



Parks and Recreation Commission  
March 3, 2011

Agenda Item 7

DEPARTMENT OF  
PARKS AND RECREATION

CITY OF SACRAMENTO  
CALIFORNIA

915 I STREET  
5<sup>th</sup> Floor  
SACRAMENTO, CA  
95814

Park Planning & Development  
Services

PH 916-808-5200  
FAX 916-808-8266

February 22, 2011

Parks and Recreation Commission  
Sacramento, California

Honorable Members in Session:

**SUBJECT:** Proposed Solar Photovoltaic Park at Sutter's Landing Park

**LOCATION AND COUNCIL DISTRICT:** Northern terminus of 28<sup>th</sup> St. north of A St.  
Planning Area 1, Council District 3

**RECOMMENDATION:** Review and Discuss

**CONTACT PERSON:** J.P. Tindell, Park Planning and Development Manager, 808-1955  
Marty Strauss, Integrated Waste Planning Superintendent, 808-4934

**FOR COMMISSION MEETING:** *March 3, 2011*

**SUMMARY:** City staff has been pursuing installation of a solar photovoltaic park at Sutter's Landing Park/28<sup>th</sup> Street Landfill as a new revenue stream to the City. On October 26, 2010, the City Council approved an Exclusive Right to Negotiate a Ground Lease with a private company, Conergy. At the Commission's November 2010 meeting, staff agreed to return to the Commission for review of 30% drawings/design of the proposed solar facility.

**BACKGROUND INFORMATION:** See Attachment A for exhibits showing the areas proposed for solar facilities installation (west and east sides). Attachment B is the slide presentation presented at a community meeting on the project held on February 17, 2011, followed by a summary of the notes taken by staff.

Additional project key points include:

- 1) Environmental Values: Proximity to the American River and its associated riparian habitat makes Sutter's Landing a unique natural area in the center of our City. Project environmental impacts will be addressed in accordance with CEQA requirements.
- 2) Lease Term: The proposed lease to Conergy is for a minimum of 20 years. This is a reasonable lease term for any entity to receive full Return on Investment. 2017 is the earliest date when the east side (WMUs A-B east of 28<sup>th</sup> Street, approximately 100 acres) is projected for completion of



Optimize the Experience of Living!

State required post closure monitoring requirements. Before this time these areas cannot be considered for other uses without additional expense to accommodate post closure monitoring requirements.

- 3) **Portable Installations:** The proposed installations are intentionally designed to be portable and impermanent. Should the City choose not to renew the lease for use of its property, the lessor will be required to remove all improvements and return the property to an unimproved condition.
- 4) **Added Shade and Interpretation for Park Users:** Installations provided on the west side of the park (approx. 70 acres), where park amenities are being developed over time, are project requirements established by the City and will provide shade and cooling effects that both generate power and enhance public recreational use. In addition, interpretive opportunities (e.g. public viewing tower and signage) are to be provided.
- 5) **Sale of Generated Power:** It is yet to be determined what entity (such as SMUD or PG&E) will enter into a required Power Purchase Agreement with the lessor.
- 6) **Project Schedule:** Project construction is intended to be phased (see Attachment A, staff report page 7, ref. PV 2.05). See Attachment C, staff report page 21, for a preliminary overall project schedule showing key milestones.
- 7) **Not Suitable for Zoo:** Sutter's Landing Park has been jointly determined by City staff and the Sacramento Zoological Society to be an unsuitable location for a City Zoo.

**FINANCIAL CONSIDERATIONS:** The project will be funded entirely by private sources, including ongoing maintenance by the company leasing property from the City. Final decisions as to the disposition of lease revenues to the City are pending.

**ENVIRONMENTAL CONSIDERATIONS:**

**California Environmental Quality Act (CEQA):** Not applicable to this informational report; any proposed development project will be subject to CEQA review and compliance.

**Sustainability Considerations:** The proposed project is highly consistent with the goals, policies, and targets of the City's Sustainability Master Plan (SMP) and Parks & Recreation Sustainability Plan. A source of renewable energy is proposed that will also be highly visible and have environmental education benefits to the public. It is the only such facility proposed to date for a City park.

