

**DOCKET**

**08-AFC-2**

DATE	SEP 17 2009
RECD	SEP 17 2009

**DATE:** September 17, 2009  
**To:** California Energy Commission  
Docket Office - #08-AFC-02  
**FROM:** Lois Navarrot  
**SUBJECT:** Beacon Solar Energy Project  
**ENCLOSED PLEASE FIND:** Beacon Solar, LLC's E-Mails and POS

- FOR YOUR INFORMATION
- PLEASE DOCKET AND RETURN ENDORSED COPY IN THE ENCLOSED SELF-ADDRESSED, STAMPED ENVELOPE
- PLEASE TELEPHONE
- PER OUR TELEPHONE CONVERSATION
- IN ACCORDANCE WITH YOUR REQUEST
- PLEASE REVIEW
- PLEASE RECORD
- PLEASE ACKNOWLEDGE RECEIPT
- PLEASE COMMENT
- PLEASE READ, SIGN AND RETURN

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**From:** Foster, Jared  
**Sent:** Friday, September 04, 2009 5:26 PM  
**To:** Eric Solorio  
**Cc:** Stein, Kenneth; McCloud, Duane; Russell, Meg; Busa, Scott  
**Subject:** Beacon Solar Energy Project - Revised Grading Plans

Eric - Attached are the revised grading plans for the Beacon Solar Energy Project. They differ from Figure 12 in the Project Refinements document to the extent that the grading plan is broken into two sheets. The first sheet is the grading plan and the second sheet provides section details. Cut and Fill numbers are shown on sheet one under the notes.

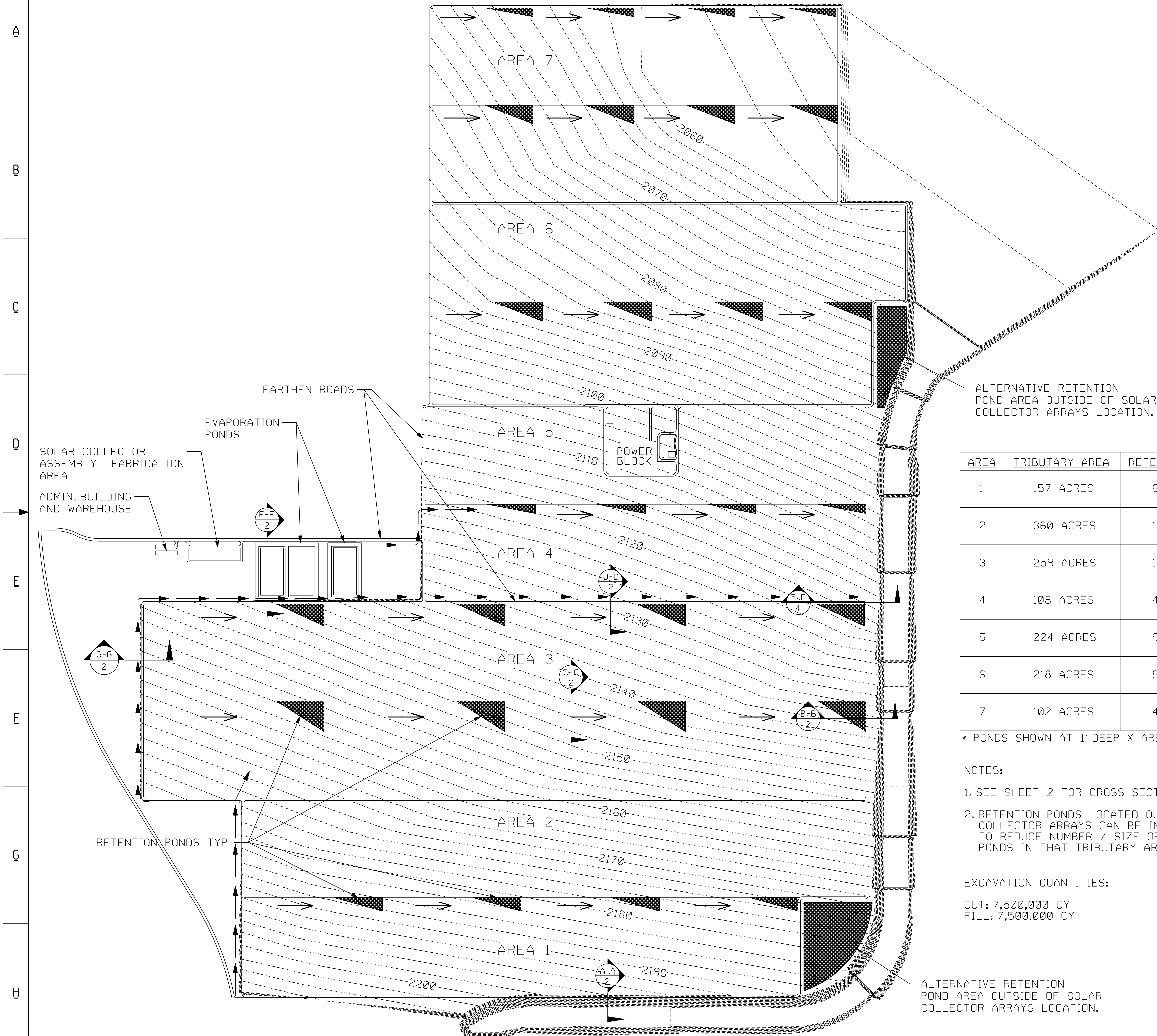
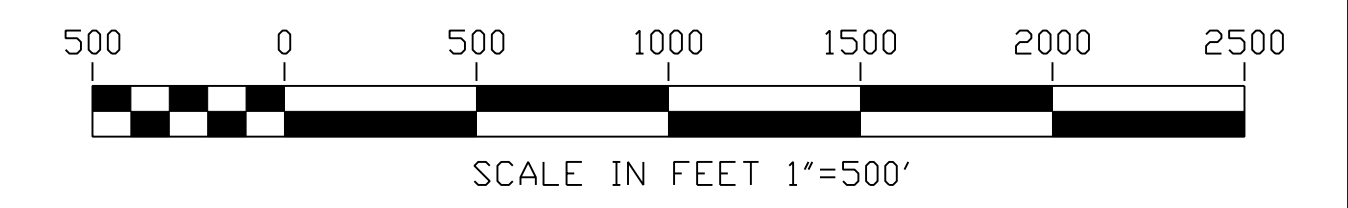
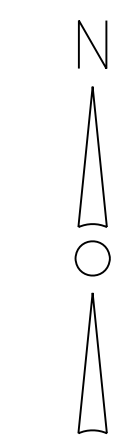
Let me know if you have any questions.

