO VERDE AREA

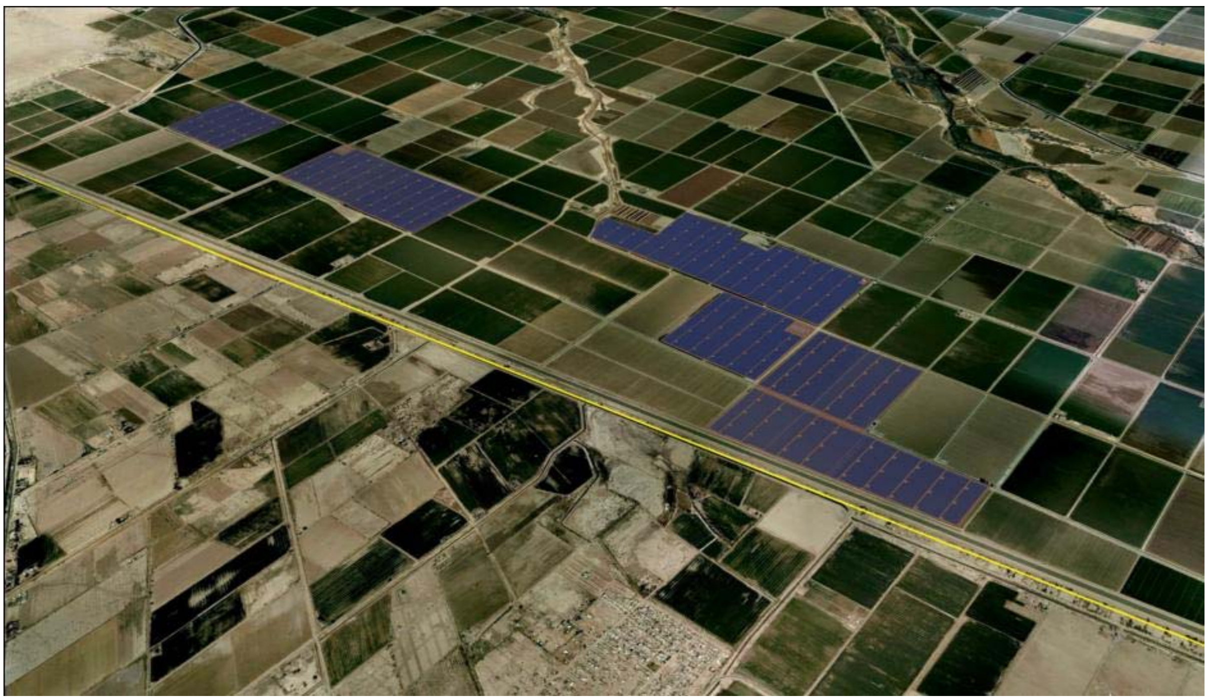
Symbol	Name
Co	Cibola fine sandy loam
Cs	Cibola silty clay loam
Ib	Imperial fine sandy loam
Ic	Imperial silty clay
Md	Meloland fine sandy loam
Me	Meloland silty clay loam
RsA	Rositas gravelly loamy sand, 0 to 2 percent slopes

Appendix E

MSSF I - Project Description

Mount Signal Solar Farm I

PROJECT DESCRIPTION



82LV 8ME, LLC
Sponsor: 8minutenergy Renewables LLC
10100 Santa Monica Boulevard, Suite 300
Los Angeles, CA 90067
(213) 281-9771

With Technical Assistance By:
GS Lyon Consultants, Inc.
780 North 4th Street
El Centro, CA 92243
(760) 337-1100

September 2011

8minutenergy RENEWABLES

Table of Contents

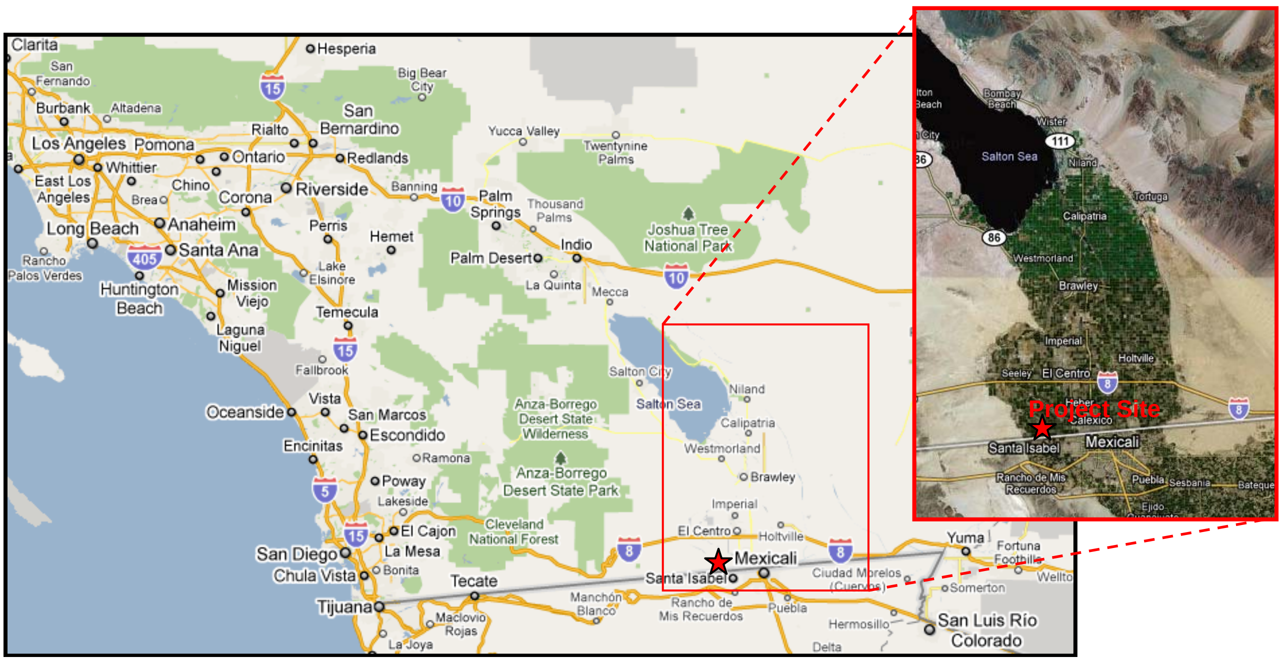
Project Name: Mount Signal Solar Farm I

General Location: The project will be located approximately 2½ to 7½ miles west of Calexico, California in southern Imperial County. The project comprises four agricultural parcels totaling approximately 1,400 acres, generally located between State Route 98 to the north and the US-Mexico border to the south, and between Pulliam Road to the west and Weed Road to the east. The land used by the project is owned by Calexico West, Inc. Agricultural land uses lie to the immediate north, south, east, and west of the project, with the exception of the US-Mexico border located directly to the south of Parcel II.

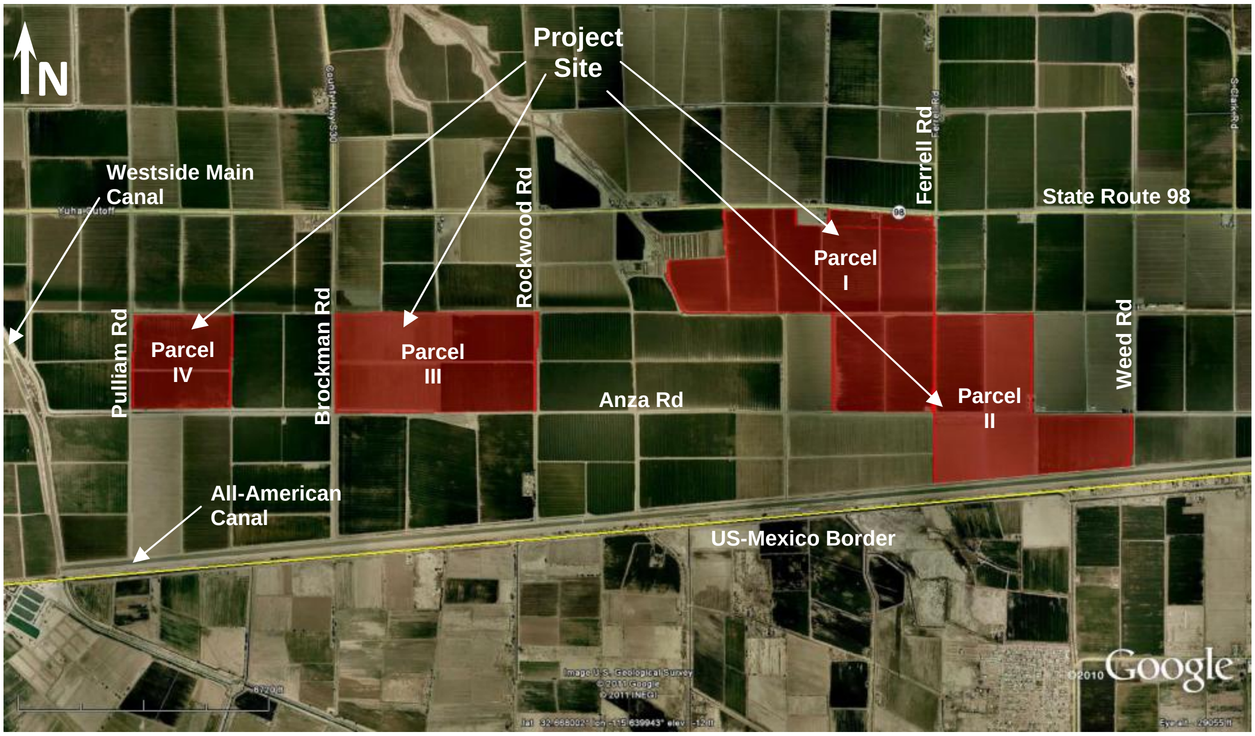
Assessor's Parcel Numbers:

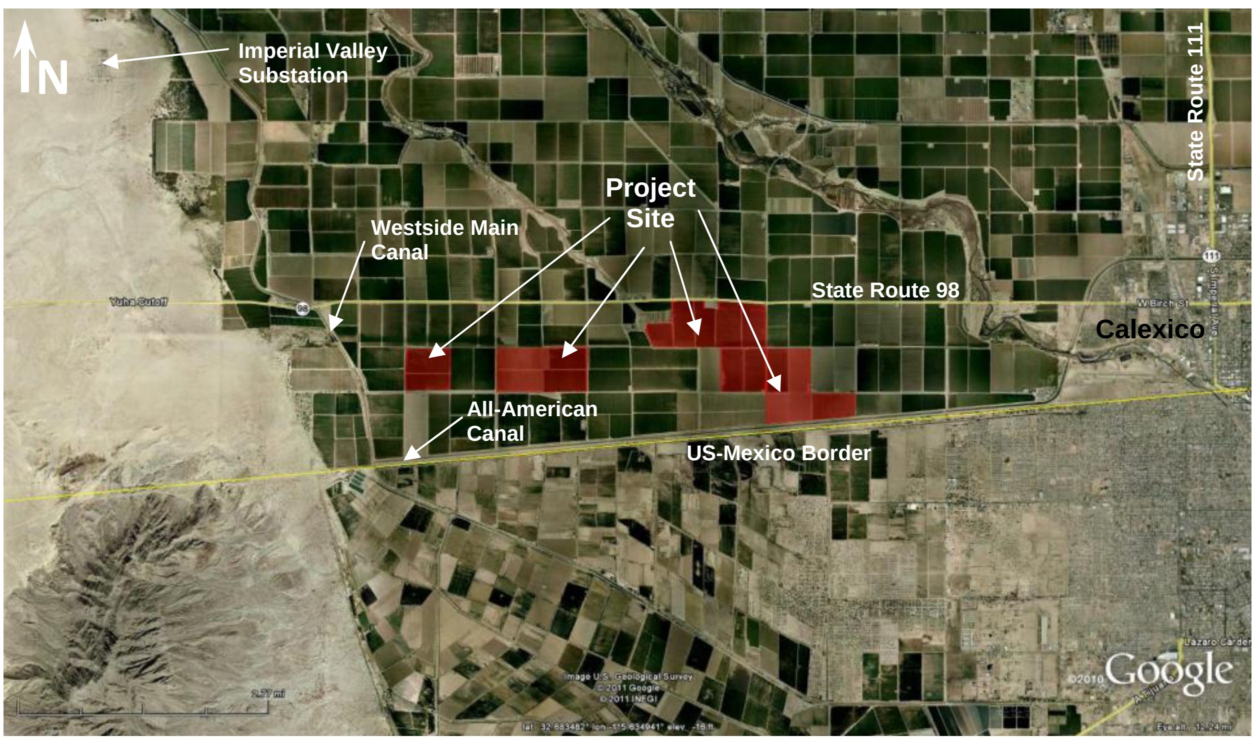
- Parcel I (545 acres) – 052-210-013; 052-210-036; 052-210-034; 052-210-035
- Parcel II (380 acres) – 059-130-001; 059-130-002; 059-130-004; 059-130-005
- Parcel III (320 acres) – 052-210-016
- Parcel IV (160 acres) – 052-190-012

Location Map:



Vicinity Map:





DESCRIPTION OF PROPOSED PROJECT

82LV 8ME, LLC and 8minutenergy Renewables LLC (the “Applicant”) are seeking approval of a Conditional Use Permit (CUP) from Imperial County for the development of an up to 200 MW Mount Signal Solar Farm I (“MSSF-I”) solar farm located west of Calexico (see “Vicinity Map,” above). The Applicant proposes to construct, own, operate, and fund MSSF-I; the project is expected to produce power by the end of 2012.

The interconnection application process for MSSF-I with the California Independent System Operator (CAISO) has been initiated, and a queue position with CAISO has been secured for 200 MW. The Applicant intends for the project to produce up to 200 MW. The land requirements of a solar farm can vary significantly depending on the mounting structures used (e.g., fixed-tilt vs. tracking) and the efficiency of the modules selected. In general, on a per-MW basis, less land is required for higher efficiency modules (which may not be available cost effectively at the time of construction) with fixed-tilt mounts than for lower efficiency modules with tracking mounts. It is entirely possible that MSSF-I ends up with a mix of fixed tilt and tracking mounts and different module efficiencies.

MSSF-I’s interconnection will occur at the 230 kV side of SDG&E Imperial Valley (IV) Substation, located approximately 5 miles northwest of MSSF-I. The Applicant intends to construct its own gen-tie line to IV Substation; the Right-of-Way (ROW) application for this gen-tie is currently being processed by the Bureau of Land Management (BLM). MSSF-I intends to transfer its electrical power to IV Substation from up to 2 onsite substations; any potential substation area that is not used will be instead be covered with solar panels. MSSF-I may allow its transmission, substation, and/or O&M facilities to be shared with one or more solar projects in the vicinity.

Alternatively, MSSF-I c/would also utilize the transmission, substation, and/or O&M facilities of another legal entity(ies), such as a neighboring solar project or a Special Purpose Vehicle (SPV) created to accommodate multiple solar projects' shared transmission, substation, and/or O&M facilities. In such a scenario, MSSF-I’s onsite transmission, substation, and/or O&M facilities c/would be reduced or eliminated.

Any necessary authorization or agreement to share facilities would be obtained from the appropriate legal entity(ies) prior to MSSF-I’s construction.

The Applicant has considered the following in its selection of the MSSF-I site for detailed evaluation:

- Land availability (approximately 1,400 acres);
- Zoning (the MSSF-I will be sited on land currently zoned “A-2” General Agriculture, and “A-2-R” General Agriculture Rural Zone);
- Minimal environmental consequences (MSSF-I will be located on disturbed land currently used for agriculture);
- Water availability (no water wells required);
- Primarily (90%+) low production agricultural land (Farmland of Statewide Importance);
- Land purchase option