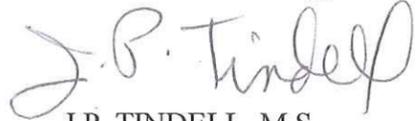
**POLICY CONSIDERATIONS:** Providing parks and recreation facilities is consistent with the City's strategic plan to achieve sustainability and liveability and to expand economic development throughout the City.

**CONSISTENCY WITH GOALS OF THE CITY OF SACRAMENTO GREENPRINT:**

Not applicable, as the proposed project does not directly involve any tree planting.

**ESBD CONSIDERATIONS:** No goods or services are being purchased in association with this report.

Recommendation Approved:



J.P. TINDELL, M.S.  
Park Planning and Development Manager

- |              |   |
|--------------|---|
| Attachment A | Proposed solar facilities at Sutter's Landing Park (30% drawings and proposed construction phasing) |
| Attachment B | 2-17-11 Community Meeting Slide Presentation and Notes  |
| Attachment C | Preliminary Project Schedule  |

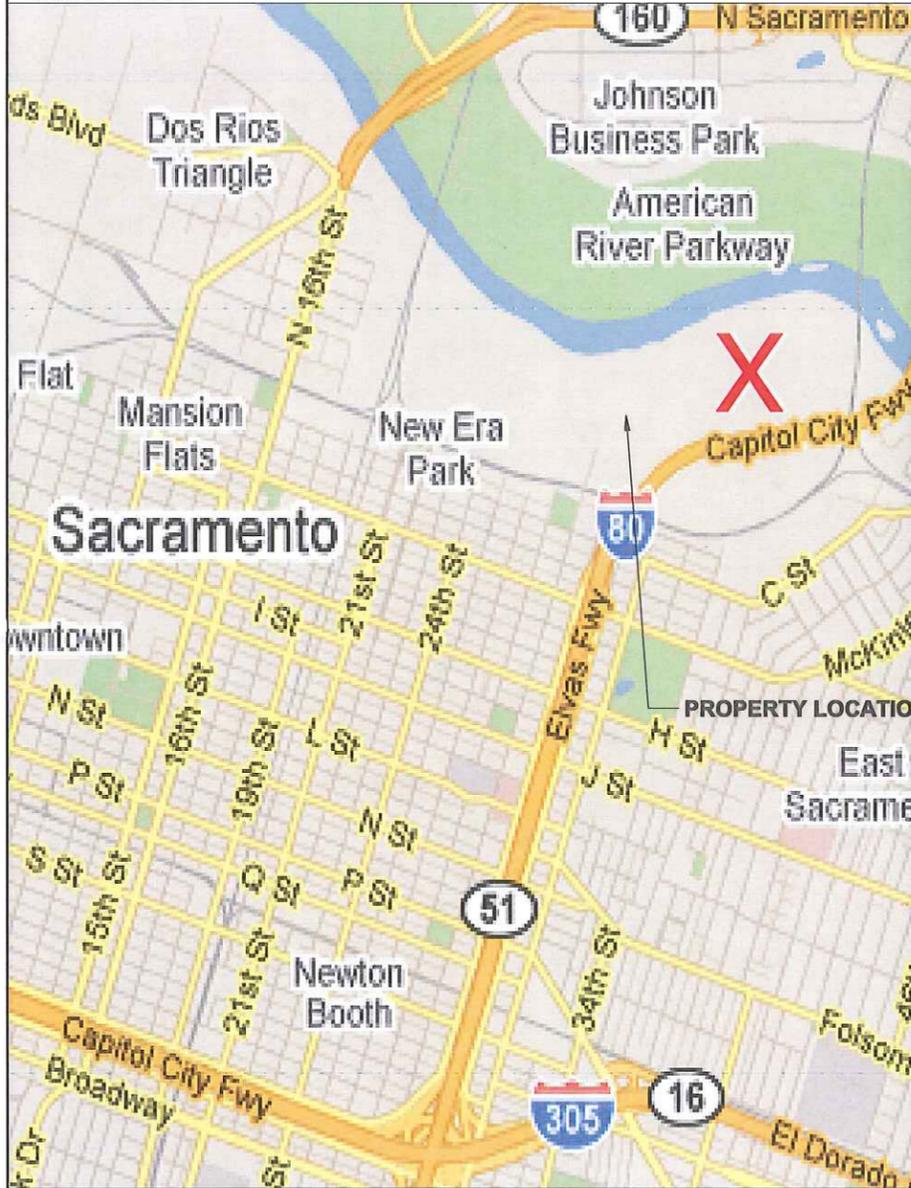
# CITY OF SACRAMENTO SOLAR PROJECT

CITY OF SACRAMENTO SOLAR PROJECT  
22.79 MW GROUND MOUNTED SOLAR PV SYSTEM  
28TH STREET, SACRAMENTO, CA