Thanks,

Jared Foster, P.E.  
916.817.3935  
Worley Parsons  
2330 E Bidwell, Suite 150  
Folsom, CA 95630

LEGEND

- PROPOSED CONTOUR
- ==== GRAVEL ROAD
- ▲ RETENTION POND
- DRAINAGE CHANNEL AND OFFSITE FLOW CAPTURE
- ON-SITE FLOWS THROUGH RETENTION FACILITIES



AREA	TRIBUTARY AREA	RETENTION VOLUME	ESTIMATED POND SIZE
1	157 ACRES	6.43 AC-FT	4 @ 1.60 AC-FT * OR 6 @ 1.07 AC-FT
2	360 ACRES	14.75 AC-FT	4 @ 3.68 AC-FT * OR 6 @ 2.46 AC-FT
3	259 ACRES	10.63 AC-FT	4 @ 2.65 AC-FT * OR 6 @ 1.77 AC-FT
4	108 ACRES	4.41 AC-FT	4 @ 1.10 AC-FT * OR 6 @ 0.74 AC-FT
5	224 ACRES	9.20 AC-FT	4 @ 2.30 AC-FT * OR 6 @ 1.53 AC-FT
6	218 ACRES	8.94 AC-FT	4 @ 2.23 AC-FT * OR 6 @ 1.49 AC-FT
7	102 ACRES	4.17 AC-FT	4 @ 1.04 AC-FT * OR 6 @ 0.69 AC-FT

\* PONDS SHOWN AT 1' DEEP X AREA

NOTES:

1. SEE SHEET 2 FOR CROSS SECTION DETAILS.
2. RETENTION PONDS LOCATED OUTSIDE OF SOLAR COLLECTOR ARRAYS CAN BE INCREASED IN DEPTH / SIZE TO REDUCE NUMBER / SIZE OF REMAINING RETENTION PONDS IN THAT TRIBUTARY AREA.

EXCAVATION QUANTITIES:

CUT: 7,500,000 CY  
FILL: 7,500,000 CY

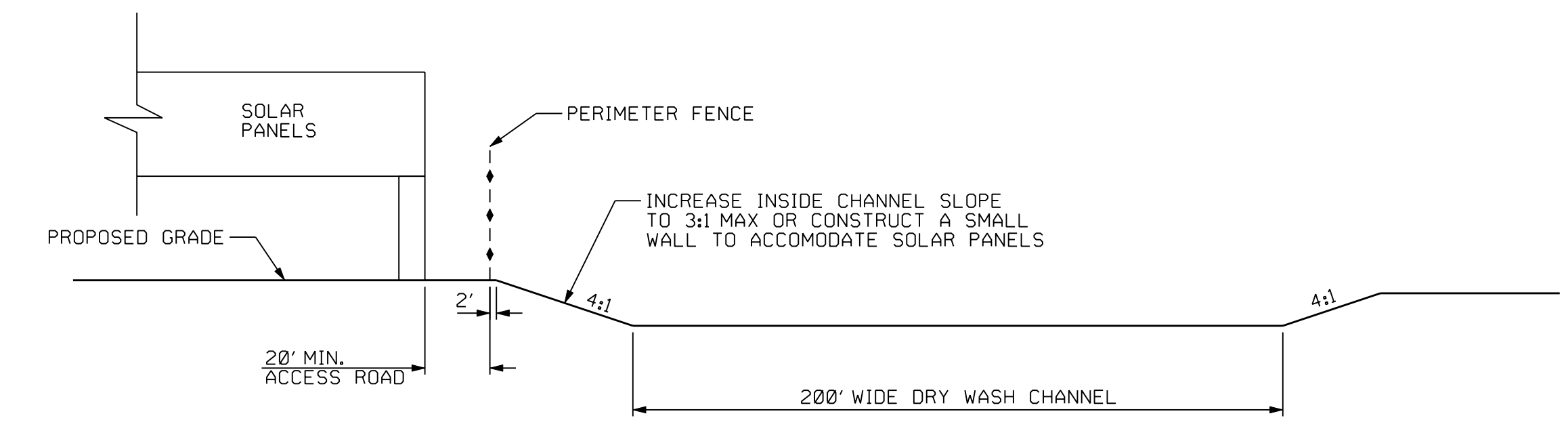
REV	DATE	DESCRIPTION	DRAWN	CHECKED	DESIGNED	IN CHARGE	PROJECT MANAGER
PRELIMINARY STATUS		DATE	REPRESENTS GENERAL DESIGN CONCEPTS BASED ON ASSUMPTIONS. REVIEWED NOT CHECKED.				
APPROVED STATUS		DATE	REPRESENTS REVIEWED AND APPROVED DESIGN. ANY PORTION MARKED "HOLD" RETAINS PRELIMINARY STATUS.				
ORIGINATING PERSONNEL			PROFESSIONAL ENGINEER'S SEAL				
DRAWN BY							
CHECKED BY							
LEAD DESIGNER							
ENGINEER/TECH SPECIALIST							
PROJECT ENGINEERING MANAGER							
PROJECT MANAGER							
			LEADERSHIP NO INCIDENTS SAFE BEHAVIOR <small>ORIGINALLY PREPARED UNDER THE RESPONSIBLE SUPERVISION OF</small>				