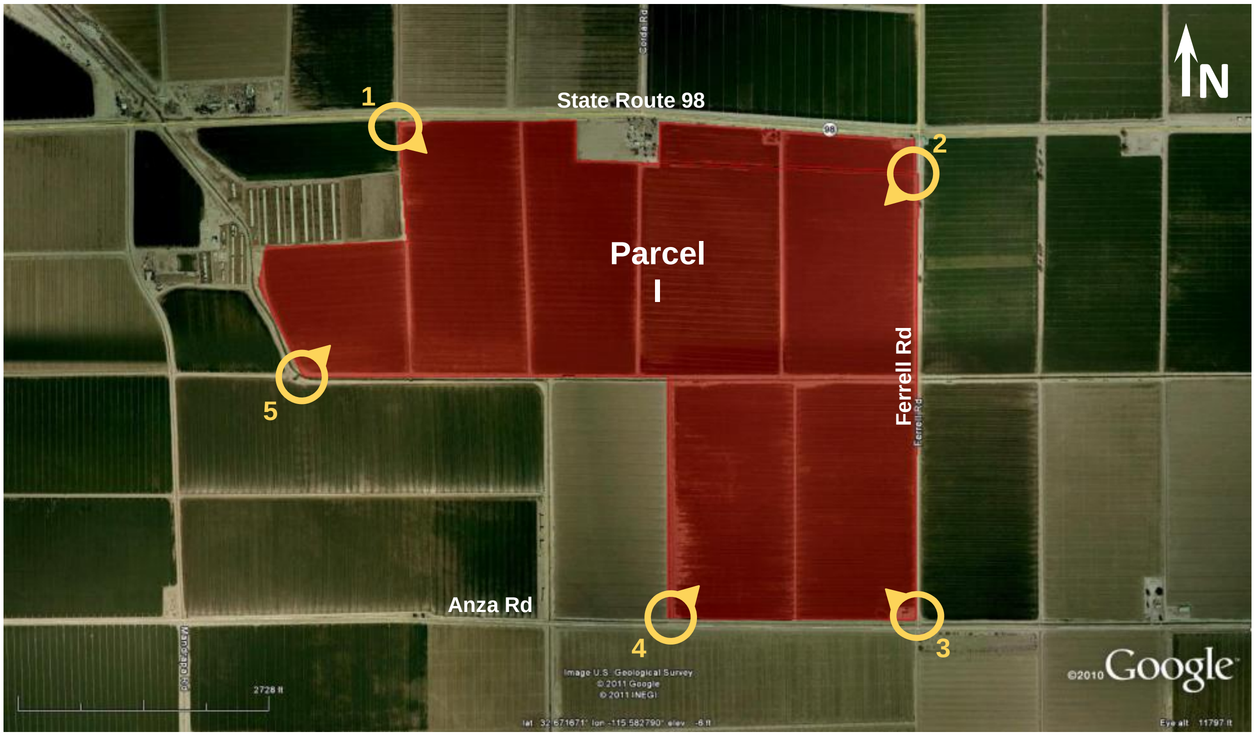


Photo Locations for Parcel I

Parcel I, #1 Looking SE

Parcel I, #2 Looking SW

Parcel I, #3 Looking NW

Parcel I, #4 Looking NE

Parcel I, #5 Looking NE

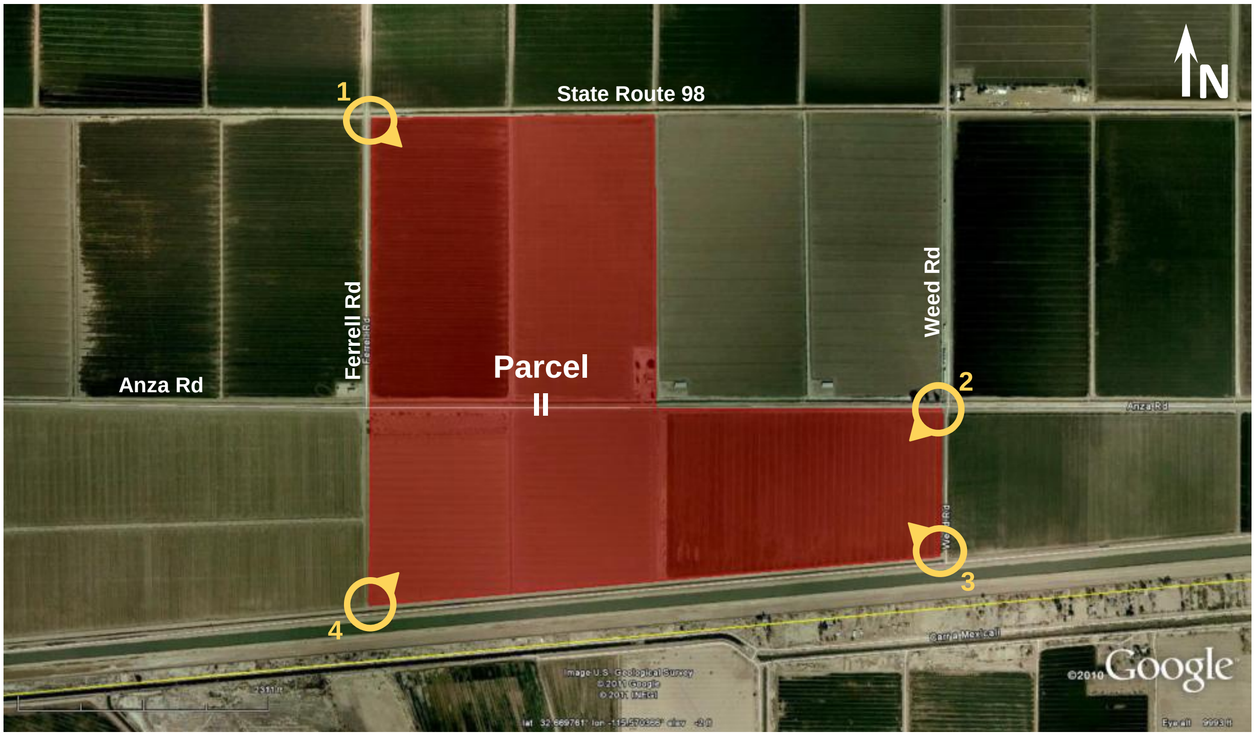


Photo Locations for Parcel II

Parcel II, #1 Looking SE

Parcel II, #2 Looking SW


Parcel II, #3 Looking NW


Parcel II, #4 Looking NE

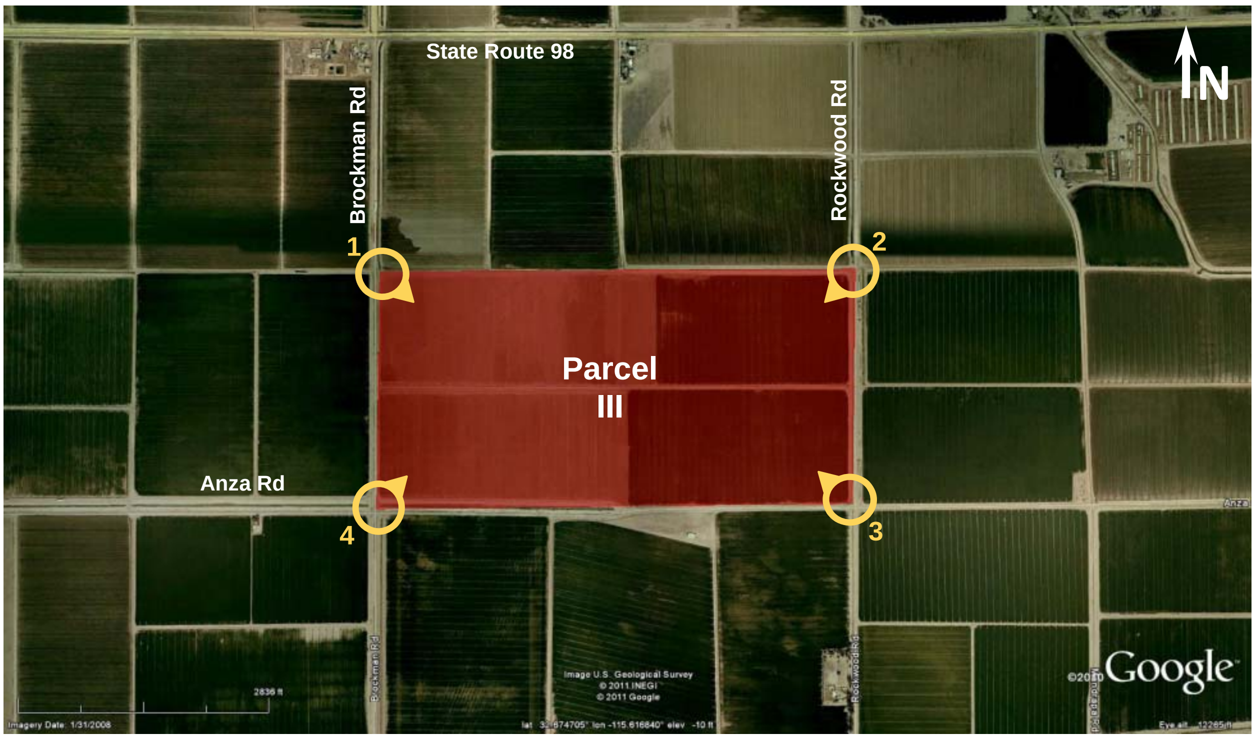


Photo Locations for Parcel III


Parcel III, #1 Looking SE


Parcel III, #2 Looking SW

Parcel III, #3 Looking NW

Parcel III, #4 Looking NE

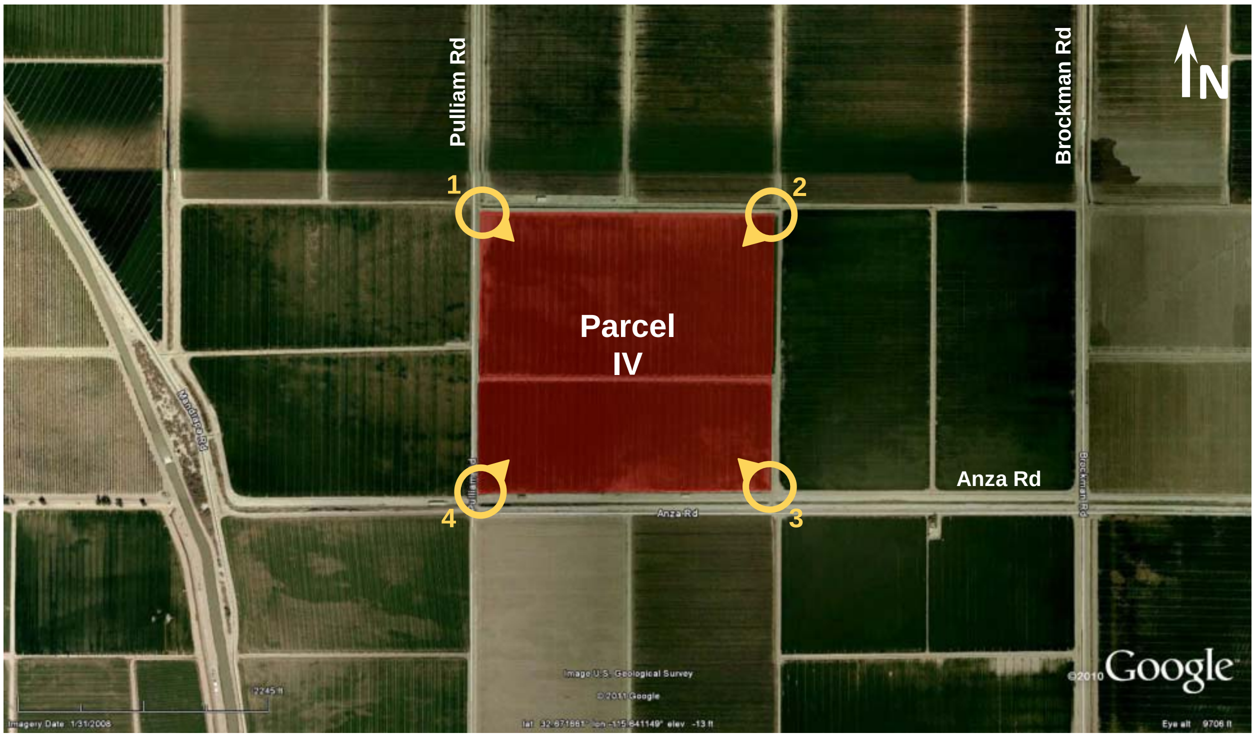


Photo Locations for Parcel IV

Parcel IV, #1 Looking SE

Parcel IV, #2 Looking SW

Parcel IV, #3 Looking NW

Parcel IV, #4 Looking NE

Up to six (6) full time employees will operate MSSF-I. Typically, up to three (3) staff will work during the day shift (sunrise to sunset), and the remainder during the night shifts and weekend. As noted earlier, it is possible that MSSF-I would share another legal entity's O&M facilities. In that scenario, MSSF-I c/would also share personnel with that legal entity, thereby reducing or eliminating the onsite staff required for MSSF-I.

MSSF-I will export and sell the generated electricity via the CAISO grid. After the useful life of the project (up to 40 years), the panels will be disassembled from the steel mounting frames and the site restored to its pre-development condition. MSSF-I is planned to generate up to 200 MW AC of electricity during peak daylight hours.

MSSF-I will utilize non-reflective photovoltaic (PV) panels (or modules) to convert sunlight directly into electricity. Individual panels will be installed on either fixed-tilt or tracker mount systems, which will stand up to 15 feet high (depending on the mount) while either flat or tilted up to approximately 25 degrees from horizontal to the south. The solar array field will be arranged in grids, and each grid will include an inverter container and a pad-mounted transformer near the center. MSSF-I will also have several electrical control containers throughout the project. MSSF-I will require the installation of up to 1.6 million photovoltaic panels to generate up to 200 MW AC (direct current ("DC") nameplate capacity of up to approximately 264 MW DC). The initial energy production of MSSF-I will be up to approximately 480,000 MWh per year, sufficient to power over 68,000 homes and displacing over 270,000 tons of CO_2 emissions per year when compared to a gas-fired power plant, or 540,000 tons when compared to a coal-fired power plant. This displacement of CO_2 emissions is equivalent to planting approximately 11 to 22 million trees or removing approximately 50,000 to 100,000 cars from the roads, respectively.

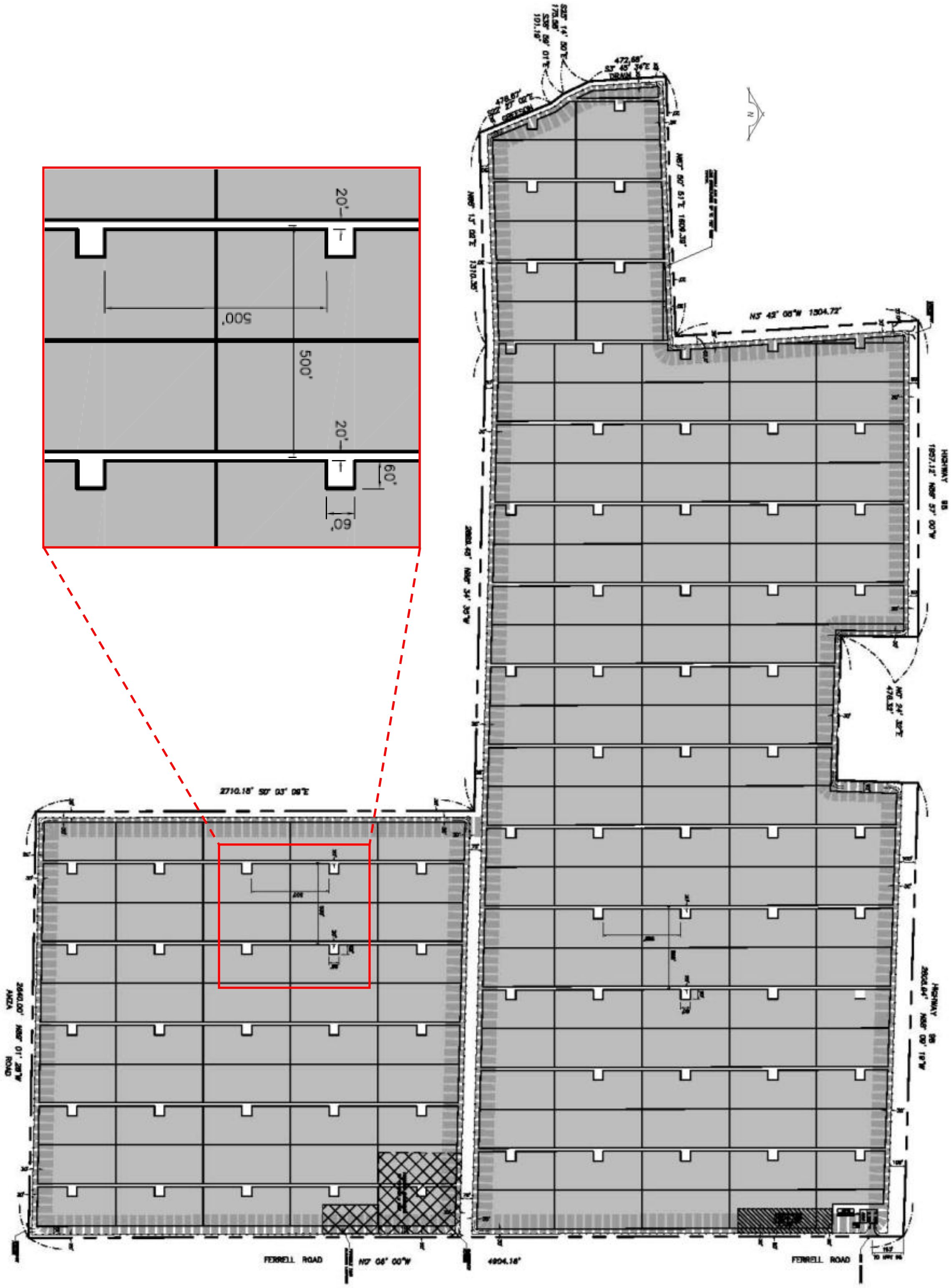
Fixed-tilt solar panels

Typical fixed-tilt solar panel rows

Typical single-axis tracking solar panels

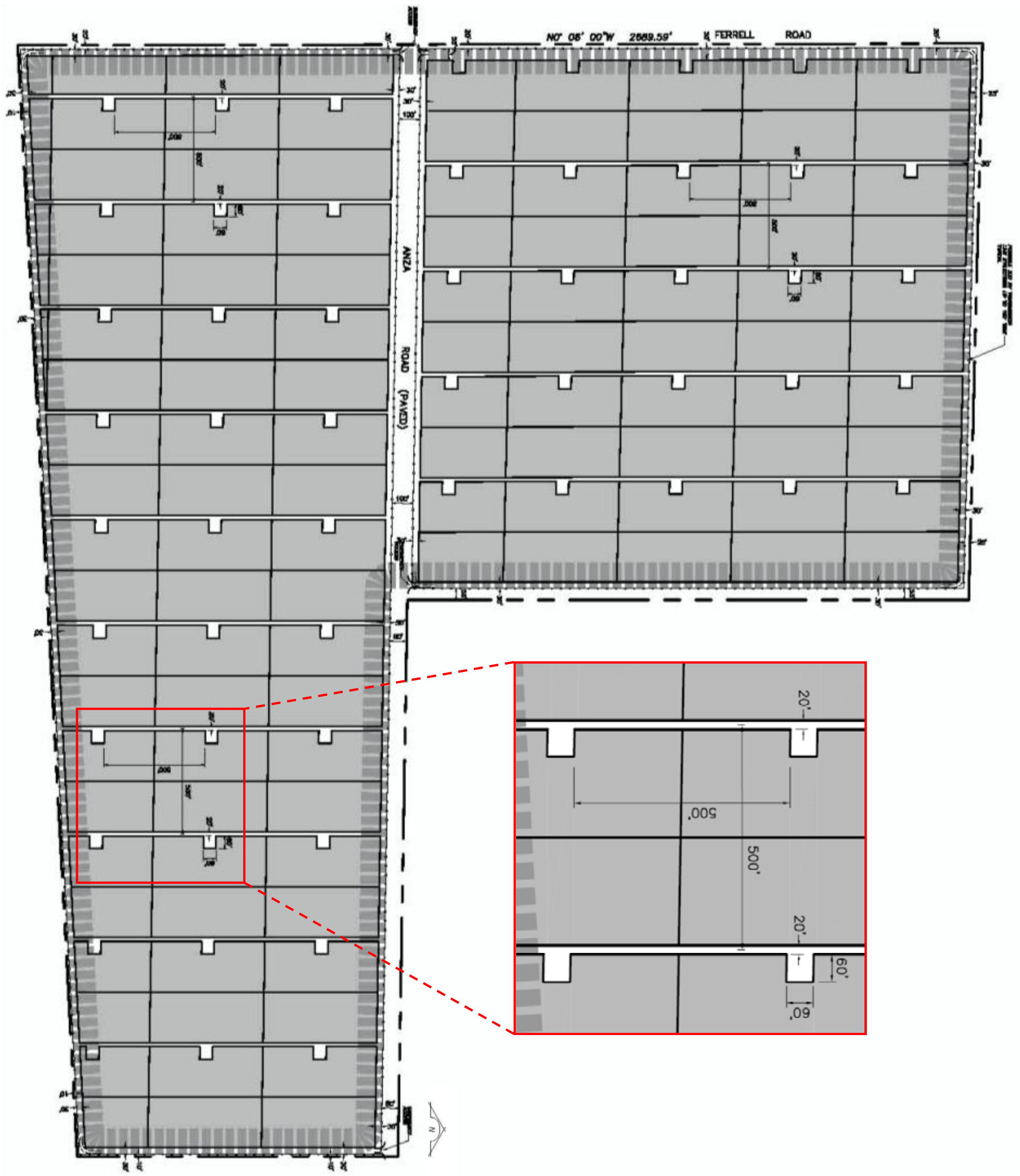
Typical single-axis tracking solar panel rows

Typical single-axis tracking solar panel rows



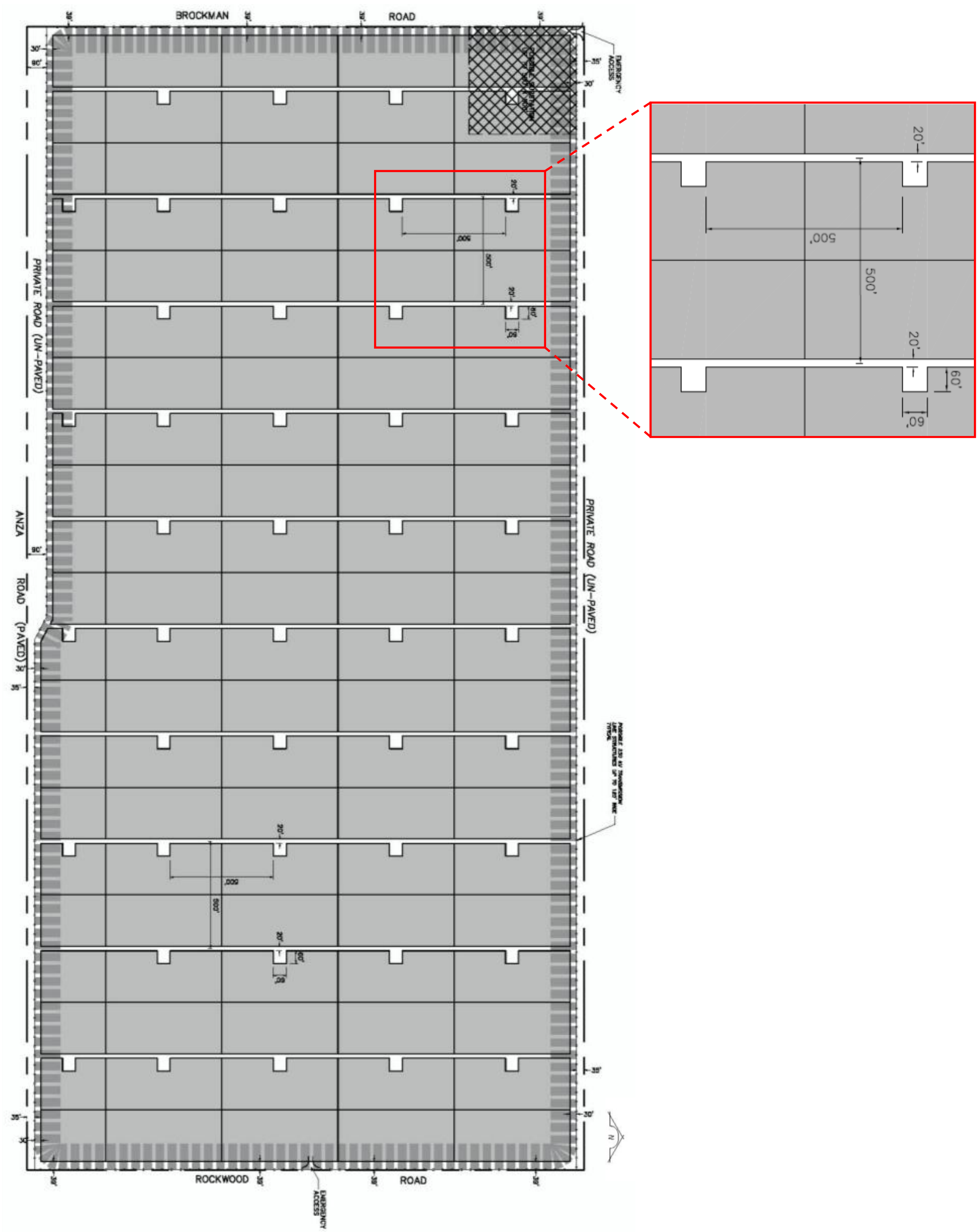
Project Site Layout – Parcel I[1]

