

Panoche Valley

Water Features

- Lake or Pond
- River or Stream

Utilities

- 500 kV Utility Line
- 230 kV Utility Line

Transportation

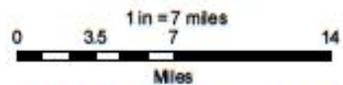
- Interstate 5
- Local Road

Jurisdiction

- County Boundary
- City Boundary
- Pinnacles NM



Panoche Valley Solar Farm
 Solargen Energy, Inc
Figure 1
Project Vicinity



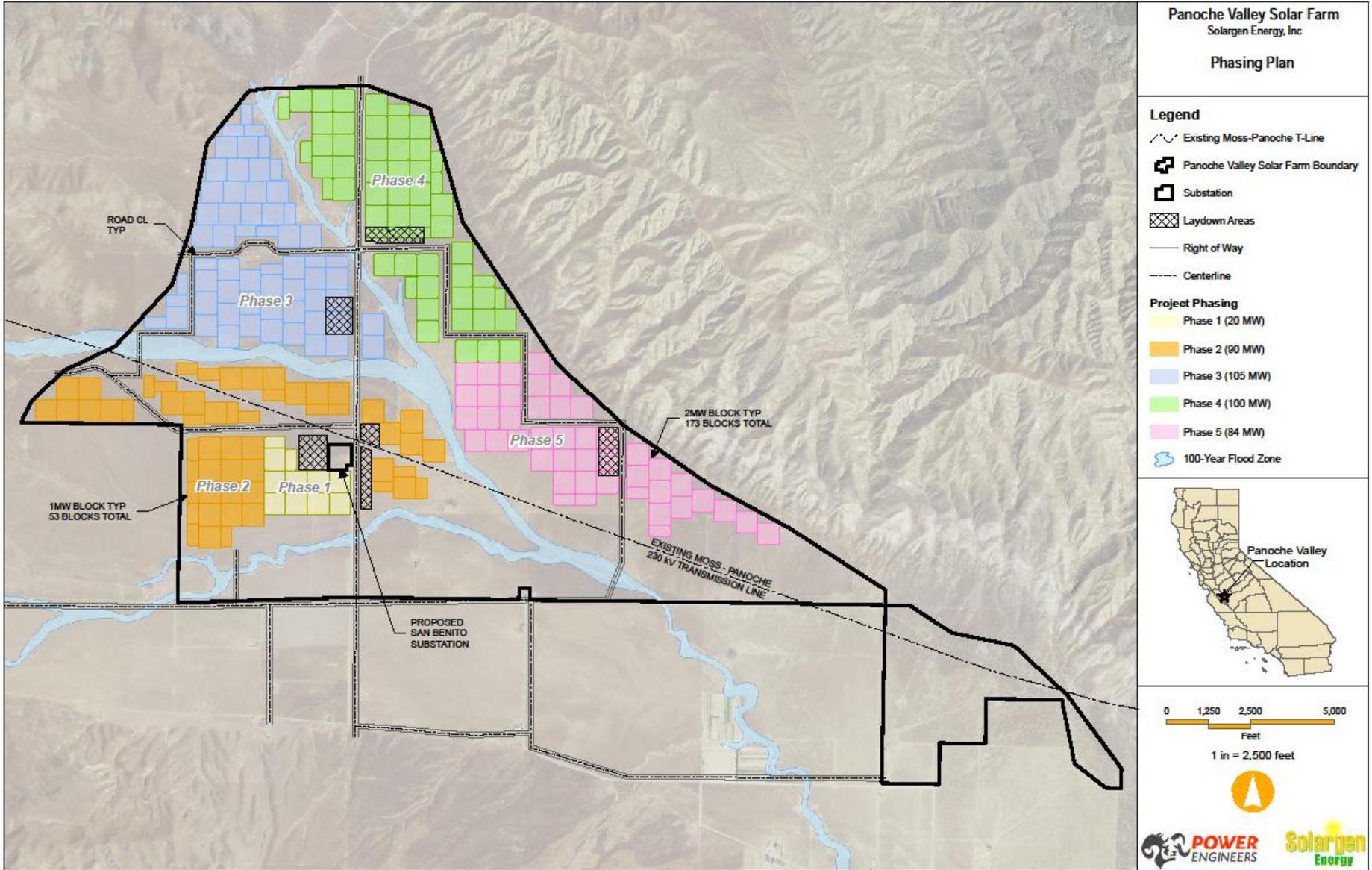


Figure 2

Panoche Valley Solar Farm

Study Area Impact Map
Revised 8/26/2010

Legend

-  PV Panel Block
-  Underground Cable
-  Existing Transmission Line
-  Road
-  Ordinary High Water Mark
-  Substation
-  Study Area

Impact Area #1