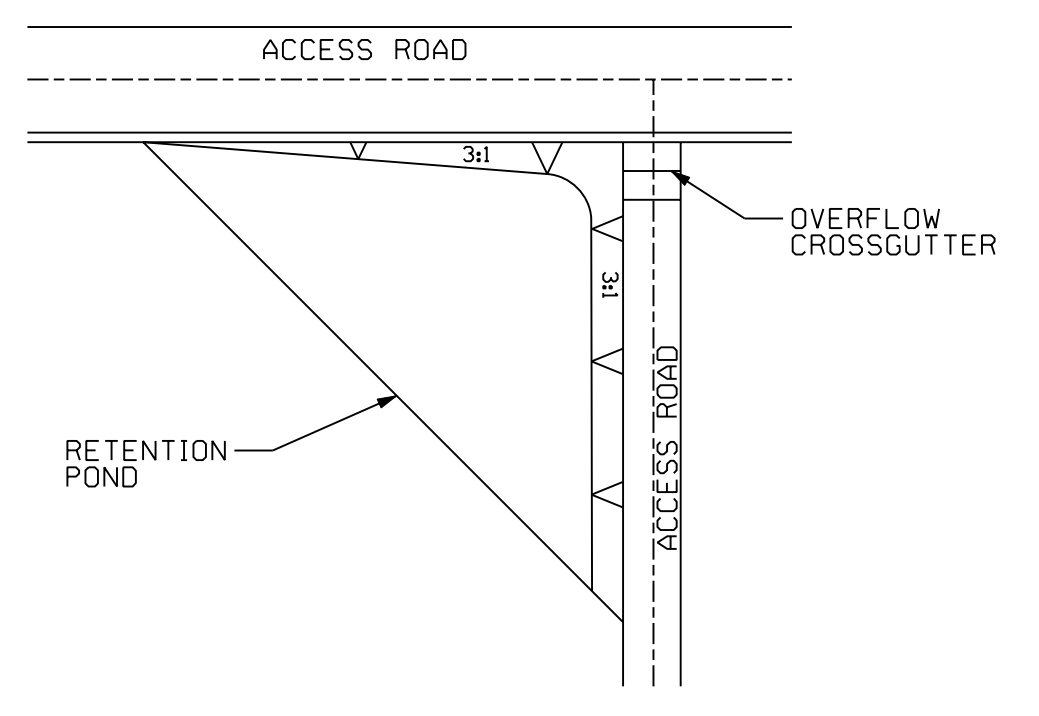
CLIENT/PROJECT TITLE  
BEACON SOLAR, LLC  
BEACON SOLAR ENERGY PROJECT

PRELIMINARY CONCEPTUAL  
RETENTION POND PLAN  
PLAN VIEW

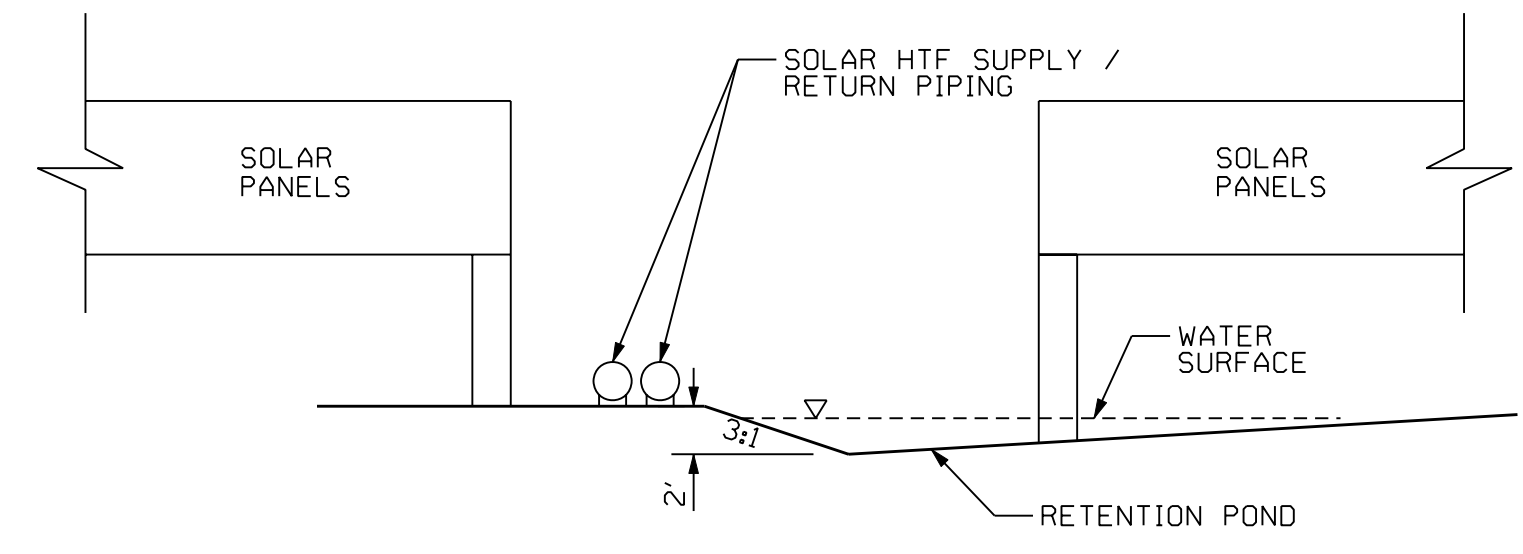
SCALE	1"=500'	DRAWING SIZE	ARCH D (24' x 36')