[1] See Appendix for enlarged version



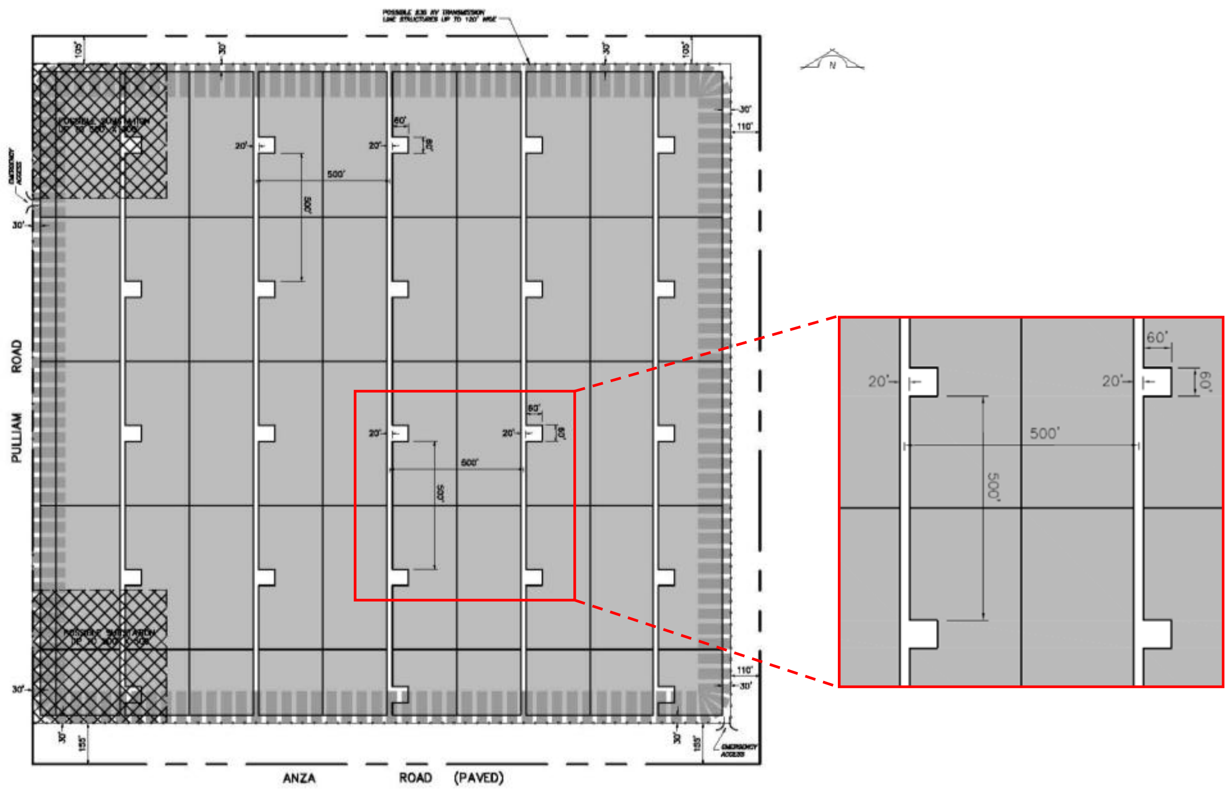
Project Site Layout – Parcel II[1]

[1] See Appendix for enlarged version



Project Site Layout – Parcel III[1]

[1] See Appendix for enlarged version



Project Site Layout – Parcel IV[1]

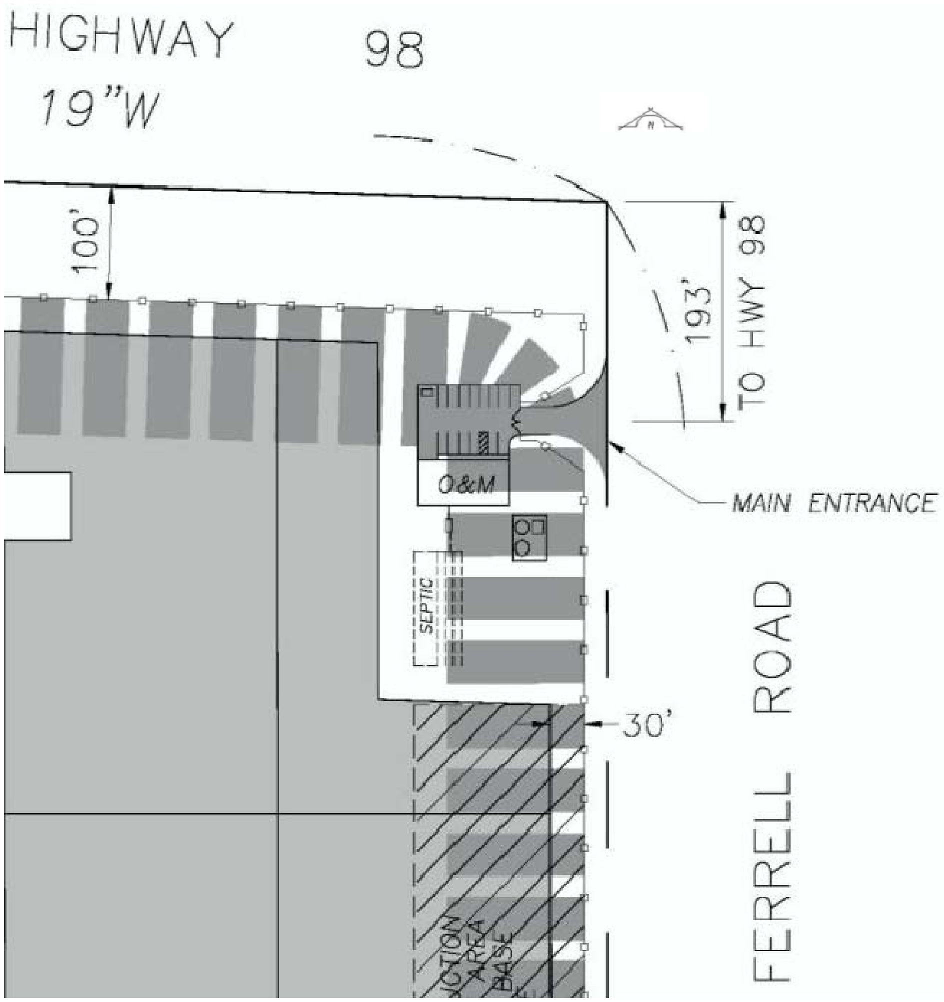
The Applicant proposes to situate the solar array on agricultural lands generally located between State Route 98 to the north and the US-Mexico border to the south, and between Pulliam Road to the west and Weed Road to the west. Any Imperial Irrigation District (IID) irrigation canals and drains will remain in place, including maintenance access roads as per IID easements.

The Applicant intends for MSSF-I to have an operations and maintenance ("O&M") building (up to approximately 320 square feet, or 40' x 80'), with associated parking, which will be constructed near the southwest corner of Ferrell Road and SR-98 (see Site Layout in the Appendix). Alternatively, the O&M building site could be located near the southwest corner of Ferrell Road and a dirt road (½ mile south of SR-98). The O&M building will be steel framed, with metal siding and roof panels, painted to match the surrounding setting (desert sand). The O&M building site will have a septic tank and leach field for wastewater disposal. A water system and small water treatment plant will be placed at the O&M building to provide onsite de-ionized water for panel washing.

Panel washing requires about one quart of water for each panel per month. It is estimated that water demand from the IID canal for panel washing and domestic use will not exceed 80 acre-feet per year. A total of approximately 20,000 to 70,000 gallons of water will be stored in steel tank(s) placed above ground onsite at the water treatment area, under a metal shade structure. 10,000 gallons of water will be exclusively dedicated for O&M firefighting purposes, i.e., to

[1] See Appendix for enlarged version

protect the O&M building only. The Applicant intends to also order and obtain a portion of the landlords' agricultural water allocations (approximately 7,000 acre-feet) from the IID to potentially irrigate and maintain a cover crop (saltgrass or similar) on the disturbed portions of the MSSF-I site; alternatively or in addition, a soil stabilizer may also be used. If a cover crop is used onsite, it is estimated that water usage to maintain that cover crop would be up to approximately 350 acre-feet per year.



Operations and Maintenance (O&M) Building Area in Parcel I

Access to the MSSF-I is via existing paved roads (SR-98 and Ferrell Road). The site will be enclosed with a low voltage, 8-foot high enhanced security fence with perimeter landscaping along public roads. The fencing will be screened with neutral colored slats (or similar) along public roads. The fence and landscaping would largely screen the project from view and beautify the project's frontages to ensure that the project would not adversely impact scenic resources or the visual character of the site and its surroundings. The O&M building's parking lot and access driveway from will be paved (not curbed). The roads, driveways and parking lots will meet the Department of Public Works and Fire/OES Standards as well as those of the Air Pollution Control District. Parking spaces and walkways will be concreted to meet all California Accessibility Regulations.

The solar array areas will have low lying grass and/or a soil stabilizer to control dust and storm water erosion. A small (48”x 96”) metal sign will be mounted at the entrances to MSSF-I that identifies the project.

As noted earlier, it is possible that MSSF-I would share another legal entity’s O&M facilities. In that scenario, MSSF-I c/would therefore not require onsite O&M facilities (O&M building with associated parking area, water tank(s), dedicated 10,000 gallons of fire-fighting water to protect the O&M building, etc.). The O&M building area depicted in the Site Layout c/would instead be covered by solar panels.

TECHNICAL STUDIES[1]

Hazardous Materials (Phase I Environmental Site Assessment)

A Phase I Environmental Site Assessment was conducted at the MSSF-I site by GS Lyon Consultants, Inc. in July 2010 and April 2011. The assessment did not reveal any Recognized Environmental Conditions (RECs) in connection with the property.

Geotechnical and GeoHazards Study

A geologic hazards survey was made for the MSSF-I site by Landmark Consultants, Inc. (El Centro, CA) in July 2010. No geologic hazards exist on or within the near vicinity of the site.

Transportation Impact Analysis

In June 2011, Linscott, Law & Greenspan, Engineers completed a Traffic Impact Analysis to assess the impact of the construction and operation of the solar farm to the roadways and intersections that will be utilized by the Project. The study estimated traffic volumes, including projected construction and operations traffic, would remain below the acceptable traffic volume thresholds identified by the County.

Visualization Study

In June 2011, Modative completed a visualization study to determine the aesthetic impacts of the proposed solar farm to the surrounding area. As shown in the visualization, the project will not damage any scenic resources or have a significant impact to the visual character of the site and its surroundings.

Glare Analysis for Ground Traffic

In May 2011, Good Company completed a reflectivity study to assess the project’s potential for glare along nearby traffic corridors. The study concluded that the panels’ orientation for either fixed-tilt or single-axis tracking solar panels results in angles of reflection well above the built environment and nearby traffic corridors. At the project’s proposed perimeter fence, which lies 30 feet from the first solar panels, the minimum height of the reflection is already at 35.8 feet or higher (depending on the time of year). At farther distances, the height of reflection is higher.

Glare Analysis for Air Traffic

In April 2011, Aztec Engineering completed a reflectivity study to assess the project’s potential for glare and glint affecting air traffic to and from Calexico Airport. The study concluded that neither fixed-tilt nor tracking solar panels at MSSF-I will have any relevant effect for airplanes landing at or taking off from the airport. In the few days in the year when there is some potential glint produced by the project’s solar panels, airplanes will also be directly facing the sun (which will render the glint effect negligible), so the panels will not have a relevant effect on airplanes’ visibility, nor deteriorate the actual approaching or launching flight conditions.

[1] See Appendix for technical studies and reports

Cultural Analysis

A cultural literature review and sensitivity assessment was completed for the MSSF-I project by AECOM (formerly EDAW) in June 2011. An archival records search was conducted for the project site as well as a one-mile radius around the site. The research identified two (2) cultural resources recorded within one mile of MSSF-I (but not in the project area itself): segments of the All-American Canal and segments of the Westside Main Canal.

Biological Survey

In June 2011, Barrett's Biological Surveys (El Centro, CA) completed a Biological Resources Technical Report for the MSSF-I site. Two (2) burrowing owls and one (1) burrows were observed onsite for MSSF-I. Twenty-three (23) burrowing owls and twenty-five (25) burrows were found in the buffer zone of MSSF-I, which includes IID canals and drains. A cover crop could be maintained onsite, which would provide a foraging habitat for the burrowing owls.

In addition, several mesquite trees were found, although many were non-native mesquite trees planted for harvest.

DESCRIPTION OF THE MSSF-I ARRAY

The Applicant estimates that MSSF-I will utilize approximately 800,000 to 1.6 million PV panels, depending on the power rating of the panels procured; this range may change somewhat as PV technology continues to change and improve. These panels will be mounted on frameworks made of galvanized steel or aluminum in continuous rows of up to 500 feet in length. The arrays are grouped to create grids of up to 500' x 500' (typ), with inverter modules and a transformer near the center of each grid. The grids produce approximately 1.1 MW to 1.4 MW direct electrical current (DC), which is converted to alternating electrical current (AC) at the inverter module. Each grid's inverter modules and transformer will be housed within an up to roughly 160 square foot container or similar structure. MSSF-I will also have several electrical control containers which would look similar to inverter containers.

Typical Inverter Container

The approximate 20 kV to 70 kV output from each grid's transformer will be transferred to one or both of MSSF-I's onsite electrical substations, which will step up the voltage to a maximum of 230 kV. The power will then be transferred to the Imperial Valley Substation using one of the methods described earlier.

The onsite substation(s) will be fed via buried electrical conduits, electrical conductor wires, and/or up to a maximum of 230 kV overhead electrical transmission lines that run along the MSSF-I property line, roads, or parcel boundaries in some cases. The onsite substations will occupy an area of up to 500' x 500' each, located in the southwest corner of Ferrell Road and a private road (½ mile south of SR-98) and either the northwest corner of Parcel III (along Brockman Road), the northwest corner of Parcel IV (along Pulliam Road), or the southwest corner of Parcel IV (along Pulliam Road).

As noted earlier, it is possible that MSSF-I would share facilities with one or more separate legal entities. In such a scenario, MSSF-I c/would either "host" a shared substation(s) located onsite or transmit its power to a shared substation located offsite. If an offsite substation is used, the potential MSSF-I onsite substation locations depicted in the site layout (see Appendix) c/would instead be covered by solar panels.

An up to 230 kV transmission line designed to interconnect MSSF-I with other nearby solar projects may traverse MSSF-I land along the edge(s) of the project, and may connect to one or both of MSSF-I's onsite substations. Please see Site Layout in the Appendix for the location of an up to 120-foot wide corridor that could accommodate an up to 230 kV transmission line.

A 20-foot wide all-weather gravel road will be located within each 500 feet of solar panels to provide County fire/emergency vehicle access within the facility and to allow access to the DC to AC electrical inverter modules. Additionally, a 20-foot wide all-weather gravel road will also exist between the perimeter fence and the solar panels with additional space in the corners for turning radii for a County fire truck.

Solar PV Power Plant Examples (Greece and Spain)

Typical Solar PV Mounting Structure

Onsite Substation(s)

The onsite substations will occupy an area of up to 500' x 500' each, located in the southwest corner of Ferrell Road and a private road (½ mile south of SR-98) and either the northwest corner of Parcel III (along Brockman Road), the northwest corner of Parcel IV (along Pulliam Road), or the southwest corner of Parcel IV (along Pulliam Road). The up to 500' x 500' onsite substation(s) will have breakers, step-up transformers, and other necessary electrical equipment such as an electrical control container. The substation areas will be secured separately by an additional 8-foot high enhanced security chain-link fence.

As noted earlier, it is possible that MSSF-I would share facilities with one or more separate legal entities. In such a scenario, MSSF-I would either "host" a shared substation(s) located onsite or transmit its power to a shared substation located offsite. If an offsite substation is used, the potential MSSF-I onsite substation locations depicted in the site layout (see Appendix) c/would instead be covered by solar panels.

In the event that MSSF-I "hosts" an onsite substation(s) to be shared by one or more nearby solar projects, the substation's equipment would be designed to accommodate up to 230 kV electrical output from each of those projects. A 230 kV gen-tie line designed to interconnect MSSF-I with other nearby solar projects may traverse MSSF-I land along the edge(s) of the project or parcel boundaries and may connect to MSSF-I's onsite substation(s). Please see Site Layout in the Appendix for the location of an up to 120-foot wide corridor that could accommodate an up to 230 kV transmission line.

Typical Substation Design

Typical Substation Design (Midway Substation)

Annual Production and In-Service-Date

The MSSF-I facility will provide maximum electrical output during daylight hours. Peak electricity demand in California corresponds with air conditioning use on summer afternoons when ambient temperatures are high. MSSF-I's peak generating capacity corresponds to this time-period when the peak solar energy, solar insulation value, is highest. There is no generating capacity between sunset and sunrise due to the lack of solar energy.

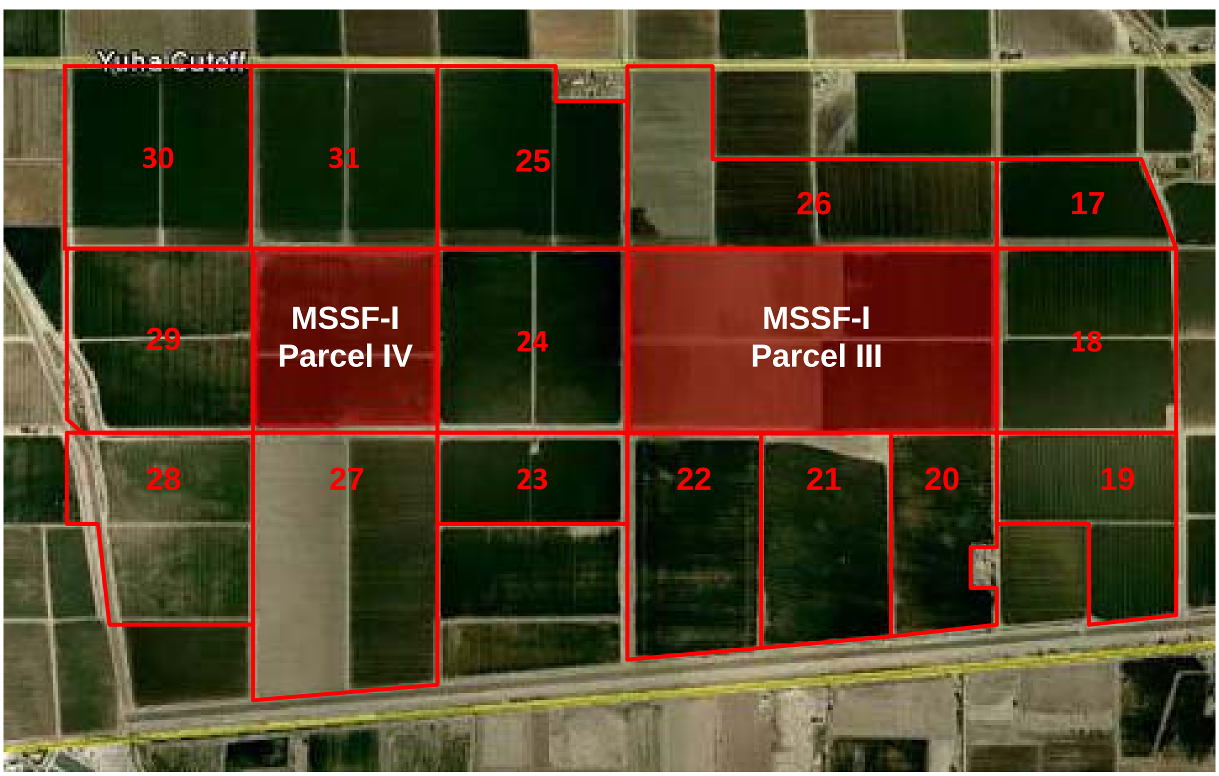
MSSF-I will have a total power output of up to 200 MW AC, with an annual production of up to approximately 480,000 MWh per year. Construction of MSSF-I will be phased in blocks as interconnection becomes available, with full capacity scheduled to be available by the end of 2012 ("In-Service-Date"). The In-Service-Date assumes that permitting, financing, power purchase agreement ("PPA") negotiations, and interconnection and transmission availability are in accordance with the project schedule.

SURROUNDING PROPERTIES

MSSF-I abuts mostly agricultural land uses to the north, south, east, and west, with the exception of the US-Mexico border located just beyond the southern boundary of Parcel II. In addition, SR-98 runs along the northern boundary of Parcel I. The project is located approximately 2½ to 7½ miles west of the city of Calexico.