Access Road - Ford
69 Linear Feet
50 CY fill

Impact Area #3
Access Road - Culvert Crossing
30 Linear Feet
247 CY fill

Impact Area #2
Access Road - Culvert Crossing
27 Linear Feet
130 CY fill



1 inch = 0.5 miles

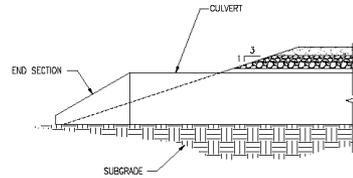
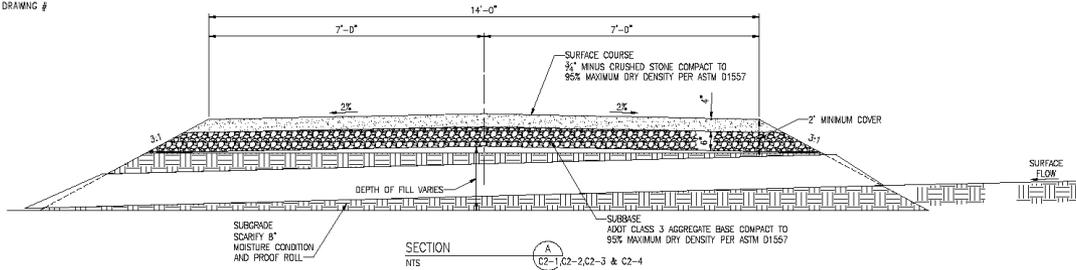
0 0.25 0.5 0.75 Miles



Date Printed: August 26, 2010
D:\Panoche\Additional Impacts\082610

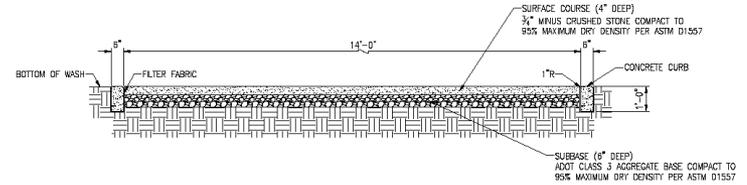
Figure 3

SWTC DRAWING #



TYPICAL CULVERT INSTALLATION

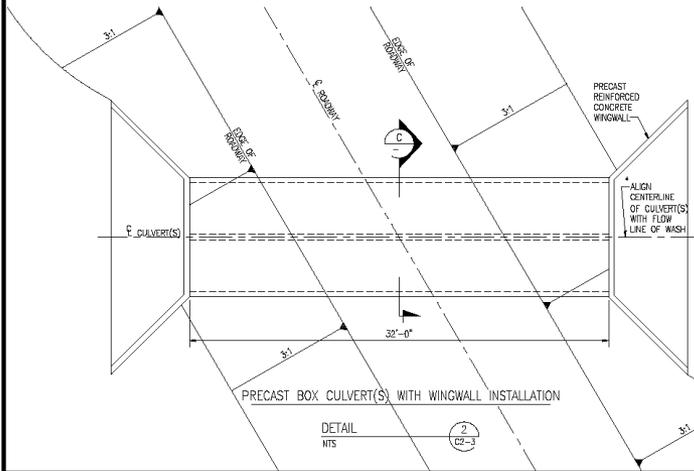
DETAIL 1
NTS C2-1, C2-2, C2-3 & C2-4



TYPICAL ROADWAY WASH CROSSING (INTERMITTENT STREAM CROSSING)