WORLEYPARSONS' DWG. NO.	FPLS-0-SK-112-716-001	REV	A



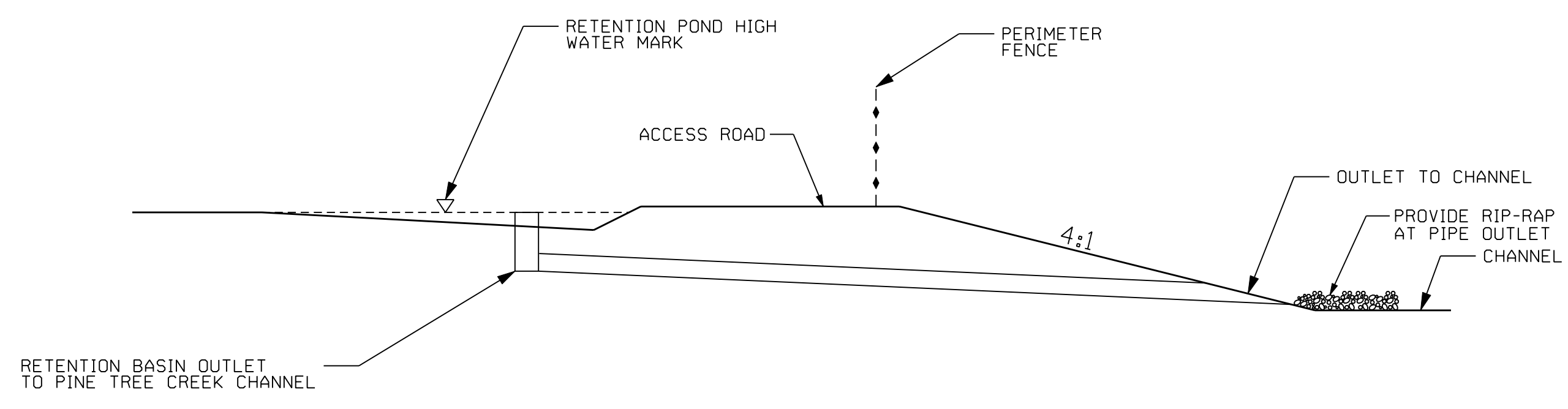
DETAIL A-A ACCESS ROAD AND CHANNEL DETAIL  
NTS



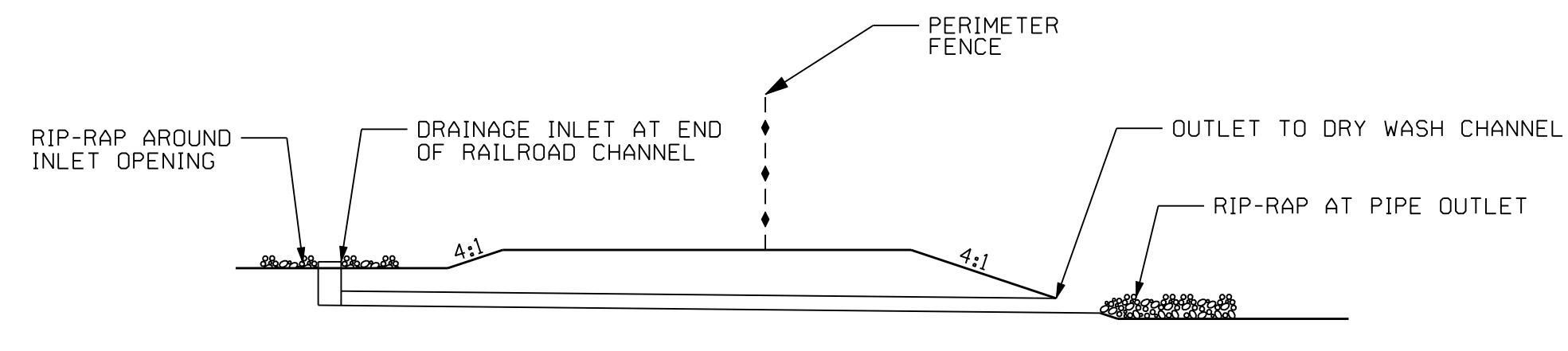
DETAIL C-C SOLAR FIELD RETENTION BASIN PLAN VIEW  
NTS