Adjacent Owners List/APN List

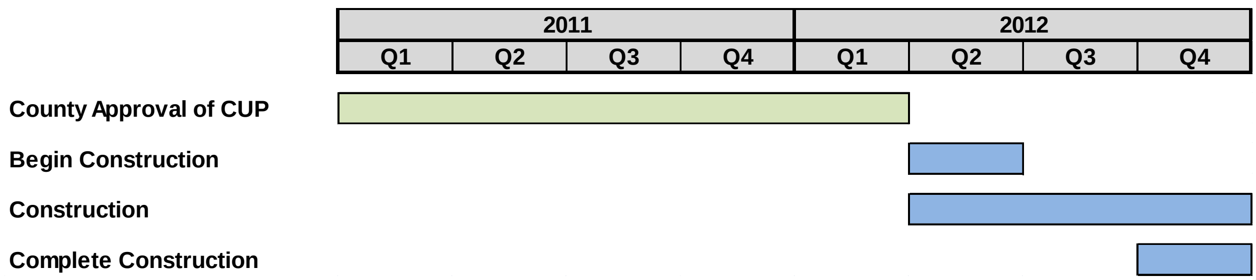
Number	APN	Owner	Owner's Address
1	052-210-033	Mariana Gonzalez	698 West Highway 98, Calexico, CA 92231
2	052-180-051	Joy Phoenix Trustee	2140 N. El Camino Rinconado, Tucson, AZ 85749
3	059-120-001	Joy Johnson Trustee	2140 N. El Camino Rinconado, Tucson, AZ 85749
4	059-120-002	James & Dorothy Ellis Trustees	6391 Sprint Parkway, Overland Park, KS 66251
5	059-120-003	West-Gro Farms Inc.	PO Box 1748, El Centro 92244
6	059-120-004	West-Gro Farms Inc.	PO Box 1748, El Centro 92244
7	059-130-003	Alice Johnson Trustee	5990 Camino de la Costa, La Jolla, CA 92037
8	059-110-008	Alice Johnson Trustee	5990 Camino de la Costa, La Jolla, CA 92037
9	059-110-003	Alice Johnson Trustee	5990 Camino de la Costa, La Jolla, CA 92037
10	052-210-020	John Strobel Jr.	1798 West Main Street, El Centro, CA 92243
11	052-210-014	Archibald & Mary Dessert Trustees	1591 Hamilton, El Centro, CA 92243
12	052-210-032	Bambarger & Payne	903 West Highway 98, Calexico CA 92231
13	052-210-028	William & Kathy Brandenberg	903 West Highway 98, Calexico CA 92231
14	052-180-040	Monica Salma Jason LP	PO Box 2978, Riverside, CA 92506
15	052-180-064	Salma Jason Monica LP	PO Box 2978, Riverside, CA 92516
16	052-180-065	Mora, Aguilar-Mora, & Chavez-Mora	704 West Highway 98, Calexico, CA 92231
17	052-210-029	Bambarger & Payne	903 West Highway 98, Calexico, CA 92231
18	052-210-015	Brandenberg & Seitz	903 West Highway 98, Calexico, CA 92231
19	052-210-019	Brundy & Brundy	PO Box 845, Seeley, CA 92273
20	052-210-039	WR Connelly Inc.	9210 Olive Drive, Spring Valley, CA 91977
21	052-210-038	WR Connelly Inc.	9210 Olive Drive, Spring Valley, CA 91977
22	052-210-037	Curtis & Julie Corda Trustees	1941 Pepper Drive, El Centro, CA 92243
23	052-190-024	Montecito Land c/o William Simmons	PO Box 360, El Centro, CA 92244
24	052-190-011	George Bishop	804 Morse Street, Oceanside, CA 92054
25	052-190-010	IID Trust Land	PO Box 937, Imperial, CA 92251
26	052-210-001	Katherine Bishop	573 Drew Road, Calexico, CA 92231
27	052-190-023	Curtis & Julie Corda Trustees	1941 Pepper Drive, El Centro, CA 92243
28	052-190-022	Curtis & Julie Corda Trustees	1941 Pepper Drive, El Centro, CA 92243
29	052-190-037	Curtis & Julie Corda Trustees	1941 Pepper Drive, El Centro, CA 92243
30	052-190-008	IID Trust Land	PO Box 937, Imperial, CA 92251
31	052-190-009	IID Trust Land	PO Box 937, Imperial, CA 92251



No roadways will be affected by MSSF-I, except during the project's 6 to 9 month construction. Construction truck traffic will reach MSSF-I via SR-98. Despite the increased traffic during construction of the proposed project, a Traffic Impact Analysis found that the traffic volumes on these roads are still below the volume thresholds identified by the County.

DEVELOPMENT SCHEDULE

It is anticipated that permitting, construction, and operation of the MSSF-I facility will generally adhere to the following schedule:



PUBLIC UTILITIES AND SERVICES

The MSSF-I is expected to be serviced as follows:

1) *Refuse* – Allied Waste Management/Palo Verde Valley Disposal
2) *Sewer* – On-site Septic System
3) *Water* – IID supply/onsite treatment
4) *Police* – Imperial County Sheriff Department
5) *Fire* – Imperial County Fire Station
6) *Electric* – Imperial Irrigation District
7) *Telephone* – AT&T

PROJECT FEATURES AND BEST MANAGEMENT PRACTICES (BMPs)

The following sections describe standard project features and best management practices that will be applied during construction and long-term operation of MSSF-I in an effort to avoid negative environmental impacts.

Aesthetics

The project will have an enhanced security perimeter fence no less than 8 feet high, and will be screened with neutral colored (desert sand) PVC slats (or similar) along each public road. Perimeter landscaping will be provided along each public road.

Erosion Control and Storm Water Drainage

Earthmoving activities will be limited to the construction of the access road, O&M building, the electrical substations, and any storm water protection or storage (detention) facilities. Final grading may include revegetation with low lying grass or applying earth-binding materials to disturbed areas.

Site Drainage during Construction and Operation

To the extent possible and economically feasible, site drainage during construction will follow predevelopment flow patterns. Ultimate site discharge will be at the low corners of the project parcels. The incremental storm water run-off attributed to construction of foundations for solar panel mounting frames, foundations within the substations, inverter modules, control containers, and the O&M building area will be contained by ditches, drains, and/or elevated roadways at the low corner of the project parcels, which will prevent offsite migration of storm water and allow sedimentation and absorption with ultimate discharge at the low corner of the project parcels. Designs will be based upon the State's Construction General Permit (2009-0009DWQ) for erosion and sediment control. All storm water storage areas will be designed to absorb or discharge within 72 hours (mosquito abatement measure).

Temporary Erosion and Sedimentation Control Measures

Temporary erosion and sedimentation control measures to be used during construction will be designed to prevent sediments from being displaced and carried offsite by storm water runoff. Prior to beginning excavation activities, a silt fence, straw bales, or other BMP will be installed where appropriate where minor runoff to offsite areas could occur. The silt fence will filter sediments from construction runoff. During construction, the extent of earth disturbances will be minimized as much as practical. Temporary BMP control measures will be maintained as necessary throughout the construction period. A sediment trap will be constructed for the major site runoff discharge. The sediment trap will be located immediately upstream of the site boundary.

Waste and Hazardous Materials Management

The MSSF-I will have minimal levels of materials on site that have been defined as hazardous under 40CFR, Part 261. The following materials may be used during the construction, operation, and long term maintenance of MSSF-I:

- Insulating oil – used for electrical equipment
- Lubricating oil – used for maintenance vehicles
- Various solvents/detergents – equipment cleaning
- Gasoline – used for maintenance vehicles

Wastes will be managed in accordance with applicable regulations of the approved MSSF-I facility as follows:

- Any hazardous wastes will be maintained at quantities below the threshold requiring a Hazardous Material Management Program (HMMP) (one 55 gallon drum).
- All waste drums will be stored in accordance with good practice and applicable regulations, and will be protected from environmental conditions, including rain, wind, and direct heat and physical hazards such as vehicle traffic and sources of heat and impact.

- Waste lubricating oils will be recovered and reclaimed by a waste oil-recycling contractor.
- Spent lubricating oil filters from vehicles will be disposed at an authorized waste disposal facility.
- Batteries will be reclaimed and recycled by authorized facilities.
- Any hazardous waste generation, handling, and storage areas will be inspected and monitored on a regular basis.
- California-authorized and certified hazardous waste haulers will transport any hazardous wastes to registered waste treatment, storage, disposal, and recycling facilities.
- Emergency response and reporting will be performed per written procedures that follow government and industry requirements and standards.
- Workers will be trained to handle hazardous wastes generated at the site.
- If 55 gallons of hazardous waste or more should accumulate onsite, storage of such hazardous waste will at no time exceed 90 days from the date of initial accumulation exceeding 55 gallons, and a HMMP shall be developed as described below.

The storage, use, and handling of any hazardous materials will be in accordance with applicable regulations and will include the following items:

- Facility personnel will be trained in hazardous materials and hazardous waste awareness, handling, and management as required for their level of responsibility.
- Bulk chemicals will be stored in the original shipping container provided by and returned to the chemical provider.
- Chemical storage areas and feed/transfer areas will be equipped with secondary containment sufficient in size to contain the volume of the largest container or tank including an allowance for rainwater.
- Small-quantity chemicals used for maintenance tasks will be kept in appropriate flammable material or corrosive material storage lockers following applicable regulations.
- Periodic inspections will ensure that all containers are secure and properly marked.
- Sanitary wastewater generated at the facility cannot be conveyed to an existing sewage public treatment facility. There are no public entities that manage sanitary wastewater flows for locations in the vicinity of the project site.

Should onsite storage of hazardous materials exceed one 55 gallon drum, MSSF-I will implement a Hazardous Materials Management Program (HMMP) developed for the MSSF-I construction and operation stages, and will include, at a minimum, procedures for:

1. Hazardous materials handling, use and storage,
2. Emergency response,
3. Spill control and prevention,
4. Employee training,
5. Record keeping and reporting.

The HMMP (if required) will be developed and implemented prior to start of construction or prior to the storage on-site of an excess of 55 gallons of hazardous materials. The program will be revised and updated as required in a timely manner. Employees will be trained and the program implemented prior to the start of commercial operation. The procedures outlined in the HMMP will be in accordance with all applicable regulations.

Spill Prevention and Containment

Spill prevention and containment for construction and operation of MSSF-I will adhere as follows to EPA's guidance on Spill Prevention Control and Countermeasures (SPCC) as any hazardous materials stored onsite will be in quantities of less than 55 gallons.

> *Regularly scheduled inspections, evaluations, and testing by qualified personnel are critical parts of discharge prevention. Their purpose is to prevent, predict, and readily detect discharges. They are conducted not only on containers, but also on associated piping, valves, and appurtenances, and on other equipment and components that could be a source or cause of an oil release.*

Waste Water/Septic System

A standard onsite septic tank and leach field will be used for the MSSF-I (unless the project shares another legal entity's O&M facilities) to dispose sanitary wastewater, designed to meet operation and maintenance guidelines required by Imperial County laws, ordinances, regulations and standards. Any necessary replacement leach field will be adjacent to the primary field.

Inert Solids

Inert solid wastes resulting from construction activities may include recyclable items such as paper, cardboard, solid concrete and block, metals, wire, glass, type 1-4 plastics, drywall, wood, and lubricating oils. Non-recyclable items include insulation, other plastics, food waste, vinyl flooring and base, carpeting, paint containers, packing materials, and other construction wastes. All packaging materials for components of the solar farm shall be crated and recycled offsite. No crating or packaging materials will be placed in local landfills. Management practices require recycling of contractor waste when possible, and proper storage of non-recyclable waste and debris to prevent wind dispersion, and weekly pickup of non-recyclable wastes with disposal at a local approved landfill.

Chemical storage tanks (if any) will be shop-fabricated, double-walled construction meeting applicable regulations. These tanks, as well as portable drums (if any), will be provided with appropriate anchors or cradles and placed within spill containment basins.

Any wastes classified as hazardous such as solvents, degreasing agents, concrete curing compounds, paints, adhesives, chemicals, or chemical containers will be stored (in an approved storage facility/shed/structure) and disposed of as required by local and state regulations. Material quantities of hazardous wastes are not expected.

FIRE PROTECTION

MSSF-I will have onsite fire-protection systems and will be supported by local fire protection services. Portable and fixed fire suppression equipment and systems will be included in the project. Portable fire extinguishers will be located at strategic locations throughout the project site. The fixed fire protection system will also include 10,000 gallons of dedicated water from onsite storage tank(s) and wet fire-department connection for protection of the O&M building only. Pressurized waterlines or fire department connections are not planned for the solar arrays.

As noted earlier, it is possible that MSSF-I would share another legal entity's O&M facilities. In that scenario, MSSF-I c/would therefore not require onsite O&M facilities (O&M building with associated parking area, water tank(s), dedicated 10,000 gallons of fire-fighting water to protect the O&M building, etc.). The O&M building area depicted in the Site Layout c/would instead be covered by solar panels.

Employees will be given fire safety training including instruction in fire prevention, the use of portable fire extinguishers and the reporting of fires to the local fire department. Employees will only suppress fires in their incipient stage.

Service roads along the perimeter and within the property will be minimum 20-foot wide, all-weather gravel roads capable of supporting a 75,000 pound load imposed by a fire apparatus. Interior roads with a minimum width of 20 feet will be spaced approximately 500 feet from each other. Each of these roads will have a turnaround area with a minimum 60 foot by 60 foot dimension (or 60 foot by 80 foot including the service road) approximately every 500 feet from each other or the perimeter fire service road.

If a cover crop (saltgrass or similar) is used onsite, it will be maintained at a reasonably low height to avoid the potential for a fire incident.

SITE SECURITY AND FENCING

An onsite security system will be installed. Controlled access gates will be maintained at the entrances to MSSF-I.

Perimeter security fencing and access gates will be provided for MSSF-I. The security fencing will be low voltage and provided with warning reflective signage. Regular site security vehicular patrols will be conducted to provide additional site security. Site access will be provided to offsite emergency response teams that respond in the event of an "after-hours" emergency. Access to the property will either be via swinging or sliding gates with a minimum width of 20 feet. Entry into MSSF-I by fire department or emergency units will be handled on a manual override basis. If the gates are manual, a key for the gate will be provided in a key box at the gate location.

HEALTH AND SAFETY

Safety precautions and emergency systems will be implemented as part of the design and construction of the MSSF-I facility to ensure safe and reliable operation. Administrative controls will include classroom and hands-on training in operating and maintenance procedures, general safety items, and a planned maintenance program. These will work with the system design and monitoring features to enhance safety and reliability.

All employees shall be provided with communication devices, cell phones, or walkie-talkies, to aid in the event of an emergency situation on-site.

Safety, Auxiliary and Emergency Systems

Safety, auxiliary, and emergency systems may consist of lighting, grounding, backup UPS systems and diesel power generators, fire and hazardous materials safety systems, security systems, chemical safety systems, and emergency response teams. The O&M building will include its own utilities and services, such as emergency power, fire suppression, and treated water systems.

MSSF-I will implement programs to assure compliance with federal and state occupational safety and health program requirements. In addition to compliance with these programs, MSSF-I will identify and implement plant-specific programs that effectively assess potential hazards and mitigate them on a routine basis.

As discussed above, hazardous materials may be stored and used at MSSF-I during construction and operation, but will be restricted to less than one 55 gallon drum. The design and construction of any hazardous materials storage and dispensing systems will be in accordance with applicable regulations. Hazardous materials storage areas will be designed with curbs or other containment measures like double-walled storage tanks, if applicable, to contain spills and leaks. If hazardous materials exceed 55 gallons, a Hazardous Material Management Program will be developed as described above.

Emergency eyewashes and showers (if required by fire or safety codes) will be provided at appropriate locations. Appropriate Personal Protective Equipment (PPE) will be provided during both construction and operation of the MSSF-I facility.

Emergency Response Plan

MSSF-I will have an Emergency Response Plan (ERP). The ERP will address potential emergencies including chemical releases, fires, and injuries. The ERP will describe emergency response equipment and equipment locations, evacuation routes, procedures for reporting to local emergency response agencies, responsibilities for emergency response, and other required actions to be taken in the event of an emergency.

Employee response to an emergency will be limited to an immediate response to minimize the risk of escalation of the accident or injury. Employees will be trained to respond to fires, spills, earthquakes, and injuries. A first aid facility with adequate first-aid supplies and personnel qualified in first aid treatment will be onsite.

ADDITIONAL INFORMATION

Project Construction

Construction of MSSF-I is anticipated to require approximately 6 to 9 months. This section describes major components during the design, layout, and construction processes.

Project Engineering, Procurement, Construction, and Compliance

The engineering, procurement, and construction of the MSSF-I will be accomplished as follows:

1. AES Solar has been selected to provide detailed engineering, preparation of drawings and specifications for permitting. The Applicant will provide project management. Long lead equipment will be procured by AES Solar in advance of the start of construction.
2. A Construction Manager Contractor at Risk (CMAR) for site preparation, buildings, services, power collection, and transmission will be identified in advance of the start of construction for value engineering input, construction preparation, and procurement.
3. A Prime Equipment Supplier (PES) or Suppliers will be identified for the manufacturing, assembly, and installation of the PV arrays and inverters.

The overall detailed construction schedule will be prepared and coordinated through the prime CMAR contractor with input from the Applicant. Detailed construction operating plans will be included in the Project Execution Plan (PEP) as follows:

1. A project specific Occupational Safety and Health Plan will be developed to specify worker safety procedures and the Applicant's and CMAR's responsibilities in order to prevent incidents involving personnel on the project site.
2. The PEP will address roles, responsibilities and identify primary contacts, procedures, and actions required during the design, procurement, and construction stages of the work.
3. A project specific Quality Assurance / Control Plan will be developed by the CMAR Contractor(s)' QA/QC Departments with input from appropriate representatives of the Contractor(s)' Project Team, the Applicant, and major equipment suppliers.
4. During construction, construction trades personnel parking will be located within the lay-down area. The parking area will be fenced and controlled by security personnel during normal work hours.
5. A temporary gravel area of minimum two acres will be located adjacent to the O&M building. This area will be located near the southwest corner of SR-98 and Ferrell Road, or alternatively near the southwest corner of Ferrell Road and a dirt road (½ mile south of SR-98). It will be devoted to equipment and materials lay-down, storage, parking of construction equipment, small fabrication areas and office trailers. If MSSF-I's O&M building is not necessary due to the project sharing another legal entity's O&M facilities, MSSF-I's temporary lay-down area c/would instead be covered by solar panels.
6. The CMAR contractor(s) will have at least one Safety Coordinator who will prepare a site-specific safety plan. Emergency services will be coordinated with the nearby fire department.
7. All contractors, subcontractors, and consultants will participate in comprehensive health, safety, environmental, HMMP (if required), and emergency procedures training prior to any initial site activities.

Site Preparation, Surveying and Staking

Site preparation, surveying, and staking of the project site will begin following the Applicant's receipt of Imperial County's approval to implement MSSF-I. Activities that will be included in this phase include:

1. Land surveying activities (including benchmarks),
2. Staking of construction limits (lay-down yards, access roads, temporary use areas),
3. Briefing of contractors.

Temporary Lay Down Yard

A minimum two-acre lay down yard will be required for PV panel offloading and steel frame assembly. It is assumed that the PV panel arrays will be assembled in parallel with the construction of the O&M building and the electrical substations. Upon completion of the project, the lay down yard will be revegetated with a low lying grass or with a soil stabilizer, and the area will be filled with solar panels as shown in the Site Layout. However, if MSSF-I shares another legal entity's facilities, a separate lay down yard may not be needed for MSSF-I; alternatively, the lay down yard area needed may be reduced.

Site Clearing

The proposed project will be designed in such a manner to minimize ground disturbances and resulting environmental impacts.

PV Panel Steel Mounting Frames Installation

Foundations for the galvanized steel mounting frames will be installed approximately 20 feet on center along the front and back of each panel row. Each foundation will consist of an approximately 12 to 15 inch diameter drilled pier extending approximately 3 to 7 feet below ground surface.

PV Solar Array Field

To the extent possible and economically feasible, the site layout will attempt to maintain predevelopment drainage patterns. Discharge from the site will be at the low corners of the project parcels. If an onsite O&M building is constructed, the 20-foot wide paved entry road will be designed to convey nuisance runoff to drainage channels/swales. It is expected that storm water runoff will flow over the crown of any paved roadway, which is typically less than six inches from swale flow line to crown at centerline of roadway, thus allowing drainage during storms. Interior access roads (e.g., between PV panel blocks) will be all-weather gravel roads, as noted earlier. Unpaved access areas between PV panel rows may be planted with saltgrass (or similar), which would be watered infrequently, thus not requiring mowing or cutting, yet maintaining binding of the soil with the grass root system. As an alternative to the cover crop, a permeable soil stabilizing polymer may be used as a dust suppressant.

It is anticipated that specialized trades and higher skill level construction personnel will commute to the MSSF-I construction site(s) on a daily basis from within the Imperial Valley area

and, in the case of those travelling from longer distances, may stay in temporary housing or apartments during the week for the duration of construction of the proposed project.

Heavy construction will be scheduled to occur between 6:00 AM and 5:00 PM, Monday through Friday. Additional hours may be necessary to make up schedule deficiencies or to complete critical construction activities. There is estimated to be up to 60 workers per day during the construction of the project.

Some activities may continue 24 hours per day, seven days per week. These activities include, but are not limited to, refueling equipment, staging material for the following day's construction activities, quality assurance/control, and commissioning.

Materials and supplies will be delivered to the site by truck. Truck deliveries will normally occur during daylight hours. However, there will be offloading and/or transporting to the site on weekends and during evening hours.

O&M Building

It is anticipated that an O&M building (up to approximately 320 square feet, or 40' x 80') will be required for MSSF-I. The O&M building will include:

1. Office
2. Repair Building/Parts Storage
3. Electrical/Array Control Room
4. Restrooms
5. Water Treatment Facility

As noted earlier, it is possible that MSSF-I would share another legal entity's O&M facilities. In that scenario, MSSF-I c/would therefore not require an onsite O&M building. The O&M building area depicted in the Site Layout c/would instead be covered by solar panels.

Work Force

It is expected that MSSF-I will be operated with a staff of up to six (6) full-time employees. The facility will operate seven days per week, generating electricity during normal daylight hours when the solar energy is available. Maintenance activities will occur seven days a week, 24 hours a day to ensure PV Panel output when solar energy is available. As noted earlier, it is possible that MSSF-I would share another legal entity's O&M facilities. In that scenario, MSSF-I c/would also share personnel with that legal entity, thereby reducing or eliminating the onsite staff required for MSSF-I.