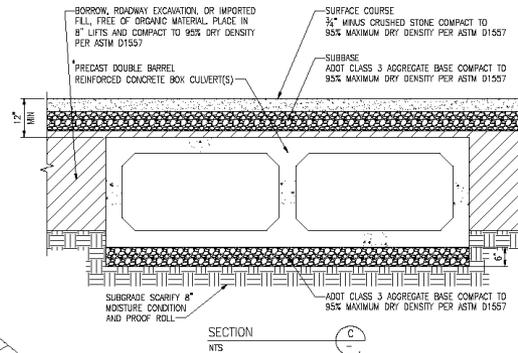
WASH CROSSING NOTES:

1. THE TOP OF THE CONCRETE CURB SHALL BE THE BOTTOM ELEVATION ON THE UPSTREAM SIDE.
2. USE 3000PSI 28 DAY CONCRETE, USING TYPE 2 CEMENT, IN THE CURBS.
3. THE FILTER FABRIC SHALL BE INSTALLED UP THE SIDE OF EACH CURB 6" AND BE INSTALLED PER INDUSTRY STANDARDS.
4. THE FILTER FABRIC SHALL MEET PIMA COUNTY STANDARDS FOR "HIGH SURVIVABILITY FABRIC" (1014-4.03).



DETAIL 2
NTS C2-3

*NUMBER OF CULVERTS AND CULVERT SIZE VARIES WITH EACH CROSSING



SECTION C
NTS

BOX CULVERT NOTES:

1. INSTALL COLDCAST PRECAST REINFORCED CONCRETE BOX CULVERT AND WINGWALLS OR ENGINEER APPROVED EQUIVALENT. EACH BARREL TO HAVE SPAN EQUAL TO 4' AND RISE EQUAL TO 2'. WALL THICKNESS SHALL BE MINIMUM 5".
2. PRECAST BOX CULVERT DESIGN SPECIFICATIONS SHALL BE IN ACCORDANCE WITH AC-318 "BUILDING REQUIREMENTS FOR STRUCTURAL CONCRETE", ASHTO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES", ASTM C1200 "PRECAST REINFORCED CONCRETE BOX SECTIONS FOR CULVERTS, STORM DRAINS, AND SEWERS", OR ASTM C850 "PRECAST REINFORCED CONCRETE BOX SECTIONS FOR CULVERTS, STORM DRAINS, AND SEWERS WITH LESS THAN 2 FT OF COVER SUBJECT TO HIGHWAY LOADINGS", AS APPLICABLE.
3. CONCRETE COMPRESSIVE STRENGTH 5,000 P.S.I. MINIMUM UNLESS OTHERWISE SPECIFIED.
4. STEEL REINFORCING DESIGN TO CONFORM TO THE REQUIREMENTS OUTLINED IN NOTE #2 AND SHALL UTILIZE GRADE 60 RE-BARS CONFORMING TO THE REQUIREMENTS OF ASTM A185, OR WWP CONFORMING TO THE REQUIREMENTS OF ASTM A185 OR BOTH.
5. CONTRACTOR MAY CAST THE BOX CULVERT IN PLACE, IF CONTRACTOR SELECTS THIS OPTION, DESIGN DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL. IF PRECAST OPTION IS SELECTED CONTRACTOR SHALL SUBMIT VENDOR DRAWINGS TO THE ENGINEER FOR REVIEW.

NO.	DATE	REVISION	BY	APPD.	NO.	DATE	REVISION	BY	APPD.