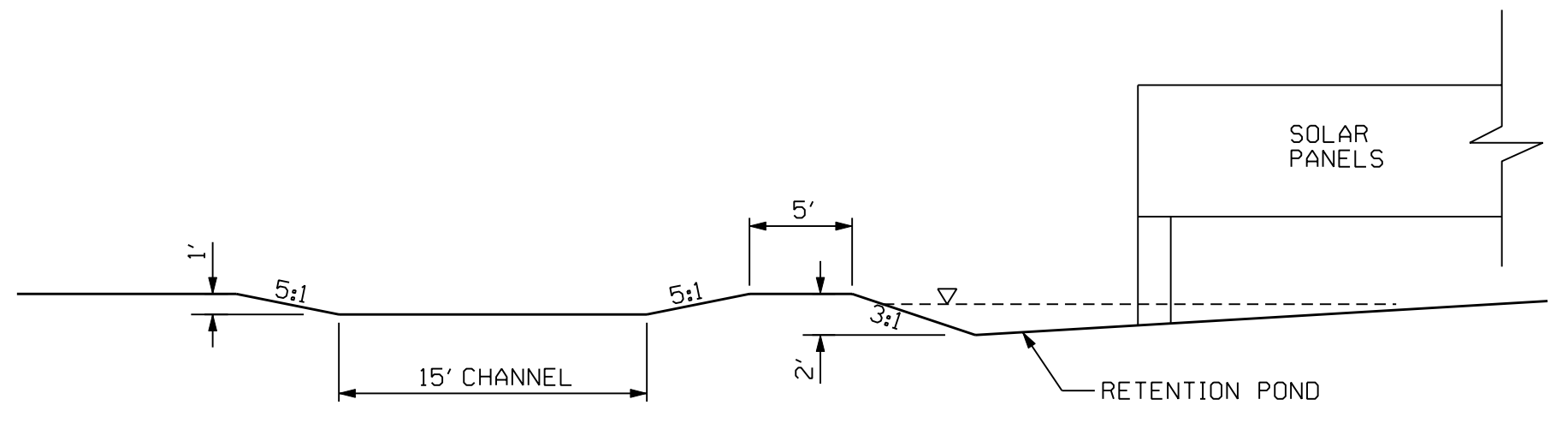
DETAIL C-C SOLAR FIELD RETENTION BASIN PROFILE VIEW  
NTS



DETAIL B-B RETENTION BASIN OUTLET TO CHANNEL PROFILE  
NTS

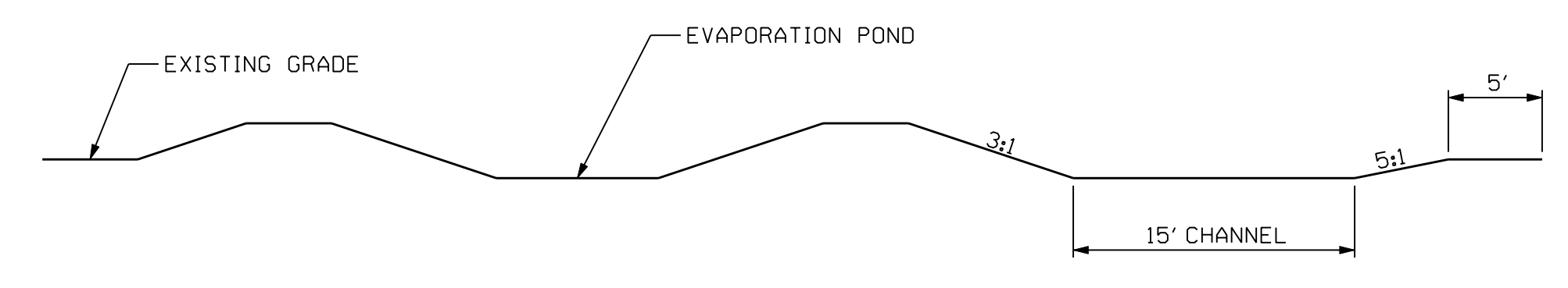


DETAIL E-E RAILROAD CHANNEL OUTLET TO DRY WASH CHANNEL PROFILE  
NTS

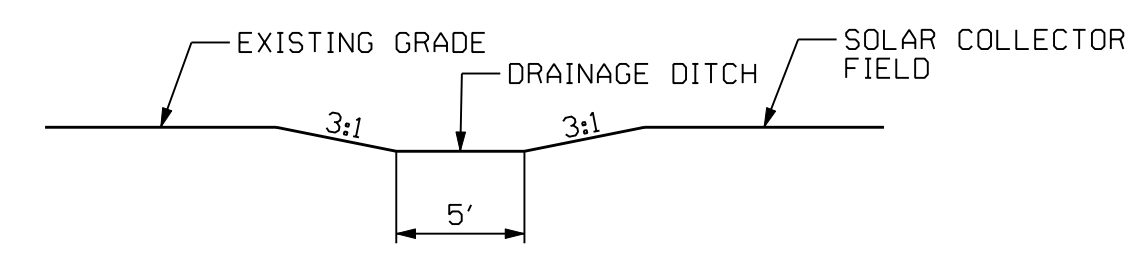


DETAIL D-D RAILROAD CHANNEL / RETENTION POND PROFILE  
NTS

- NOTES:
1. MAX DEPTH OF RETENTION POND WATER IS 18"
  2. ADD GRAVEL INFILTRATION TRENCH TO POND AS REQUIRED TO ENSURE INFILTRATION WITHIN 7 DAYS.