Project Lighting

The project will be compliant with the Imperial County Zoning Ordinance. Day lighting will supplement energy-efficient fluorescent lighting in the O&M building. Emergency egress identification and path lighting will be provided per building code requirements.

Electrical Grounding

The facility will be designed in accordance with National Electrical Code requirements including MAG amendments. The electrical system may experience unit ground potential rise due to ground fault, lightning strike, or switching surges. A grounding system will be installed to permit dissipation of ground fault currents and minimize ground potential rise.

The grounding grid will be designed with adequate capacity to dissipate heat produced by ground current under fault conditions and be designed to maintain safe voltage gradients. Ground resistivity testing and calculations will be performed during detailed design to determine the number and type of grounding electrodes and the grid spacing necessary to ensure safe step and touch potentials under fault conditions. Each PV panel string within the solar field will be bonded to the foundation to provide localized grounding of each string.

Within project buildings, grounding conductors will bond building structural steel, metallic piping, and non-energized metallic parts of electrical equipment to the building grounding systems. Isolated grounding conductors will connect sensitive control systems to the building grounding systems.

If required, a cathodic protection system will be designed and installed to control electrochemical corrosion of exterior surfaces of underground carbon steel, copper, aluminum, and stainless steel. Bottoms of soil- or sand-pad-mounted steel tanks and exterior surfaces of underground ductile or cast-iron pipe will be protected against corrosion. The type of cathodic protection system (galvanic or impressed current) will be based on soil characteristics, the amount of material to be protected, and the interference effects of any nearby cathodic protection systems.

Lightning protection will follow the National Fire Protection Association (NFPA) 780 guidelines and will be provided where required for project structures and pumps.

Heating, Ventilation, and Air-Conditioning

Heating, ventilation, and air-conditioning (HVAC) will consist of heat pump ground-mounted units with code-required fresh make-up air capabilities for the office and control area of the O&M building. Mechanical ventilation will be provided for the maintenance areas.

Temperature control will be provided for both personnel and equipment areas, and humidity control will be provided in the control and communications equipment rooms.

Operations and Maintenance

Operation and Facility Maintenance Needs

Once MSSF-I is constructed, minimal maintenance needs are required and are generally limited to the following:

1. Washing of PV panels
2. Monitoring electricity generation
3. Providing site security

4. Facility maintenance (e.g., replacing or repairing PV modules, wiring, control equipment and inverters)
5. Site maintenance, including but not limited to:
   a. Cover crop (if any) c/would be maintained via periodic flood irrigation
   b. Landscaping will be maintained via drip irrigation, sprinklers, and/or bubblers, as appropriate

Maintenance Activities

PV panel washing, operations dust control, domestic water use, and water treatment under regular maintenance routines will require up to 80 acre-feet (26 million gallons) of water per year. Backwash water from the reverse osmosis water treatment plant will equal the clean process water volume. Backwash water will be applied to any required landscaped areas along the perimeter fence. A very low speed is anticipated for maintenance vehicles.

Access roads and solar array long-term maintenance will include:

1. Temporary soil stabilization techniques, such as scheduling construction sequences to minimize land disturbance during the rainy and non-rainy seasons and employing BMPs appropriate for the season.
2. Sediment control techniques, such as using silt fences, straw bales, and/or fiber rolls to intercept and slow the flow of sediment-laden runoff such that sediment settles before runoff leaves the site.
3. Wind erosion control by maintaining low lying grass over or dust palliatives, as required, to prevent or alleviate windblown dust.
4. Other measures, as appropriate, to comply with Imperial County laws, ordinances, regulations and standards.

<u>EXISTING CONDITIONS OF PROJECT SITE</u>

MOUNT SIGNAL SOLAR FARM I

(82LV 8ME, LLC)

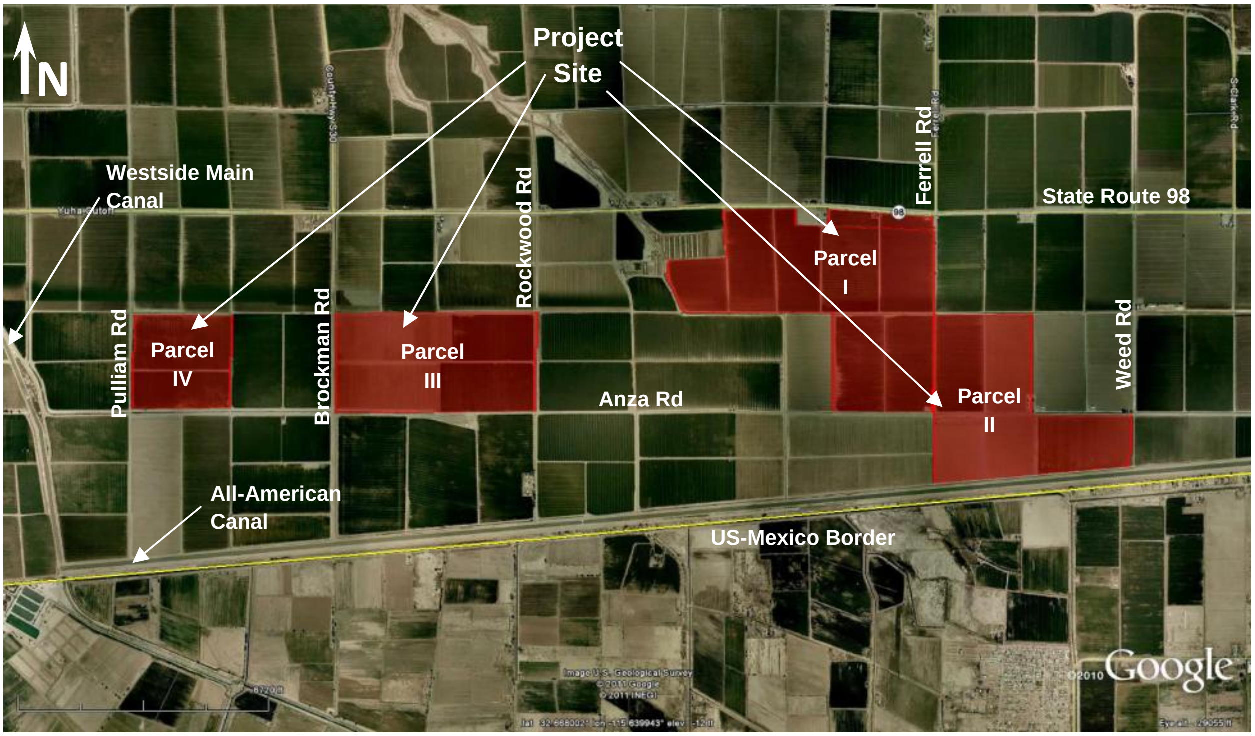


Figure 1: Satellite view (Google Earth)