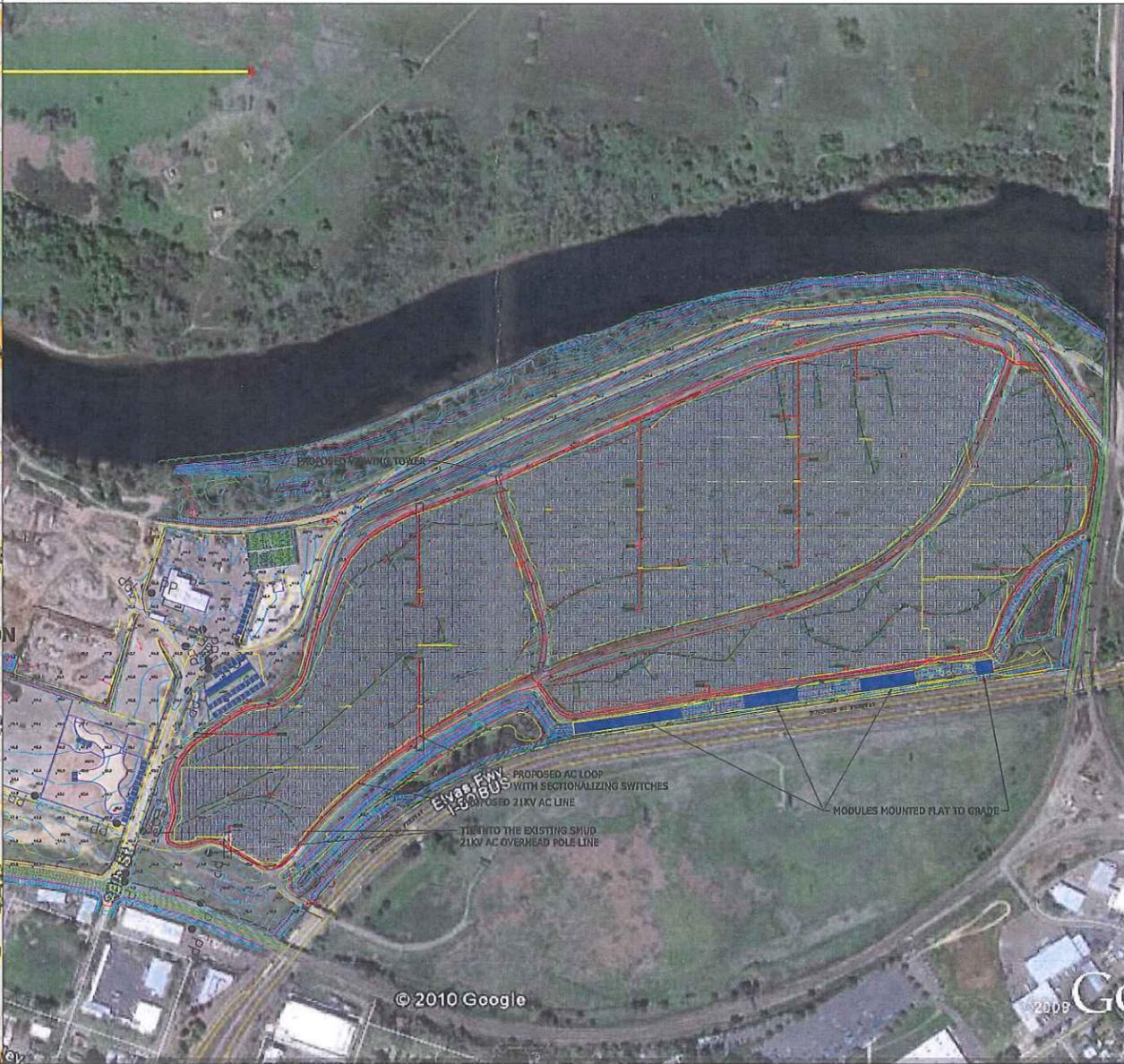
Attachment A

ENGINEERS STAMP:

VICINITY MAP:



SITE MAP:



PROJECT SCOPE:

THE PROJECT ENTAILS THE INSTALLATION OF A 22.79 MW SOLAR PHOTOVOLTAIC SYSTEM, AT SACRAMENTO LANDFILL ON 28TH STREET. THE SYSTEM IS DESIGNED TO OFFSET THE POWER REQUIREMENTS.

THE INSTALLATION CONSISTS OF A 22.79 MW GROUND MOUNTED SYSTEM FACING SOUTH, INVERTER AND RELATED ELECTRICAL SWITCHGEAR AS REQUIRED BY APPLICABLE CODES AND BY THE ELECTRICAL UTILITY COMPANY.

THE SYSTEM WILL BE INTERCONNECTED TO AND WILL BE OPERATED IN PARALLEL WITH SMUDS ELECTRIC GRID PER THE REQUIREMENTS OF SMUD AND APPLICABLE CODES.

THIS PROJECT IS A DESIGN-BUILD SYSTEM BY CONERGY PROJECTS, INC. OF SACRAMENTO, CALIFORNIA.

GENERAL NOTES:

APPLICABLE CODES:  
-2008 INTERNATIONAL BUILDING CODE  
-2008 NATIONAL ELECTRICAL CODE

ADAPT DESIGN TO SUIT LOCAL CONDITIONS WHERE NECESSARY. FIELD VERIFY EXISTING CONDITIONS AND LOCATIONS OF STRUCTURAL, MECHANICAL, ELECTRICAL AND ARCHITECTURAL COMPONENTS RELEVANT TO THE INSTALLATION OF THIS JOB BEFORE START OF WORK. DURING ASSEMBLY PLEASE REFER TO MANUFACTURER INSTALLATION INSTRUCTIONS.