DETAIL F-F RAILROAD CHANNEL / RETENTION POND PROFILE  
NTS



DETAIL G-G OFF-SITE CHANNEL  
NTS

REV	DATE	DESCRIPTION	DRAWN	CHECKED	DESIGNED	IN CHARGE	PROJECT MANAGER

PRELIMINARY STATUS DATE REPRESENTS GENERAL DESIGN CONCEPTS BASED ON ASSUMPTIONS. REVIEWED NOT CHECKED.

APPROVED STATUS DATE REPRESENTS REVIEWED AND APPROVED DESIGN. ANY PORTION MARKED "HOLD" RETAINS PRELIMINARY STATUS.

ORIGINATING PERSONNEL	PROFESSIONAL ENGINEER'S SEAL
DRAWN BY	
CHECKED BY	
LEAD DESIGNER J. DAHLGREN	
ENGINEER/TECH SPECIALIST B. ANDERS	
PROJECT ENGINEERING MANAGER J. FOSTER	
PROJECT MANAGER C. NITOFF	



CLIENT/PROJECT TITLE  
BEACON SOLAR, LLC  
BEACON SOLAR ENERGY PROJECT

PRELIMINARY CONCEPTUAL  
RETENTION POND  
PLAN DETAILS

SCALE NOT TO SCALE DRAWING SIZE ARCH D (24" x 36")  
WORLEYPARSONS DWG. NO. FPLS-0-SK-112-716-002 REV A

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**From:** Guigliano, Jennifer  
**Sent:** Tuesday, September 8, 2009 12:50 PM  
**To:** Casey Weaver [mailto:CWeaver@energy.state.ca.us]  
**Cc:** Solorio, Eric; Flack, Mike; Foster, Jared; Busa, Scott; Stein, Kenneth; McCloud, Duane; Russell, Meg; Head, Sara;  
**Subject:** Beacon Solar Hydrostatic Test Water

Good Afternoon Casey,

This message is in response to your request for additional information on hydrostatic test water for the Beacon Solar project. You requested information on the amount of hydrostatic test water, disposal method, and pond capacity to handle disposal.

The BSEP will perform hydrostatic tests on those components of the system that require it. Hydrostatic testing will be conducted as required and in a manner so as to minimize the use of water and conduct the tests in an environmentally responsible manner. The approximate quantity of hydrostatic test water to be generated by the project is 360,000 gallons. This water will be reused to the extent feasible in accordance with applicable regulations. Water that cannot be reused will be discharged to the evaporation ponds. The evaporation ponds as currently sized (6 acres) have enough capacity to contain the 360,000 gallons of hydrostatic test water generated during testing of the required system components, assuming no water can be reused.

Please let us know if you have any other questions.

Thank you,  
Jenn

Jennifer Guigliano, CPESC, CPSWQ, CESSWI, REA  
Project Director  
Group SH&E Director  
D +1 619.764.6882 M +1 619.200.8148  
New Email: [jennifer.guigliano@aecom.com](mailto:jennifer.guigliano@aecom.com)

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<<http://www.aecom.com/>>

**From:** Flack, Mike  
**Sent:** Friday, September 11, 2009 10:07 AM  
**To:** Casey Weaver  
**Cc:** Head, Sara; Guigliano, Jennifer; Foster, Jared; Russell, Meg; Field, Jennifer; McCloud, Duane; Busa, Scott; Stein, Kenneth  
**Subject:** Beacon Solar Power Project - Construction Water Volume (Revised)

Casey;

You had inquired of the changes in grading volume associated with the realigned channel. That information has been provided in revised grading plans submitted September 4 to Eric Solorio via Worley Parsons. The change shows an increase in the volume to 7.5M cubic yards. This equates to a change in the volume of construction water proposed during the 5 month grading period from ~2,500 acre-feet (original AFC value) to ~3,300 acre-feet (af). The groundwater model updated in May 2009 evaluated construction water use during this five month period using the AFC volume and assuming 5 million gallons per day (M gpd) for the first and fifth month and 10M gpd for the second, third and fourth months. We have updated the model scenario to accommodate the increase in volume to 3,300 acre-feet by assuming 6.1M gpd for the first and fifth months and 10M gpd for the second, third and fourth months. For either scenario, all the pumping is from well No. 48.