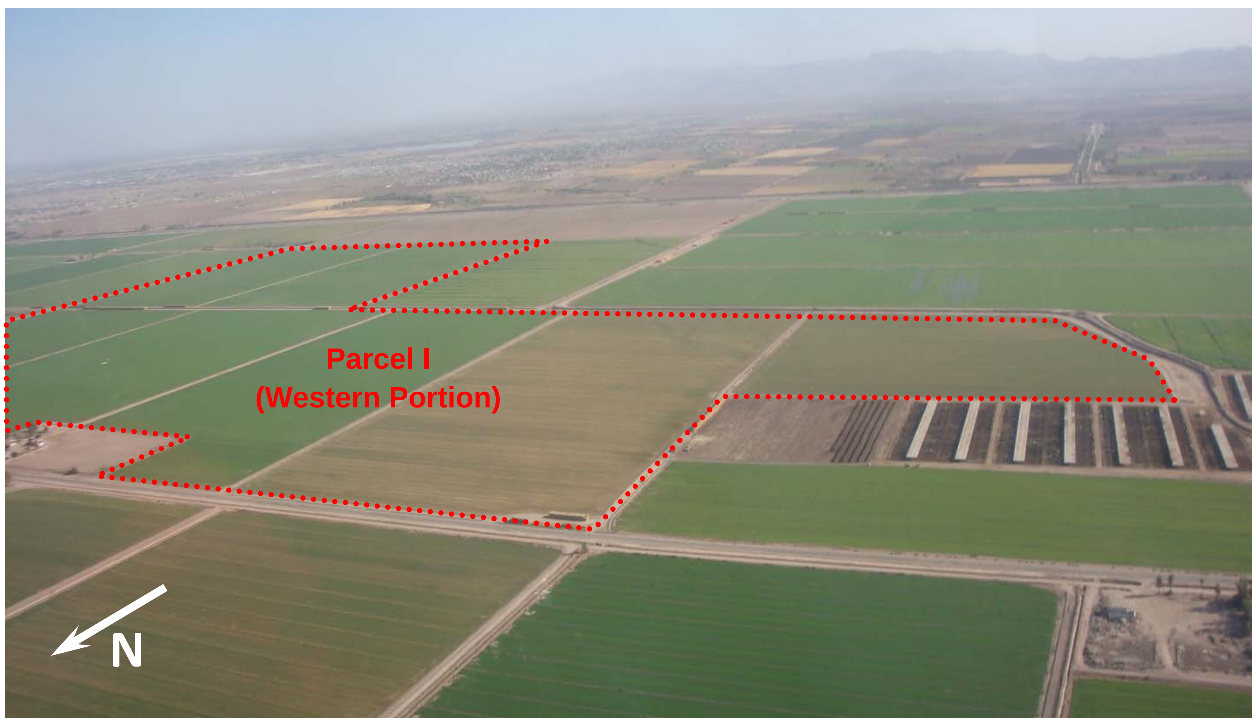


Figure 2: Aerial view of Parcel I from northwest

Figure 3: Aerial view of Parcel I from northwest

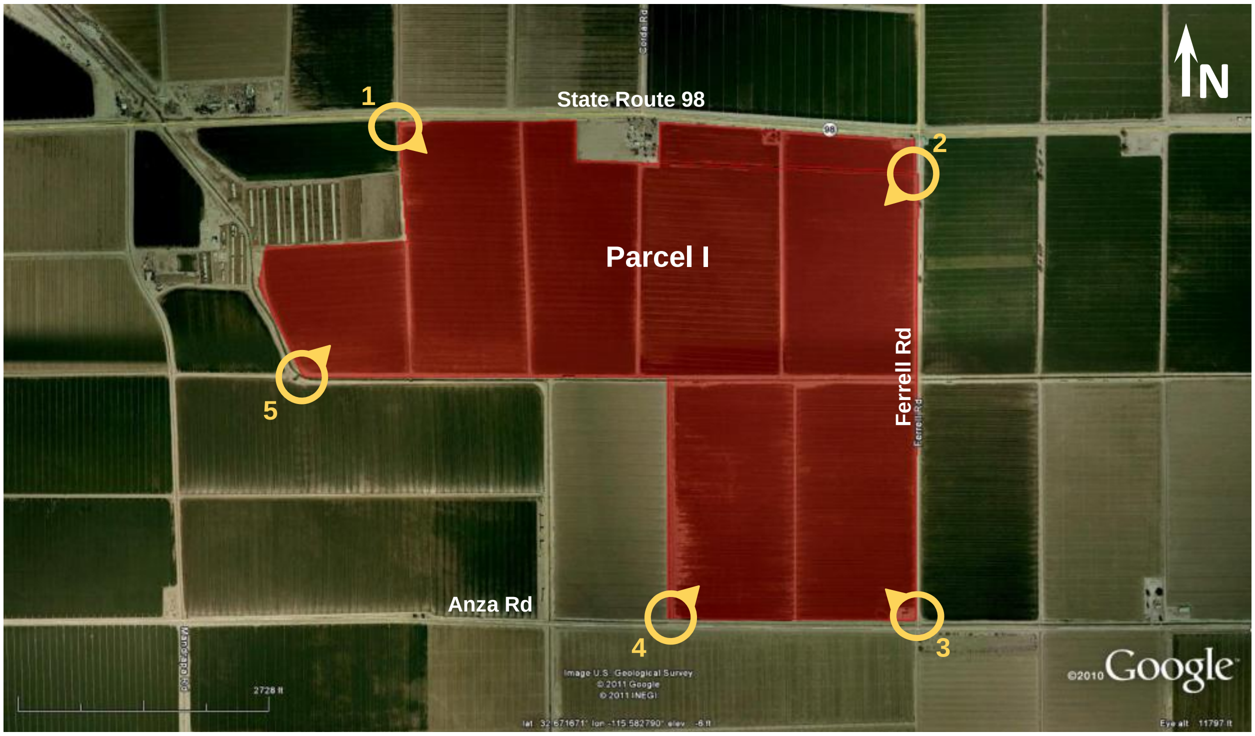


Figure 4: Photo locations for Parcel I

Figure 5: Parcel I, location #1 looking southeast

Figure 6: Parcel I, location #2 looking southwest

Figure 7: Parcel I, location #3 looking northwest

Figure 8: Parcel I, location #4 looking northeast

Figure 9: Parcel I, location #5 looking northeast

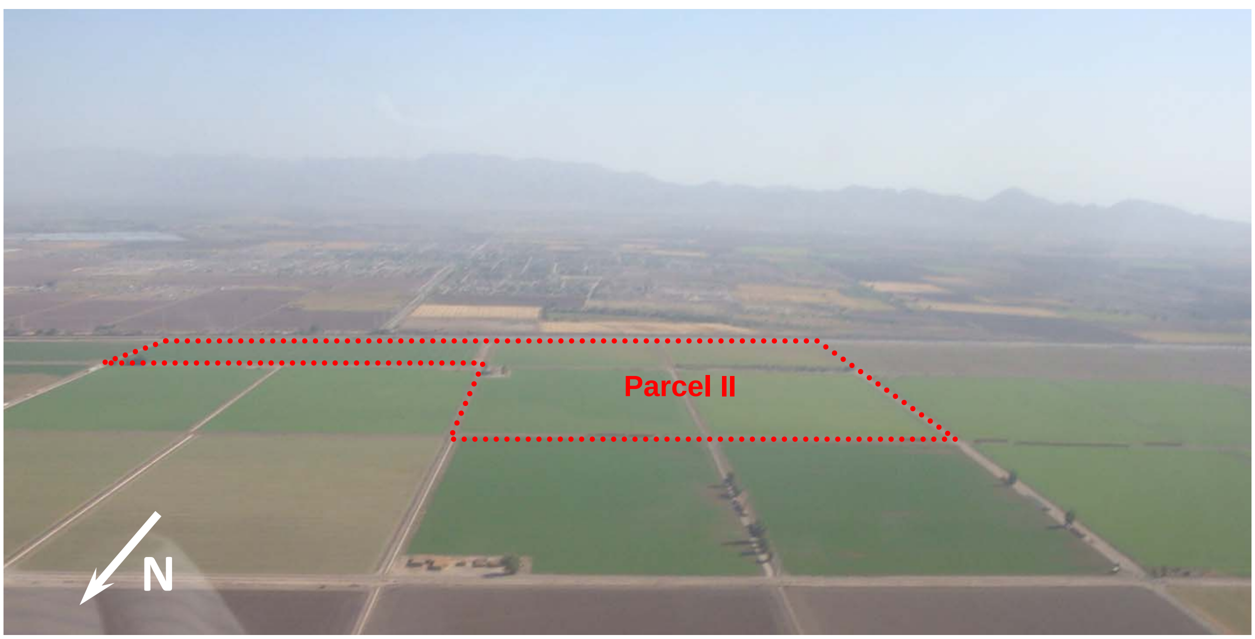


Figure 10: Aerial view of Parcel II from north

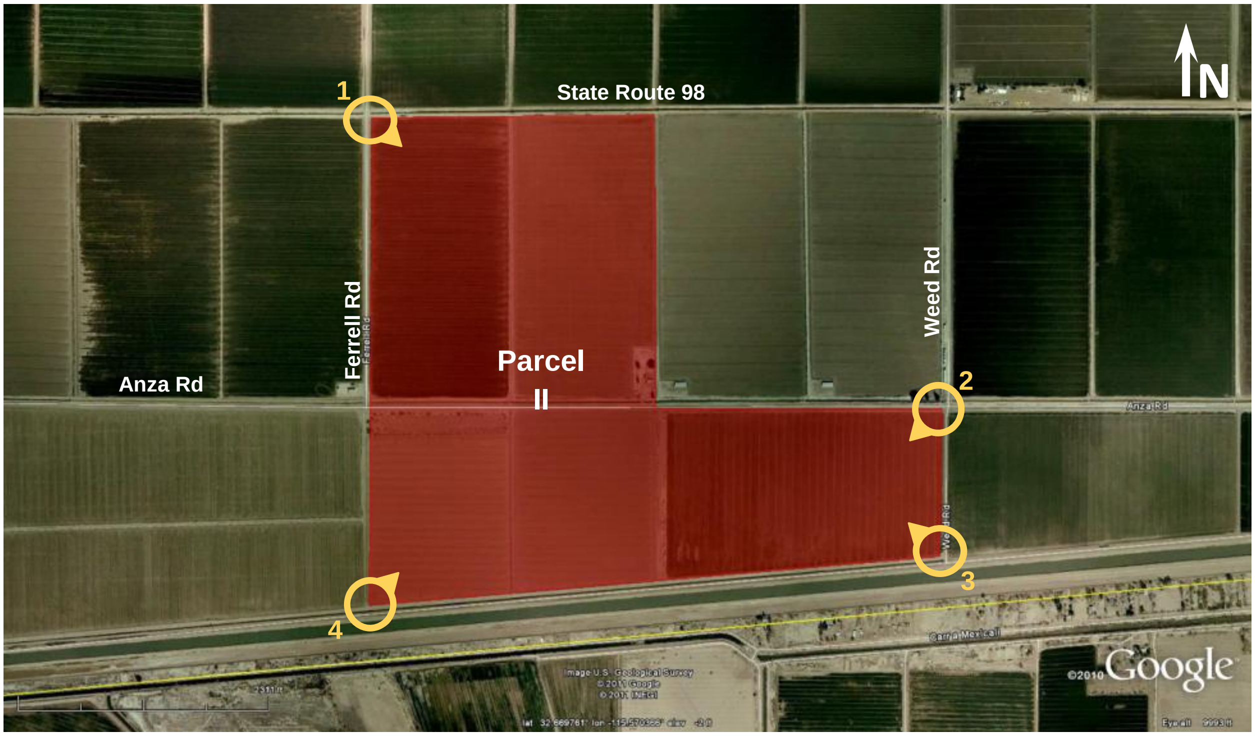


Figure 11: Photo locations for Parcel II

Figure 12: Parcel II, location #1 looking southeast

Figure 13: Parcel II, location #2 looking southwest

Figure 14: Parcel II, location #3 looking northwest

Figure 15: Parcel II, location #4 looking northeast

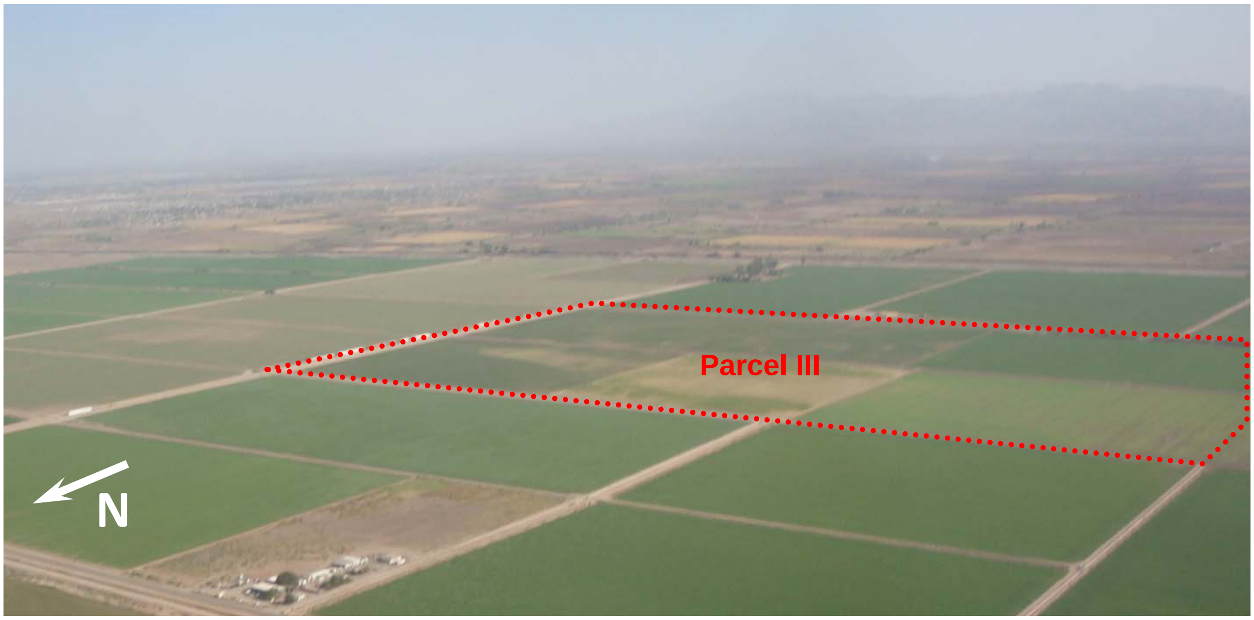


Figure 16: Aerial view of Parcel III from northwest

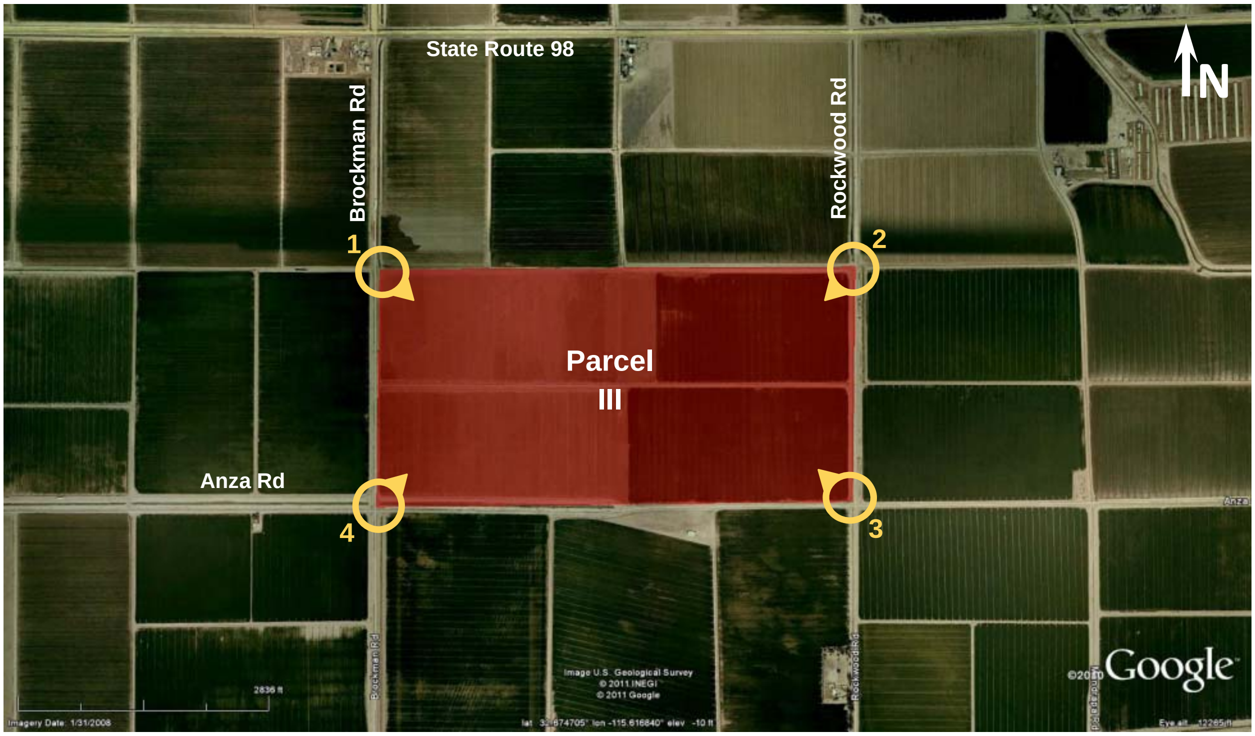


Figure 17: Photo locations for Parcel III

Figure 18: Parcel III, location #1 looking southeast

Figure 19: Parcel III, location #2 looking southwest

Figure 20: Parcel III, location #3 looking northwest

Figure 21: Parcel III, location #4 looking northeast

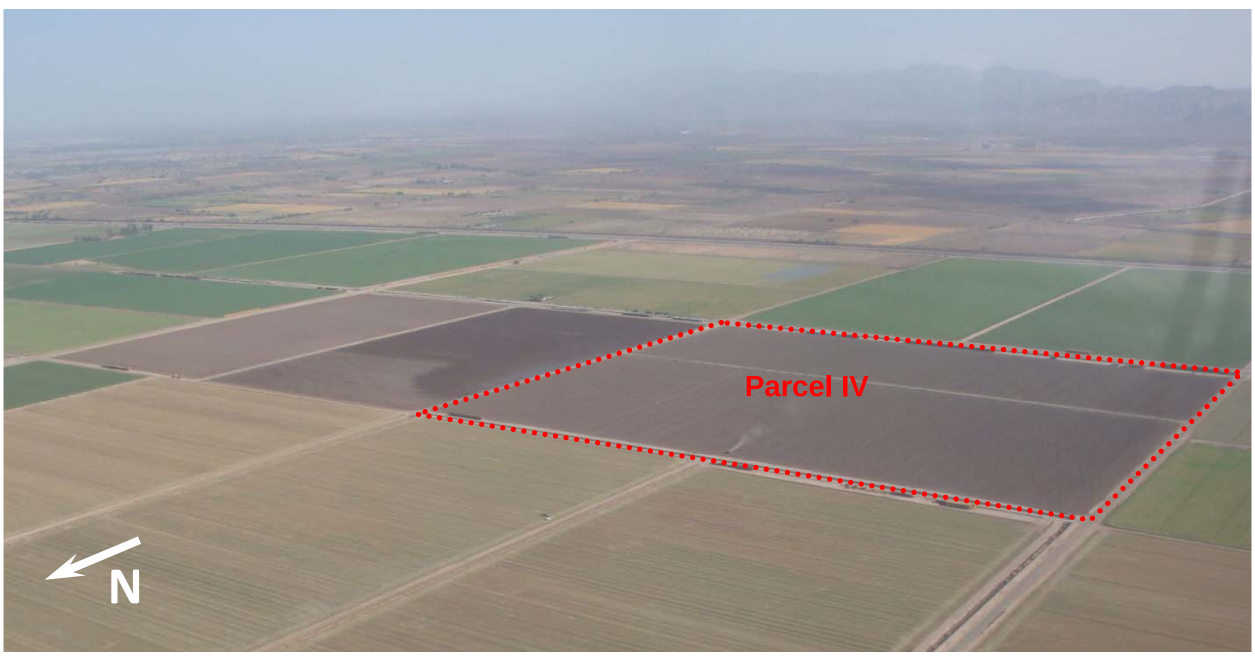


Figure 22: Aerial view of Parcel IV from northwest

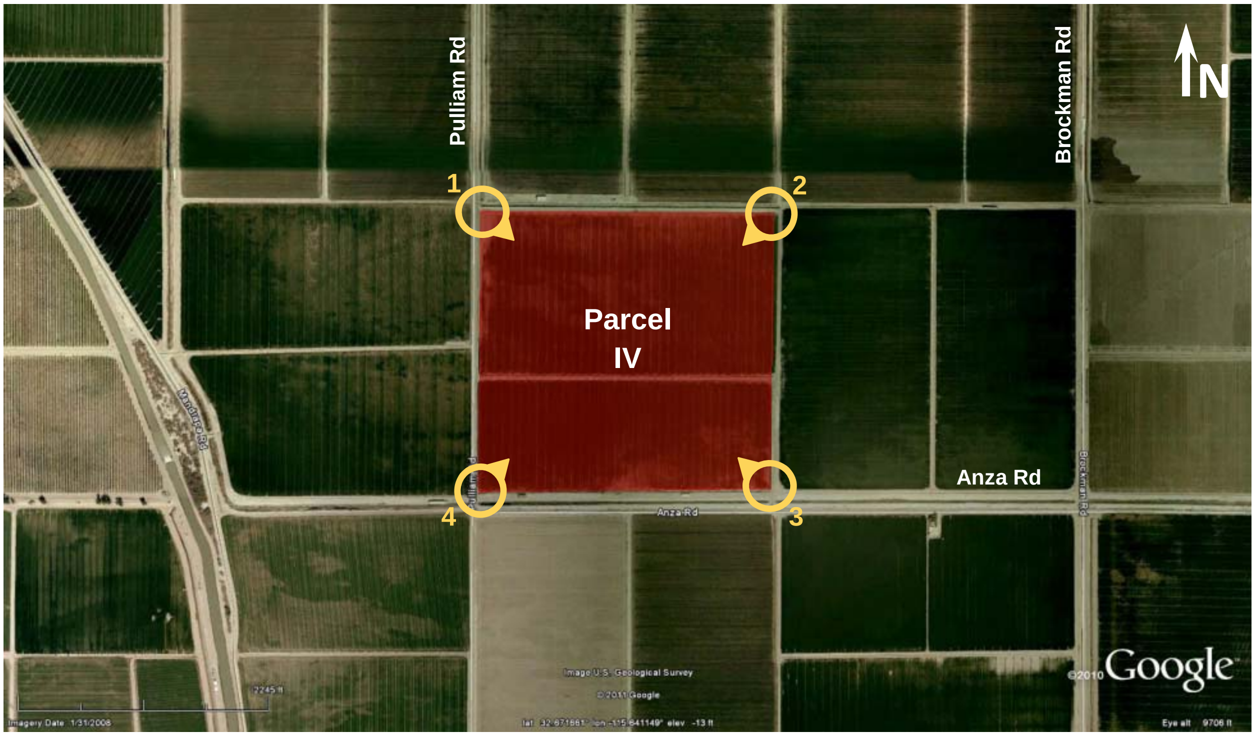


Figure 23: Photo locations for Parcel IV

Figure 24: Parcel IV, location #1 looking southeast

Figure 25: Parcel IV, location #2 looking southwest

Figure 26: Parcel IV, location #3 looking northwest

Figure 27: Parcel IV, location #4 looking northeast

Appendix F

MSSF I – Land Evaluation and Site Assessment (LESA) Model

LESA ASSESSMENT
MOUNT SIGNAL SOLAR FARM I PROJECT AREA

MOUNT SIGNAL SOLAR FARM I PROJECT

(SW/4 Section 16, S/2 Section 15, NE/4 Section 14 (portion),
N/2 Section 13 (portion) and SE/4 Section 13, T17S, R13E, SBB&M;
SE/4 Section 18 and N/2 Section 19 (portion), T17S, R14E, SBB&M)

IMPERIAL COUNTY, CALIFORNIA

April 2011

EMA Report No. 2154-02

Prepared for:

82LV 8ME, LLC
10100 Santa Monica Boulevard, Suite 300
Los Angeles, California 90067

ENVIRONMENTAL MANAGEMENT ASSOCIATES

LAND EVALUATION AND SITE ASSESSMENT MODEL

MOUNT SIGNAL SOLAR FARM I PROJECT

(SW/4 Section 16, S/2 Section 15, NE/4 Section 14 (portion), N/2 Section 13 (portion) and SE/4 Section 13, T17S, R13E, SBB&M; SE/4 Section 18 and N/2 Section 19 (portion), T17S, R14E, SBB&M)

IMPERIAL COUNTY, CALIFORNIA

The Land Evaluation and Site Assessment (LESA) model is an approach for rating the relative quality of land resources based upon specific measurable features. The LESA model was first developed by the federal Natural Resources Conservation Service (NRCS) in 1981. It was subsequently adapted in 1990 by the California Department of Conservation to evaluate land use decisions that affect the conversion of agriculture lands in California. The formulation of the California LESA Model is intended to provide lead agencies under the California Environmental Quality Act (CEQA) with an optional methodology to ensure that significant effects on the environment of agricultural land conversions are quantitatively and consistently considered in the environmental review process.

For determining the potential CEQA significance resulting from the conversion of agricultural lands to some other purpose, the California Agricultural LESA Model has developed Scoring Thresholds which are used to compare the Final LESA Score and the Weighted Factor Scores for the Project with suggested Scoring Decisions. These LESA Scores do not take into consideration any proposed mitigation measures or other factors that might affect a lead agency's determination of the significance of the agricultural lands conversion impact under CEQA.

The information provided on the following pages present documentation of the LESA assessment prepared using the California Agricultural LESA Model for the proposed Mount Signal Solar Farm 1 Project (Project). The proposed Project would be constructed on four properties totaling approximately 1,432 acres of privately owned land located about 6.5 miles west of the city of Calexico, California (Figure 1). Project Area I (APN 052-210-034-000; 052-210-035-000; 052-210-036-000 and 052-210-013-000) is bounded on the north by Highway 98 and on the south by an unpaved Imperial County road (Anza Road). Project Area II (APN 059-130-001-000; 059-130-004-000; 059-130-002-000 and 059-130-005-000) is bounded on the west and east by unpaved Imperial County roads (Ferrell and Weed Roads, respectively)(Figure 2). Project Area III (APN 052-210-016-000) is bounded on the west, south and east by unpaved Imperial County roads (Brockman, Anza and Rockwood Roads, respectively). Project Area IV (APN 052-190-012-000) is bounded on the west and south by unpaved Imperial County roads (Pulliam and Anza Roads, respectively) (Figure 3).

LESA ASSESSMENT

82LV 8ME, LLC
MOUNT SIGNAL SOLAR FARM I PROJECT
IMPERIAL COUNTY, NEVADA

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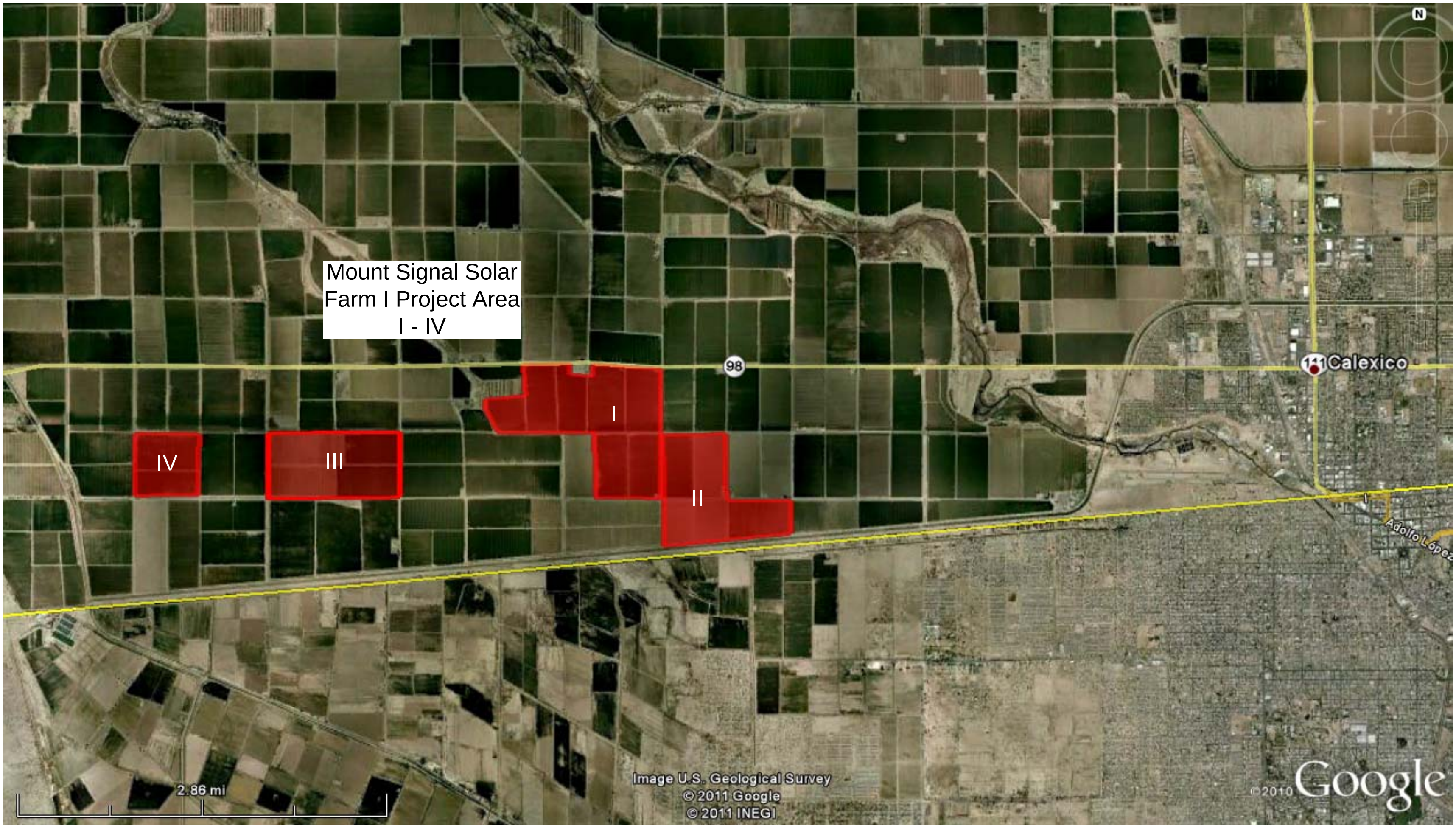


Figure 1 : Location Map

Figure 2 : Project Area on an Aerial Photographic Base - Area I & II

Figure 3 : Project Area on an Aerial Photographic Base - Area III & IV

Land Evaluation Worksheet							
A	B	C	D	E	F	G	H
Soil Map Unit*	**Project Acres**	**Proportion of Project Area**	**LCC** (irrigated)**	**LCC Rating (irrigated)*****	**LCC Score (C x E)**	**Storie Index****	**Storie Index Score (C x G)**
106	5.38	0.0038	IIw	80	0.30	72	0.27
110	19.61	0.0137	IIw	80	1.10	45	0.62
114	737.96	0.5154	IIIw	60	30.92	42	21.65
115	607.60	0.4243	IIIw	60	25.46	70	29.49
116	0.40	0.0003	IIIe	70	0.02	74	0.02
119	1.62	0.0011	IIs	80	0.09	90	0.10
122	58.38	0.0408	IIIw	60	2.45	44	1.79
123	0.91	0.0006	IIIw	60	0.04	60	0.04
Totals	1432	1.00		**LCC Total Score**	60	**Storie Index Total Score**	54
Total Project Area (acres)=	1432						

* The Soil Map Unit information and acreage were determined from the current soil survey information available at the USDA Natural Resources Conservation Service website: http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx (Figure 4, Figure 5, Figure 6 and Figure 7).

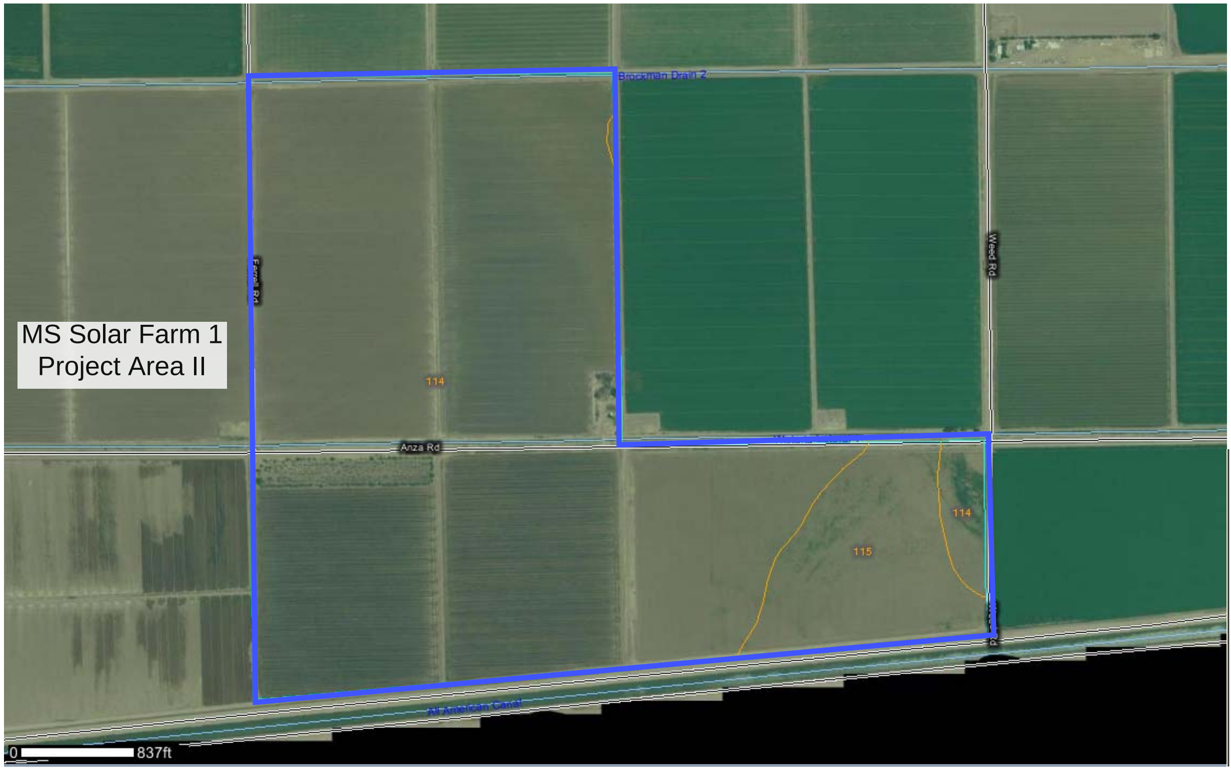
** The Land Capability Classification and Storie Index information was obtained from the current soil survey information available at the USDA Natural Resources Conservation Service website: http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx (Appendix A).