REFERENCE DRAWINGS

NOTES

DRAFT - NOT FOR CONSTRUCTION

APPROVAL BY	DATE

PANOCH VALLEY
WASH CROSSING
DETAILS

Solargen
Energy

PD - JOB NUMBER - 117357

POWER ENGINEERS

APPROVED BY: DC
DATE: 03-11-10
SCALE: NTS
DRAWN BY: DLK
CHECKED BY: DC
DWG. NO: C3-2
SHEET: 1 of 1

Cad File #

**/3000743010/05/05/*DWG

Figure 4

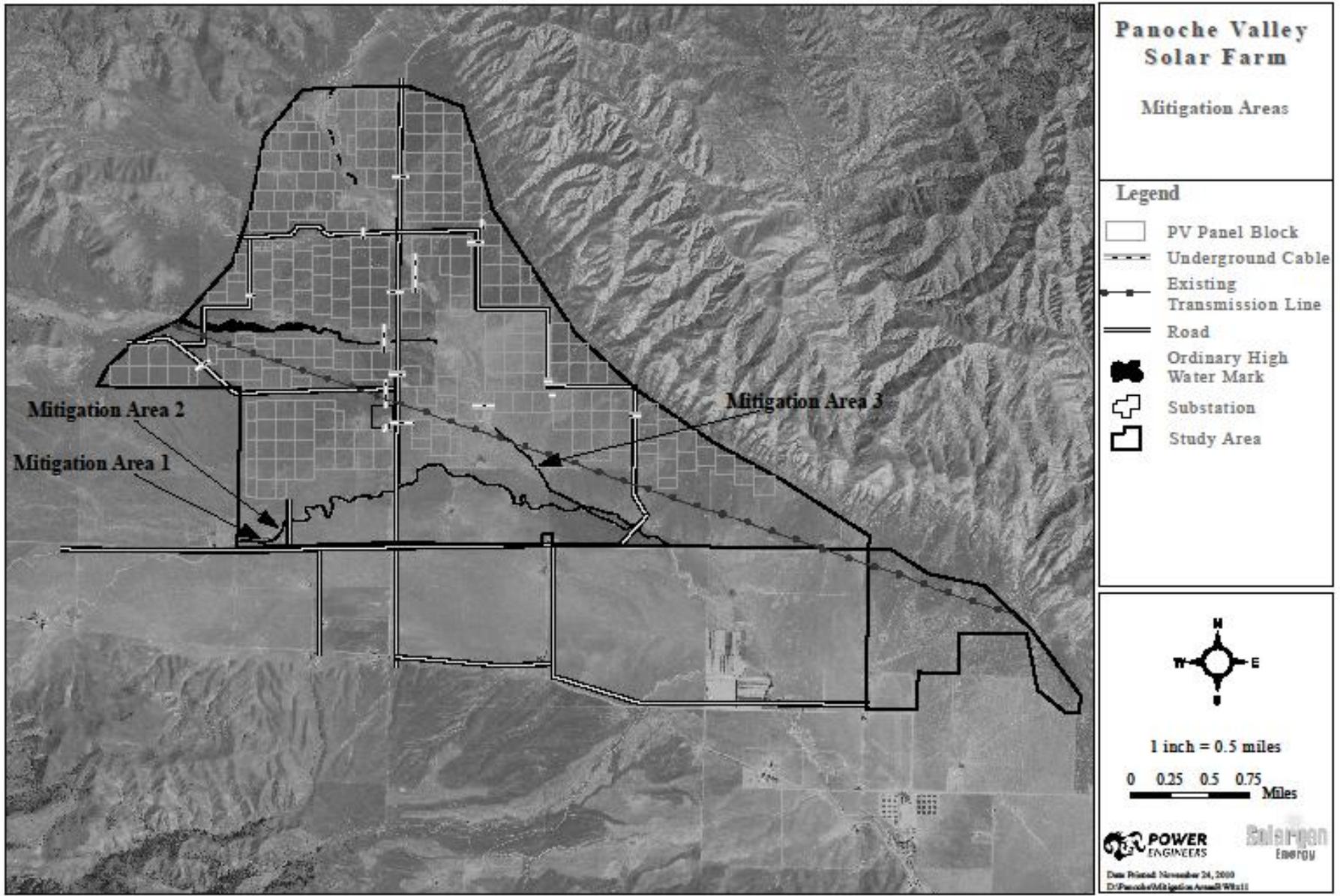


Figure 5