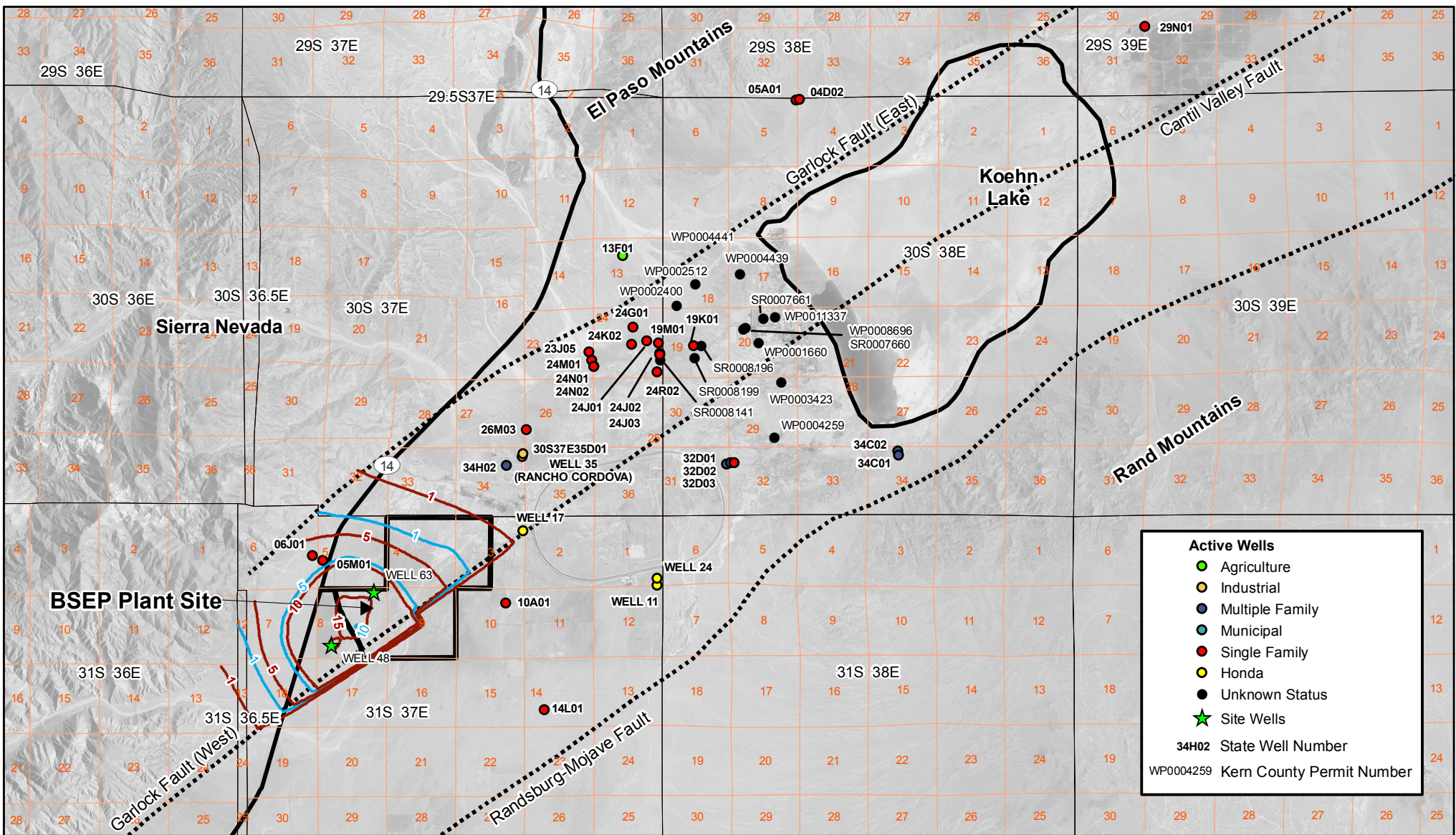
The attached Figure 14a, shows radius of influence and the difference between the proposed construction water use during the 5 month grading period for the prior proposed water use (~2,500 af) and revised volume (~3,300 af). The model results are not significantly different and do not predict any additional wells will be affected by the increased pumping volume over the short duration when water is needed for grading. Of note, water use beyond the grading period will not be different than as provided in the AFC.

If you have any questions, please contact me at your earliest convenience.

Thanks,

**Michael Flack, PG, CEG**  
AECOM Environment  
1220 Avenida Acaso  
Camarillo, California 93012-8738  
T 805.388.3775 extension - 243  
F 805.388.3577  
C 805.760.1840  
[mike.flack@aecom.com](mailto:mike.flack@aecom.com)





**Legend**

- Predicted Water Table (AFC proposed construction water use - 2500 af over 5 months)
- Predicted Water Table (Revised construction water use - 3,300 af over 5 months)
- Fault
- Township Range
- Sections
- BSEP Plant Site Boundary

Note: Fault locations are approximate  
Source: Koehler, 1977

0 2 4 Miles

1:126,720

**BSEP**

**Figure 14A**  
**Changes in Water Level (ft)**  
**After 5 Months of Construction**  
**Pumping at Well 48**  
**(Revised Volume - Reflecting Changes**  
**in the Proposed Grading)**

**Beacon Solar**

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**AECOM**

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Project: 10056-014  
Date: Sept. 2009