*** The LCC Rating for irrigated land was determined from the LCC Point Rating Table 2 from the LESA Instruction Manual (California Department of Conservation 1997).

Imperial County, California, Imperial Valley Area (CA683)			
Map Unit Symbol	**Map Unit Name**	**Acres in AOI**	**Percent of AOI**
114	IMPERIAL SILTY CLAY, WET	256.5	45.6%
115	IMPERIAL-GLENBAR SILTY CLAY LOAMS, WET, 0 TO 2 PERCENT SLOPES	305.9	54.3%
116	IMPERIAL-GLENBAR SILTY CLAY LOAMS, 2 TO 5 PERCENT SLOPE S	0.4	0.1%
Totals for Area of Interest		**562.8**	**100.0%**

Adjusted to 560.3 Acres
Rounded Percentages

Figure 4 : Project Area Soils Map - Area I



Imperial County, California, Imperial Valley Area (CA683)			
Map Unit Symbol	**Map Unit Name**	**Acres in AOI**	**Percent of AOI**
114	IMPERIAL SILTY CLAY, WET	328.8	88.9%
115	IMPERIAL-GLENBAR SILTY CLAY LOAMS, WET, 0 TO 2 PERCENT SLOPES	41.2	11.1%
Totals for Area of Interest		**370.0**	**100.0%**

Adjusted to 372.6
Rounded Percentages

Figure 5 : Project Area Soils Map - Area II

Imperial County, California, Imperial Valley Area (CA683)

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
106	GLENBAR CLAY LOAM, WET	5.3	1.6%
110	HOLTVILLE SILTY CLAY, WET	19.3	5.9%
114	IMPERIAL SILTY CLAY, WET	36.1	11.1%
115	IMPERIAL-GLENBAR SILTY CLAY LOAMS, WET, 0 TO 2 PERCENT SLOPES	231.1	70.8%
122	MELOLAND VERY FINE SANDY LOAM, WET	33.8	10.4%
123	MELOLAND AND HOLTVILLE LOAMS, WET	0.9	0.3%
Totals for Area of Interest		**326.4**	**100.0%**

Adjusted to 331.7
Rounded Percentages

Figure 6 : Project Area Soils Map - Area III

Imperial County, California, Imperial Valley Area (CA683)			
Map Unit Symbol	**Map Unit Name**	**Acres in AOI**	**Percent of AOI**
114	IMPERIAL SILTY CLAY, WET	113.9	69.1%
115	IMPERIAL-GLENBAR SILTY CLAY LOAMS, WET, 0 TO 2 PERCENT SLOPES	25.7	15.6%
119	INDIO-VINT COMPLEX	1.6	1.0%
122	MELOLAND VERY FINE SANDY LOAM, WET	23.7	14.4%
Totals for Area of Interest		**164.9**	**100.0%**

Adjusted to 167.3
Rounded Percentages

Figure 7 : Project Area Soils Map - Area IV

	Site Assessment Worksheet 1 Project Size Score*		
	I	J	K
	LCC Class I-II	LCC Class III	LCC Class IV-VIII
Project Acres per LCC Class	5.38	737.96	
Project Acres per LCC Class	19.61	607.60	
Project Acres per LCC Class	1.62	0.40	
Project Acres per LCC Class		58.38	
Project Acres per LCC Class		0.91	
Total Project Acres per LCC Class	**26.62**	**1405.25**	**0**
**** Project Size Scores***	**50**	**100**	**0**
Highest Project Size Score	**100**		

* Project Size Score was determined from the Project Size Scoring Table from the LESA Instruction Manual (California Department of Conservation 1997).

Site Assessment Worksheet 2 Water Resources Availability				
A	**B**	**C**	**D**	**E**
Project Portion	**Water Source**	**Proportion of Project Area**	**Water Availability Score***	**Weighted Availability Score (C x D)**
1	Irrigation District Only	1.0	100	100
2				
3				
4				
5				
6				
		(Must Sum to 1.0)	***Total Water Resource Score***	100

* The Water Availability Score was determined using the Water Resources Availability Scoring Table from the LESA Instruction Manual (California Department of Conservation 1997).

Site Assessment Worksheet 3

Surrounding Agricultural Land & Surrounding Protected Resource Land

A	B	C	D	E	F	G
Zone of Influence*					Surrounding Agricultural Land Score (From LESA Manual Table 6)	Surrounding Protected Resource Land Score (From LESA Manual Table 7)**
Total Acres	Acres in Agriculture	Acres of Protected Resource Land	Percent in Agriculture (B/A)	Percent Protected Resource Land (C/A)		
6768.6	6662	0	98	0	100	0

* In conformance with the instructions in the LESA Instruction Manual (California Department of Conservation 1997), the Zone of Influence was determined by drawing the smallest rectangle that could completely encompass the entire Project Area. A second rectangle was then drawn which extended one quarter mile on all sides beyond the first rectangle. The Zone of Influence is represented by the entire area of all parcels with any lands inside the outer rectangle, less the area of the proposed project (Figure 8 and Figure 9).

** The LESA Instruction Manual (California Department of Conservation 1997) describes *Protected Resource Land* as those lands with long term use restrictions that are compatible with or supportive of agricultural uses of land. Included among them are the following: Williamson Act contracted lands; Publicly owned lands maintained as park, forest, or watershed resources; and Lands with agricultural, wildlife habitat, open space, or other natural resource easements that restrict the conversion of such land to urban or industrial uses.

Surrounding Parcels***	Acres	Protected Resource Land?	Percent Protected Resource Land	Acres in Protected Land	Agricultural Land?	Percent Agricultural Land	Acres of Agriculture
59120001000	167.2	N	0	0	Y	100	167.2
59050003000	165.5	N	0	0	Y	100	165.5
59120004000	161.6	N	0	0	Y	100	161.6
59130003000	167.3	N	0	0	Y	100	167.3
59060007000	163.2	N	0	0	Y	100	163.2
59060006000	163.6	N	0	0	Y	100	163.6
59110001000	18.4	N	0	0	Y	100	18.4
59110006000	134.2	N	0	0	Y	100	134.2
59110008000	332.1	N	0	0	Y	100	332.1
59110003000	147.5	N	0	0	Y	100	147.5
59110004000	10.4	N	0	0	N	0	0
52170037000	169.8	N	0	0	Y	100	169.8
52190008000	163.6	N	0	0	Y	100	163.6
52190037000	168.2	N	0	0	Y	100	168.2
52190022000	153.2	N	0	0	Y	100	153.2
52190021000	62.2	N	0	0	Y	100	62.2

Surrounding Parcels***	Acres	Protected Resource Land?	Percent Protected Resource Land	Acres in Protected Land	Agricultural Land?	Percent Agricultural Land	Acres of Agriculture	
52170036000	164.4	N	0	0	Y	100	164.4	
52190009000	161.5	N	0	0	Y	100	161.5	
52190023000	240.0	N	0	0	Y	100	240.0	
52170078000	82.6	N	0	0	Y	100	82.6	
52170035000	87.9	N	0	0	Y	100	87.9	
52190010000	150.7	N	0	0	Y	100	150.7	
52190011000	166.0	N	0	0	Y	100	166.0	
52190024000	80.8	N	0	0	Y	100	80.8	
52190025000	83.9	N	0	0	Y	100	83.9	
52190026000	60.0	N	0	0	Y	100	60.0	
52180033000	121.1	N	0	0	Y	100	121.1	
52180032000	121.8	N	0	0	Y	100	121.8	
52210001000	203.7	N	0	0	Y	100	203.7	
52210002000	41.3	N	0	0	Y	100	41.3	
52210037000	155.5	N	0	0	Y	100	155.5	
52210038000	139.0	N	0	0	Y	100	139.0	
52210039000	104.4	N	0	0	Y	100	104.4	
52210040000	4.8	N	0	0	Y	100	4.8	
52210022000	18.6	N	0	0	Y	100	18.6	
52210023000	1.2	N	0	0	Y	100	1.2	
52210025000	55.5	N	0	0	Y	100	55.5	
52201003000	0.4	N	0	0	N	0	0	
52201004000	0.7	N	0	0	N	0	0	
52201006000	0.4	N	0	0	N	0	0	
52201005000	0.7	N	0	0	N	0	0	
52202003000	0.4	N	0	0	N	0	0	
52202005000	0.1	N	0	0	N	0	0	
52202007000	0.1	N	0	0	N	0	0	
52202008000	0.1	N	0	0	N	0	0	
52202002000	0.3	N	0	0	N	0	0	
52203001000	0.8	N	0	0	N	0	0	
52203003000	4.0	N	0	0	N	0	0	
52210018000	47.8	N	0	0	Y	100	47.8	

Surrounding Parcels***	Acres	Protected Resource Land?	Percent Protected Resource Land	Acres in Protected Land	Agricultural Land?	Percent Agricultural Land	Acres of Agriculture	
52210019000	123.5	N	0	0	Y	100	123.5	
52210015000	156.0	N	0	0	Y	100	156.0	
52210029000	73.3	N	0	0	Y	100	73.3	
52210026000	61.4	N	0	0	Y	100	61.4	
52210027000	23.9	N	0	0	Y	100	23.9	
52210031000	5.6	N	0	0	N	0	0	
52210032000	28.3	N	0	0	Y	100	28.3	
52210028000	71.7	N	0	0	N	0	0	
52210006000	0.4	N	0	0	Y	100	0.4	
52210030000	0.7	N	0	0	N	0	0	
52180027000	6.9	N	0	0	Y	100	6.9	
52180049000	11.8	N	0	0	Y	100	11.8	
52180039000	152.4	N	0	0	Y	100	152.4	
52180040000	67.9	N	0	0	Y	100	67.9	
52180028000	71.2	N	0	0	Y	100	71.2	
52210020000	436.0	N	0	0	Y	100	436.0	
52210014000	318.5	N	0	0	Y	100	318.5	
52210033000	10.3	N	0	0	N	0	0	
52180064000	157.7	N	0	0	Y	100	157.7	
52180022000	43.2	N	0	0	Y	100	43.2	
52180050000	46.1	N	0	0	Y	100	46.1	
52180051000	89.4	N	0	0	Y	100	89.4	
52180065000	2.2	N	0	0	Y	100	2.2	
59120002000	78.7	N	0	0	Y	100	78.7	
59120003000	82.1	N	0	0	Y	100	82.1	
Total	**6768.6**		**Total**	**0**		**Total**	**6662**	

**The Imperial County Assessors website was accessed to identify the surrounding parcel numbers (http://imperialcounty.net/Assessor/index.html). The percentage of agriculture was determined from a map overlay used to estimate the proportion of land in agriculture and the California Department of Conservation Important Farmland Map Series.

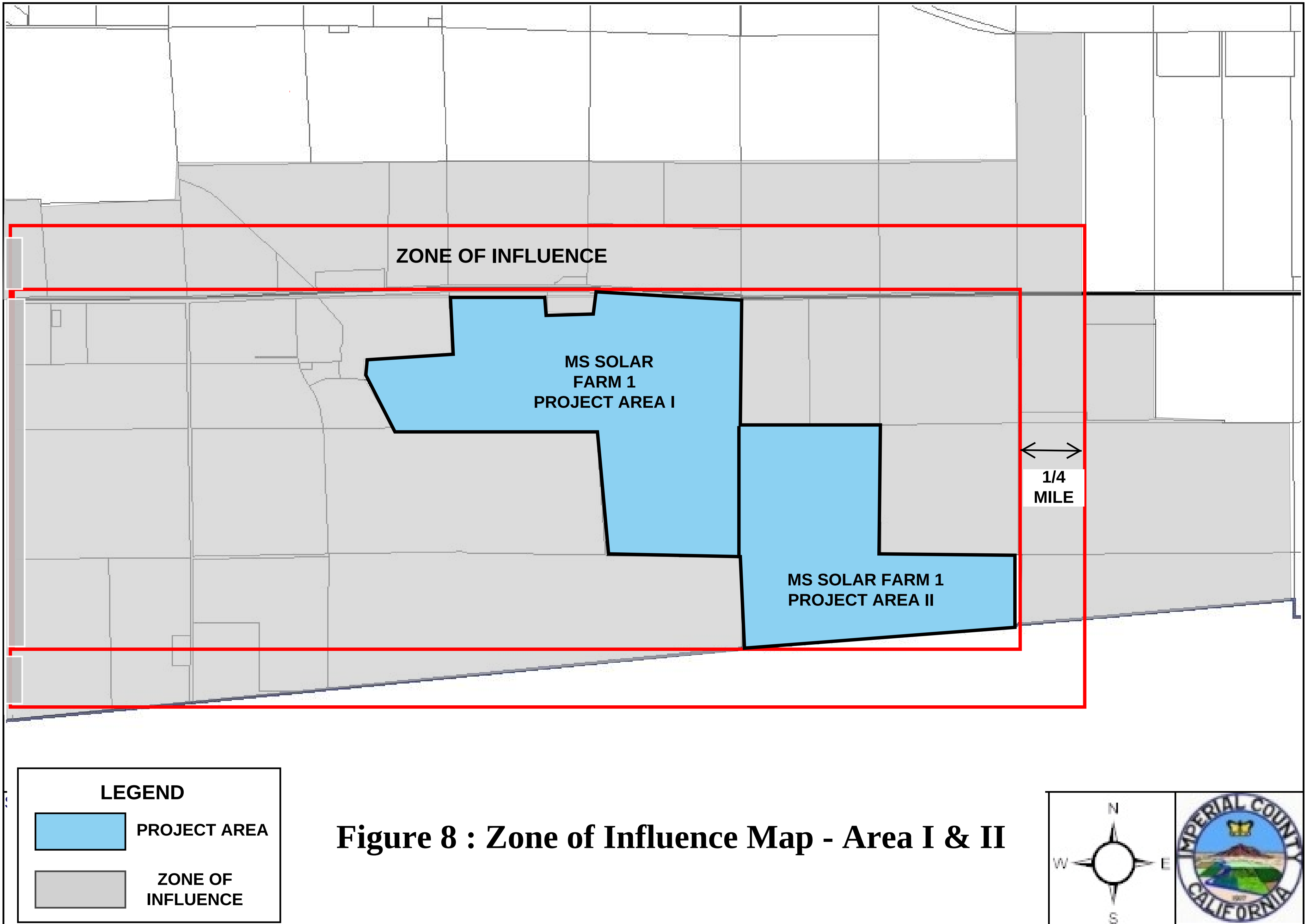


Figure 8 : Zone of Influence Map - Area I & II

IMPERIAL COUNTY
CALIFORNIA

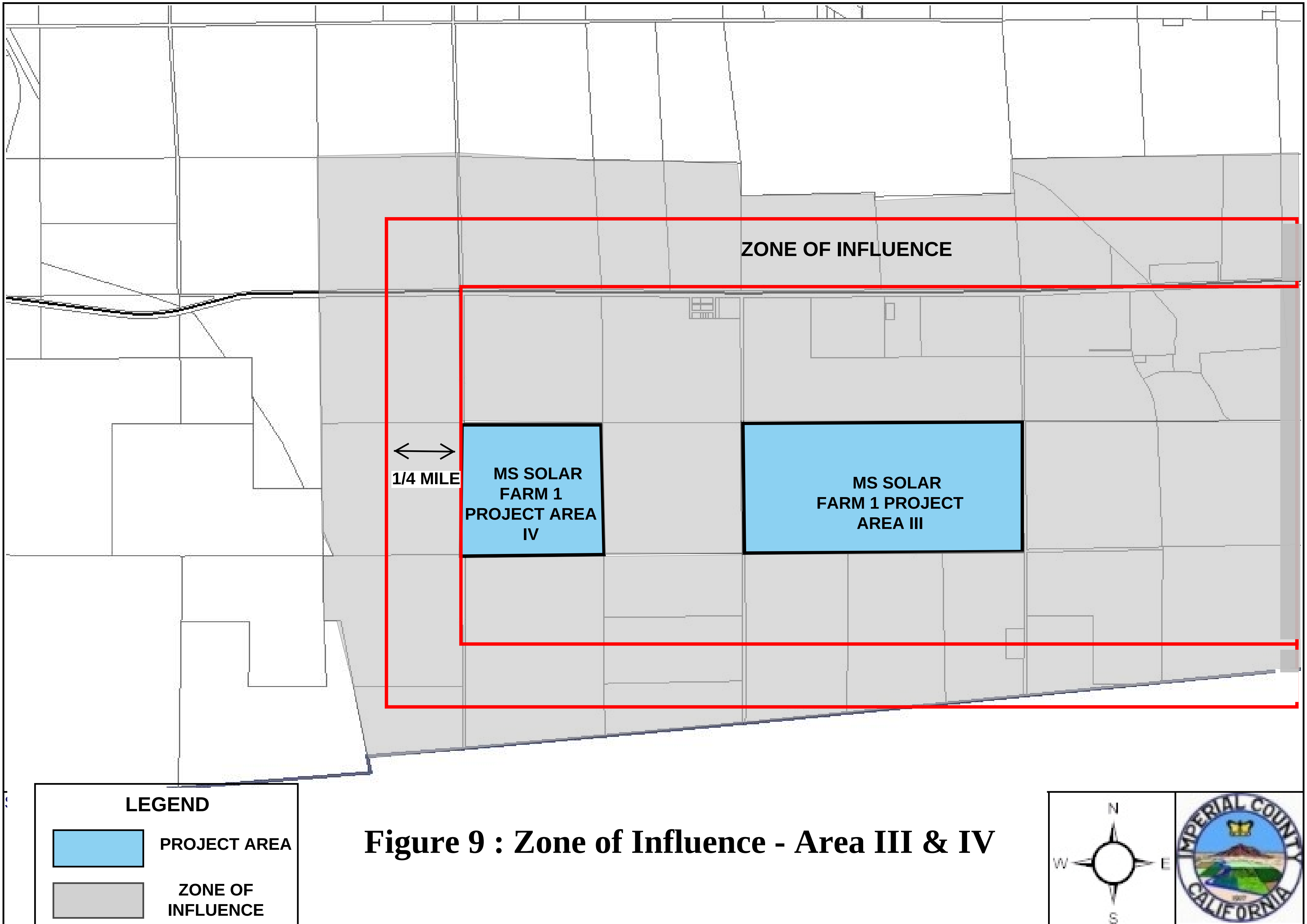


Figure 9 : Zone of Influence - Area III & IV

This map represents a visual display of related geographic information. Data provided hereon is not a guarantee of actual field conditions. To be sure of complete accuracy, please contact IMPERIALCOUNTY_PUBLIC staff for the most up-to-date information.

Final LESA Score Sheet			
	Factor Scores	**Factor Weight**	**Weighted Factor Scores**
LE Factors			
Land Capability Classification	60.37	0.25	15.09
Storie Index	53.98	0.25	13.49
LE subtotal		0.50	28.59
SA Factors			
Project Size	100	0.15	15.00
Water Resource Availability	100	0.15	15.00
Surrounding Agricultural Land	100	0.15	15.00
Protected Resource Land	0	0.05	0.00
SA Subtotal		0.50	45.00
		Total LESA Score	**73.59**

California LESA Model Scoring Thresholds	
Total LESA Score	**Scoring Decision**
0 to 39 Points	Not Considered Significant
40 to 59 Points	Considered Significant only if LE and SA subscores are each greater than or equal to 20 points
60 to 79 Points	Considered Significant unless either LE or SA subscore is less than 20 points
80 to 100 Points	Considered Significant

APPENDIX A: MOUNT SIGNAL SOLAR FARM I SOILS DETAILS

Imperial County, California, Imperial Valley Area

106—GLENBAR CLAY LOAM, WET

Map Unit Setting

Elevation: -230 to 200 feet
Mean annual precipitation: 0 to 3 inches
Mean annual air temperature: 72 to 75 degrees F
Frost-free period: 300 to 350 days

Map Unit Composition

Glenbar, wet, and similar soils: 85 percent
Minor components: 15 percent

Description of Glenbar, Wet

Setting

Landform: Basin floors
Landform position (three-dimensional): Dip
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from mixed sources

Properties and qualities

Slope: 0 to 1 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 5 percent
Maximum salinity: Nonsaline to slightly saline (2.0 to 8.0 mmhos/cm)
Sodium adsorption ratio, maximum: 5.0
Available water capacity: High (about 10.8 inches)

Interpretive groups

Land capability classification (irrigated): 2w
Land capability (nonirrigated): 7w

Typical profile

0 to 13 inches: Clay loam
13 to 60 inches: Clay loam

Minor Components

Holtville

Percent of map unit: 5 percent

Meloland

Percent of map unit: 5 percent

Indio

Percent of map unit: 5 percent

Data Source Information

Soil Survey Area: Imperial County, California, Imperial Valley Area
Survey Area Data: Version 5, Jul 25, 2008

Imperial County, California, Imperial Valley Area

110—HOLTVILLE SILTY CLAY, WET

Map Unit Setting

Elevation: -230 to 200 feet
Mean annual precipitation: 0 to 3 inches
Mean annual air temperature: 72 to 75 degrees F
Frost-free period: 300 to 350 days

Map Unit Composition

Holtville, wet, and similar soils: 85 percent
Minor components: 15 percent

Description of Holtville, Wet

Setting

Landform: Basin floors
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from mixed sources

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 5 percent
Maximum salinity: Nonsaline to slightly saline (2.0 to 8.0 mmhos/cm)
Sodium adsorption ratio, maximum: 10.0
Available water capacity: Moderate (about 7.6 inches)

Interpretive groups

Land capability classification (irrigated): 2w
Land capability (nonirrigated): 7w

Typical profile

0 to 17 inches: Silty clay
17 to 24 inches: Clay
24 to 35 inches: Silt loam
35 to 60 inches: Loamy very fine sand

Minor Components

Glenbar

Percent of map unit: 5 percent

Imperial

Percent of map unit: 5 percent

Indio

Percent of map unit: 3 percent

Vint

Percent of map unit: 2 percent

Data Source Information

Soil Survey Area: Imperial County, California, Imperial Valley Area
Survey Area Data: Version 5, Jul 25, 2008

Imperial County, California, Imperial Valley Area

114—IMPERIAL SILTY CLAY, WET

Map Unit Setting

Elevation: -230 to 200 feet
Mean annual precipitation: 0 to 3 inches
Mean annual air temperature: 72 to 75 degrees F
Frost-free period: 300 to 350 days

Map Unit Composition

Imperial, wet, and similar soils: 85 percent
Minor components: 15 percent

Description of Imperial, Wet

Setting

Landform: Basin floors
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Clayey alluvium derived from mixed sources and/or clayey lacustrine deposits derived from mixed sources

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 5 percent
Maximum salinity: Very slightly saline to slightly saline (4.0 to 8.0 mmhos/cm)
Sodium adsorption ratio, maximum: 20.0
Available water capacity: Moderate (about 8.3 inches)

Interpretive groups

Land capability classification (irrigated): 3w
Land capability (nonirrigated): 7w

Typical profile

0 to 12 inches: Silty clay
12 to 60 inches: Silty clay loam

Minor Components

Glenbar

Percent of map unit: 4 percent

Meloland

Percent of map unit: 4 percent

Holtville

Percent of map unit: 4 percent

Niland

Percent of map unit: 3 percent

Data Source Information

Soil Survey Area: Imperial County, California, Imperial Valley Area
Survey Area Data: Version 5, Jul 25, 2008

Imperial County, California, Imperial Valley Area

115—IMPERIAL-GLENBAR SILTY CLAY LOAMS, WET, 0 TO 2 PERCENT SLOPES

Map Unit Setting

Elevation: -230 to 200 feet
Mean annual precipitation: 0 to 3 inches
Mean annual air temperature: 72 to 75 degrees F
Frost-free period: 300 to 350 days

Map Unit Composition

Glenbar, wet, and similar soils: 40 percent
Imperial, wet, and similar soils: 40 percent
Minor components: 20 percent

Description of Imperial, Wet

Setting

Landform: Basin floors
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Clayey alluvium derived from mixed sources and/or clayey lacustrine deposits derived from mixed sources

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 5 percent
Maximum salinity: Very slightly saline to slightly saline (4.0 to 8.0 mmhos/cm)
Sodium adsorption ratio, maximum: 20.0
Available water capacity: Moderate (about 8.6 inches)

Interpretive groups

Land capability classification (irrigated): 3w
Land capability (nonirrigated): 7w

Typical profile

0 to 12 inches: Silty clay loam
12 to 60 inches: Silty clay loam

Description of Glenbar, Wet

Setting

Landform: Basin floors
Landform position (three-dimensional): Talf

Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from mixed

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 5 percent
Maximum salinity: Nonsaline to slightly saline (2.0 to 8.0 mmhos/cm)
Sodium adsorption ratio, maximum: 15.0
Available water capacity: High (about 10.8 inches)

Interpretive groups

Land capability classification (irrigated): 3w
Land capability (nonirrigated): 7w

Typical profile

0 to 13 inches: Silty clay loam
13 to 60 inches: Clay loam

Minor Components

Holtville

Percent of map unit: 10 percent

Meloland

Percent of map unit: 10 percent

Data Source Information

Soil Survey Area: Imperial County, California, Imperial Valley Area
Survey Area Data: Version 5, Jul 25, 2008

Imperial County, California, Imperial Valley Area

116—IMPERIAL-GLENBAR SILTY CLAY LOAMS, 2 TO 5 PERCENT SLOPE S

Map Unit Setting

Elevation: -230 to 200 feet
Mean annual precipitation: 0 to 3 inches
Mean annual air temperature: 72 to 75 degrees F
Frost-free period: 300 to 350 days

Map Unit Composition

Glenbar and similar soils: 40 percent
Imperial and similar soils: 40 percent
Minor components: 20 percent

Description of Imperial

Setting

Landform: Basin floors
Landform position (three-dimensional): Rise
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Clayey alluvium derived from mixed sources and/or clayey lacustrine deposits derived from mixed sources

Properties and qualities

Slope: 2 to 5 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 5 percent
Maximum salinity: Very slightly saline to slightly saline (4.0 to 8.0 mmhos/cm)
Sodium adsorption ratio, maximum: 20.0
Available water capacity: Moderate (about 8.6 inches)

Interpretive groups

Land capability classification (irrigated): 3e
Land capability (nonirrigated): 7e

Typical profile

0 to 13 inches: Silty clay loam
13 to 60 inches: Silty clay loam

Description of Glenbar

Setting

Landform: Basin floors
Landform position (three-dimensional): Rise

Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from mixed

Properties and qualities

Slope: 2 to 5 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 5 percent
Maximum salinity: Nonsaline to very slightly saline (2.0 to 4.0 mmhos/cm)
Sodium adsorption ratio, maximum: 10.0
Available water capacity: High (about 10.8 inches)

Interpretive groups

Land capability classification (irrigated): 3e
Land capability (nonirrigated): 7e

Typical profile

0 to 13 inches: Silty clay loam
13 to 60 inches: Clay loam

Minor Components

Holtville

Percent of map unit: 10 percent

Meloland

Percent of map unit: 10 percent

Data Source Information

Soil Survey Area: Imperial County, California, Imperial Valley Area
Survey Area Data: Version 5, Jul 25, 2008

Imperial County, California, Imperial Valley Area

119—INDIO-VINT COMPLEX

Map Unit Setting

Elevation: -230 to 300 feet
Mean annual precipitation: 0 to 3 inches
Mean annual air temperature: 72 to 75 degrees F
Frost-free period: 300 to 350 days

Map Unit Composition

Indio and similar soils: 35 percent
Vint and similar soils: 30 percent
Minor components: 35 percent

Description of Indio

Setting

Landform: Basin floors
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from mixed sources and/or eolian deposits derived from mixed sources

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 5 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 4.0 mmhos/cm)
Sodium adsorption ratio, maximum: 5.0
Available water capacity: Moderate (about 8.5 inches)

Interpretive groups

Land capability classification (irrigated): 2s
Land capability (nonirrigated): 7e

Typical profile

0 to 12 inches: Loam
12 to 72 inches: Stratified loamy very fine sand to silt loam

Description of Vint

Setting

Landform: Basin floors
Landform position (three-dimensional): Talf
Down-slope shape: Linear

Across-slope shape: Linear
Parent material: Alluvium and/or eolian deposits derived from mixed

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): High to very high (5.95 to 19.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 5 percent
Maximum salinity: Nonsaline to very slightly saline (2.0 to 4.0 mmhos/cm)
Sodium adsorption ratio, maximum: 5.0
Available water capacity: Low (about 4.9 inches)

Interpretive groups

Land capability classification (irrigated): 2s
Land capability (nonirrigated): 7e

Typical profile

0 to 10 inches: Loamy fine sand
10 to 60 inches: Loamy sand

Minor Components

Meloland

Percent of map unit: 12 percent

Holtville

Percent of map unit: 12 percent

Rositas

Percent of map unit: 11 percent

Data Source Information

Soil Survey Area: Imperial County, California, Imperial Valley Area
Survey Area Data: Version 5, Jul 25, 2008

Imperial County, California, Imperial Valley Area

122—MELOLAND VERY FINE SANDY LOAM, WET

Map Unit Setting

Elevation: -230 to 200 feet
Mean annual precipitation: 0 to 3 inches
Mean annual air temperature: 72 to 75 degrees F
Frost-free period: 300 to 350 days

Map Unit Composition

Meloland, wet, and similar soils: 85 percent
Minor components: 15 percent

Description of Meloland, Wet

Setting

Landform: Basin floors
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from mixed sources and/or eolian deposits derived from mixed sources

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 5 percent
Maximum salinity: Slightly saline to moderately saline (8.0 to 16.0 mmhos/cm)
Sodium adsorption ratio, maximum: 13.0
Available water capacity: Moderate (about 7.8 inches)

Interpretive groups

Land capability classification (irrigated): 3w
Land capability (nonirrigated): 7w

Typical profile

0 to 12 inches: Very fine sandy loam
12 to 26 inches: Stratified loamy fine sand to silt loam
26 to 71 inches: Clay

Minor Components

Imperial

Percent of map unit: 3 percent

Indio

Percent of map unit: 3 percent

Holtville

Percent of map unit: 3 percent

Glenbar

Percent of map unit: 3 percent

Vint

Percent of map unit: 3 percent

Data Source Information

Soil Survey Area: Imperial County, California, Imperial Valley Area
Survey Area Data: Version 5, Jul 25, 2008

Imperial County, California, Imperial Valley Area

123—MELOLAND AND HOLTVILLE LOAMS, WET

Map Unit Setting

Elevation: -230 to 300 feet
Mean annual precipitation: 0 to 3 inches
Mean annual air temperature: 72 to 75 degrees F
Frost-free period: 300 to 350 days

Map Unit Composition

Holtville, wet, and similar soils: 40 percent
Meloland, wet, and similar soils: 40 percent
Minor components: 20 percent

Description of Meloland, Wet

Setting

Landform: Basin floors
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from mixed sources and/or eolian deposits derived from mixed sources

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 5 percent
Maximum salinity: Slightly saline to moderately saline (8.0 to 16.0 mmhos/cm)
Sodium adsorption ratio, maximum: 13.0
Available water capacity: Moderate (about 7.4 inches)

Interpretive groups

Land capability classification (irrigated): 3w
Land capability (nonirrigated): 7w

Typical profile

0 to 12 inches: Loam
12 to 26 inches: Stratified loamy fine sand to silt loam
26 to 38 inches: Clay
38 to 60 inches: Stratified silt loam to loamy fine sand

Description of Holtville, Wet

Setting

Landform: Basin floors

Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium and/or lacustrine deposits derived from mixed

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 5 percent
Maximum salinity: Nonsaline to slightly saline (2.0 to 8.0 mmhos/cm)
Sodium adsorption ratio, maximum: 10.0
Available water capacity: Moderate (about 7.7 inches)

Interpretive groups

Land capability classification (irrigated): 3w
Land capability (nonirrigated): 7w

Typical profile

0 to 12 inches: Loam
12 to 24 inches: Clay
24 to 36 inches: Silt loam
36 to 60 inches: Loamy very fine sand

Minor Components

Glenbar

Percent of map unit: 4 percent

Imperial

Percent of map unit: 4 percent

Indio

Percent of map unit: 4 percent

Rositas

Percent of map unit: 4 percent

Vint

Percent of map unit: 4 percent

Data Source Information

Soil Survey Area: Imperial County, California, Imperial Valley Area
Survey Area Data: Version 5, Jul 25, 2008

California Revised Storie Index Rating (CA)

The Storie Index is a soil rating based on soil properties that govern a soil's potential for cultivated agriculture in California.

The Storie Index asseses the productivity of a soil from the following four characteristics: Factor A, degree of soil profile development; factor B, texture of the surface layer; factor C, slope; and factor X, manageable features, including drainage, microrelief, fertility, acidity, erosion, and salt content. A score ranging from 0 to 100 percent is determined for each factor, and the scores are mukltiplied together to derive an index rating.

For simplification, Storie Index ratings have been combined into six grades classes as follows: Grade 1 (excellent), 100 to 80; grade 2 (good), 79 to 60; grade 3 (fair), 59 to 40; grade 4 (poor), 39 to 20; grade 5 (very poor), 19 to 10; and grade 6 (nonagricultural), less than 10.

Report—California Revised Storie Index Rating (CA)

The Storie Index is a soil rating based on soil properties that govern a soil map unit component's potential for cultivated agriculture. [Absence of an entry indicates that a Storie Index rating is not applicable or was not estimated]. For simplification, Storie Index ratings have been combined into six grades as follows: Grade 1 (Excellent): Soils that rate between 80 and 100 and which are suitable for a wide range of crops. Grade 2 (Good) Soils that rate between 60 and 79 and which are suitable for a wide range of crops. Grade 3 (Fair): Soils that range between 40 and 59. Soils in this grade may give good results with certain specialized crops. Grade 4 (Poor): Soils that rate between 20 and 39 and which have a narrow range in their agricultural potential. Grade 5 (Very Poor): Soil that rate between 10 and 19 and are of very limited agricultural use except for pasture because of adverse soil conditions. Grade 6 (Nonagricultural): Soils that rate less than 10. [The numbers in the "Limiting feature value" column range from 0.01 to 1.00. Soils with a smaller the value have a lower potential for cultivated agriculture. The table shows each of the sub-factors used to generate the Storie Index rating for each soil component].

California Revised Storie Index Rating (CA)– Imperial County, California, Imperial Valley Area

Map symbol and soil name	Pct. of map unit	California Revised Storie Index (CA)		
		Storie index rating	Storie index grade and limiting features	Limiting feature value
106—GLENBAR CLAY LOAM, WET				
Glenbar, wet	85	72	Grade Two - Good	
			Rated Soil Order	1.00
			Profile Group	1.00
			Nearly level to gently sloping	0.98
			USDA Texture	0.95
			Wetness, flooding, ponding, drainage, erosion	0.90

California Revised Storie Index Rating (CA)– Imperial County, California, Imperial Valley Area				
Map symbol and soil name	Pct. of map unit	California Revised Storie Index (CA)		
		Storie index rating	Storie index grade and limiting features	Limiting feature value
110—HOLTVILLE SILTY CLAY, WET				
Holtville, wet	85	45	Grade Three - Fair	
			Rated Soil Order	1.00
			Profile Group	1.00
			Nearly level to gently sloping	0.98
			Wetness, flooding, ponding, drainage, erosion	0.90
			Toxicity	0.85
114—IMPERIAL SILTY CLAY, WET				
Imperial, wet	85	42	Grade Three - Fair	
			Rated Soil Order	1.00
			Profile Group	1.00
			Nearly level to gently sloping	0.98
			Wetness, flooding, ponding, drainage, erosion	0.90
			Toxicity	0.80
115—IMPERIAL-GLENBAR SILTY CLAY LOAMS, WET, 0 TO 2 PERCENT SLOPES				
Glenbar, wet	40	72	Grade Two - Good	
			Rated Soil Order	1.00
			Profile Group	1.00
			Nearly level to gently sloping	0.98
			USDA Texture	0.95
			Wetness, flooding, ponding, drainage, erosion	0.90
Imperial, wet	40	67	Grade Two - Good	
			Rated Soil Order	1.00
			Profile Group	1.00
			Nearly level to gently sloping	0.98
			USDA Texture	0.95
			Wetness, flooding, ponding, drainage, erosion	0.90

California Revised Storie Index Rating (CA)– Imperial County, California, Imperial Valley Area				
Map symbol and soil name	Pct. of map unit	California Revised Storie Index (CA)		
		Storie index rating	Storie index grade and limiting features	Limiting feature value
119—INDIO-VINT COMPLEX				
Indio	35	96	Grade One - Excellent	
			USDA Texture	1.00
			Rated Soil Order	1.00
			Profile Group	1.00
			Wetness, flooding, ponding, drainage, erosion	1.00
			Nearly level to gently sloping	0.98
Vint	30	83	Grade One - Excellent	
			Rated Soil Order	1.00
			Profile Group	1.00
			Wetness, flooding, ponding, drainage, erosion	1.00
			Nearly level to gently sloping	0.98
			Toxicity	0.94
122—MELOLAND VERY FINE SANDY LOAM, WET				
Meloland, wet	85	44	Grade Three - Fair	
			USDA Texture	1.00
			Rated Soil Order	1.00
			Profile Group	1.00
			Nearly level to gently sloping	0.98
			Wetness, flooding, ponding, drainage, erosion	0.90

California Revised Storie Index Rating (CA)– Imperial County, California, Imperial Valley Area				
Map symbol and soil name	Pct. of map unit	California Revised Storie Index (CA)		
		Storie index rating	Storie index grade and limiting features	Limiting feature value
123—MELOLAND AND HOLTVILLE LOAMS, WET				
Holtville, wet	40	75	Grade Two - Good	
			USDA Texture	1.00
			Rated Soil Order	1.00
			Profile Group	1.00
			Nearly level to gently sloping	0.98
			Wetness, flooding, ponding, drainage, erosion	0.90
Meloland, wet	40	44	Grade Three - Fair	
			USDA Texture	1.00
			Rated Soil Order	1.00
			Profile Group	1.00
			Nearly level to gently sloping	0.98
			Wetness, flooding, ponding, drainage, erosion	0.90

Data Source Information

Soil Survey Area: Imperial County, California, Imperial Valley Area
Survey Area Data: Version 5, Jul 25, 2008

California Revised Storie Index Rating (CA)

The Storie Index is a soil rating based on soil properties that govern a soil's potential for cultivated agriculture in California.

The Storie Index asseses the productivity of a soil from the following four characteristics: Factor A, degree of soil profile development; factor B, texture of the surface layer; factor C, slope; and factor X, manageable features, including drainage, microrelief, fertility, acidity, erosion, and salt content. A score ranging from 0 to 100 percent is determined for each factor, and the scores are mukltiplied together to derive an index rating.

For simplification, Storie Index ratings have been combined into six grades classes as follows: Grade 1 (excellent), 100 to 80; grade 2 (good), 79 to 60; grade 3 (fair), 59 to 40; grade 4 (poor), 39 to 20; grade 5 (very poor), 19 to 10; and grade 6 (nonagricultural), less than 10.

Report—California Revised Storie Index Rating (CA)

The Storie Index is a soil rating based on soil properties that govern a soil map unit component's potential for cultivated agriculture. [Absence of an entry indicates that a Storie Index rating is not applicable or was not estimated]. For simplification, Storie Index ratings have been combined into six grades as follows: Grade 1 (Excellent): Soils that rate between 80 and 100 and which are suitable for a wide range of crops. Grade 2 (Good) Soils that rate between 60 and 79 and which are suitable for a wide range of crops. Grade 3 (Fair): Soils that range between 40 and 59. Soils in this grade may give good results with certain specialized crops. Grade 4 (Poor): Soils that rate between 20 and 39 and which have a narrow range in their agricultural potential. Grade 5 (Very Poor): Soil that rate between 10 and 19 and are of very limited agricultural use except for pasture because of adverse soil conditions. Grade 6 (Nonagricultural): Soils that rate less than 10. [The numbers in the "Limiting feature value" column range from 0.01 to 1.00. Soils with a smaller the value have a lower potential for cultivated agriculture. The table shows each of the sub-factors used to generate the Storie Index rating for each soil component].

California Revised Storie Index Rating (CA)– Imperial County, California, Imperial Valley Area				
Map symbol and soil name	Pct. of map unit	California Revised Storie Index (CA)		
		Storie index rating	Storie index grade and limiting features	Limiting feature value
114—IMPERIAL SILTY CLAY, WET				
Imperial, wet	85	42	Grade Three - Fair	
			Rated Soil Order	1.00
			Profile Group	1.00
			Nearly level to gently sloping	0.98
			Wetness, flooding, ponding, drainage, erosion	0.90
			Toxicity	0.80

California Revised Storie Index Rating (CA)– Imperial County, California, Imperial Valley Area				
Map symbol and soil name	Pct. of map unit	California Revised Storie Index (CA)		
		Storie index rating	Storie index grade and limiting features	Limiting feature value
115—IMPERIAL-GLENBAR SILTY CLAY LOAMS, WET, 0 TO 2 PERCENT SLOPES				
Glenbar, wet	40	72	Grade Two - Good	
			Rated Soil Order	1.00
			Profile Group	1.00
			Nearly level to gently sloping	0.98
			USDA Texture	0.95
			Wetness, flooding, ponding, drainage, erosion	0.90
Imperial, wet	40	67	Grade Two - Good	
			Rated Soil Order	1.00
			Profile Group	1.00
			Nearly level to gently sloping	0.98
			USDA Texture	0.95
			Wetness, flooding, ponding, drainage, erosion	0.90
116—IMPERIAL-GLENBAR SILTY CLAY LOAMS, 2 TO 5 PERCENT SLOPE S				
Glenbar	40	84	Grade One - Excellent	
			Rated Soil Order	1.00
			Profile Group	1.00
			Wetness, flooding, ponding, drainage, erosion	1.00
			USDA Texture	0.95
			Toxicity	0.94
Imperial	40	64	Grade Two - Good	
			Rated Soil Order	1.00
			Profile Group	1.00
			USDA Texture	0.95
			Undulating to moderately sloping	0.94
			Wetness, flooding, ponding, drainage, erosion	0.90

Data Source Information

Soil Survey Area: Imperial County, California, Imperial Valley Area
Survey Area Data: Version 5, Jul 25, 2008