**BEFORE THE ENERGY RESOURCES CONSERVATION AND DEVELOPMENT COMMISSION  
OF THE STATE OF CALIFORNIA**

**APPLICATION FOR CERTIFICATION FOR  
THE BEACON SOLAR ENERGY PROJECT**

DOCKET NO. 08-AFC-2

**PROOF OF SERVICE**  
(Revised 4/28/09)

<b><u>APPLICANT</u></b>	<b><u>COUNSEL FOR APPLICANT</u></b>	<b><u>ENERGY COMMISSION</u></b>
<p>Scott Busa Kenneth Stein, J.D. Meg Russell Duane McCloud Guillermo Narvaez, P.E. NextEra Energy Resources 700 Universe Blvd. Juno Beach, FL 33408 <a href="mailto:Scott.busa@nexteraenergy.com">Scott.busa@nexteraenergy.com</a> <a href="mailto:Kenneth.stein@nexteraenergy.com">Kenneth.stein@nexteraenergy.com</a> <a href="mailto:Meg.Russell@nexteraenergy.com">Meg.Russell@nexteraenergy.com</a> <a href="mailto:Duane.mccloud@nexteraenergy.com">Duane.mccloud@nexteraenergy.com</a> <a href="mailto:Guillermo.narvaez@nexteraenergy.com">Guillermo.narvaez@nexteraenergy.com</a></p> <p>Diane Fellman, Director West Region NextEra Energy Resources 234 Van Ness Avenue San Francisco, CA 94102 <a href="mailto:Diane.fellman@nexteraenergy.com">Diane.fellman@nexteraenergy.com</a></p>	<p>Jane Luckhardt, Esq. Downey Brand, LLP 621 Capitol Mall, 18th Floor Sacramento, CA 95814 <a href="mailto:jluckhardt@downeybrand.com">jluckhardt@downeybrand.com</a></p>	<p>Karen Douglas Commissioner and Presiding Member <a href="mailto:kldougl@energy.state.ca.us">kldougl@energy.state.ca.us</a></p> <p>Jeffrey D. Byron Commissioner &amp; Associate Member <a href="mailto:jbyron@energy.state.ca.us">jbyron@energy.state.ca.us</a></p> <p>Kenneth Celli Hearing Officer <a href="mailto:kcelli@energy.state.ca.us">kcelli@energy.state.ca.us</a></p>
<p><b><u>APPLICANT CONSULTANT</u></b></p> <p>Sara Head, Vice President AECOM Environment 1220 Avenida Acaso Camarillo, CA 93012 <a href="mailto:Sara.head@aecom.com">Sara.head@aecom.com</a></p>	<p><b><u>INTERESTED AGENCIES</u></b></p> <p>California ISO <a href="mailto:e-recipient@caiso.com">e-recipient@caiso.com</a></p>	<p>Eric K. Solorio Project Manager <a href="mailto:esolorio@energy.state.ca.us">esolorio@energy.state.ca.us</a></p> <p>Jared Babula Staff Counsel <a href="mailto:jbabula@energy.state.ca.us">jbabula@energy.state.ca.us</a></p>
<p>Bill Pietrucha, Project Manager Jared Foster, P.E. Worley Parsons 2330 E. Bidwell, Suite 150 Folsom, CA 95630 <a href="mailto:Bill.Pietrucha@worleyparsons.com">Bill.Pietrucha@worleyparsons.com</a> <a href="mailto:Jared.Foster@worleyparsons.com">Jared.Foster@worleyparsons.com</a></p>	<p><b><u>INTERVENORS</u></b></p> <p>Tanya A. Gulesserian Marc D. Jacobs Adams Broadwell Joseph &amp; Cardozo 601 Gateway Boulevard, Suite 1000 South San Francisco, CA 94080 <b>E-MAIL PREFERRED</b> <a href="mailto:tgulesserian@adamsbroadwell.com">tgulesserian@adamsbroadwell.com</a></p>	<p>Public Adviser's Office <a href="mailto:publicadviser@energy.state.ca.us">publicadviser@energy.state.ca.us</a></p>



**Declaration of Service**

I, Lois Navarrot, declare that on September 17, 2009, I served and filed copies of the following documents:

1. 9/4/09 E-mail from Jared Foster to Eric Solorio regarding Revised Grading Plans
2. 9/8/09 E-mail from Jennifer Guigliano to Casey Weaver re Beacon Solar Hydrostatic Test Water
3. 9/11/09 E-mail from Mike Flack to Casey Weaver re Construction Water Volume (Revised)
4. Proof of Service

The original documents, filed with the Docket Unit, are accompanied by a copy of the most recent Proof of Service list, located on the web page for this project at: [www.energy.ca.gov/sitingcases/beacon](http://www.energy.ca.gov/sitingcases/beacon). The document has been sent to both the other parties in this proceeding (as shown on the Proof of Service List) and to the Commission's Docket Unit, in the following manner:

**(check all that apply)**

**For Service to All Other Parties**

sent electronically to all email addresses on the Proof of Service list;

by personal delivery or by depositing in the United States mail at Sacramento, California with first-class postage thereon fully prepaid and addressed as provided on the Proof of Service List above.

**For Filing with the Energy Commission**

sending an original paper copy mailed, to the address below;

**OR**

depositing in the mail an original and 12 paper copies as follow:

California Energy Commission  
Attn: Docket No. 08-AFC-2  
1516 Ninth Street, MS-4  
Sacramento, CA 95814-5512

[docket@energy.state.ca.us](mailto:docket@energy.state.ca.us)

I declare under penalty of perjury that the foregoing is true and correct.

\_\_\_\_\_  
/s/  
Lois Navarrot