COPYRIGHT © 2011 BY CONERGY PROJECTS, INC. ALL RIGHTS RESERVED. THIS DRAWING OR SPECIFICATION IS PROTECTED BY U.S. COPYRIGHT LAW AND INTERNATIONAL TREATIES. IT HAS BEEN PREPARED EXPRESSLY FOR THE CLIENT NAMED IN THE PROJECT INFORMATION BOX HEREIN, TO BE USED ONLY IN CONNECTION WITH THE CONERGY PROJECT FOR WHICH IT WAS CREATED. NO OTHER USE, DISSEMINATION, OR DUPLICATION SHALL BE MADE WITHOUT THE PRIOR WRITTEN CONSENT OF CONERGY PROJECTS, INC.

PROJECT INFORMATION:

MODULE MFG: CONERGY  
MODULE TYPE: CONERGY P230W  
NUMBER OF MODULES TOTAL: (99,092)  
MODULE TILT: 20°  
MODULE AZIMUTH: 180°  
NUMBER OF ARRAYS: (23)  
INVERTER MANUFACTURER: PV POWERED  
INVERTER MODEL: PVP1040KW  
NUMBER OF INVERTERS: TOTAL (17)  
INVERTER MODEL: PVP260KW  
NUMBER OF INVERTERS: TOTAL (7)  
INVERTER MODEL: PVP100KW  
NUMBER OF INVERTERS: TOTAL (1)  
INVERTER MODEL: PVP75KW  
NUMBER OF INVERTERS: TOTAL (1)  
UTILITY COMPANY: SMUD



SHEET INDEX:

SHEET	REV.	TITLE
PV0.00	A	TITLE SHEET
PV2.00	A	OVERLAY SITE PLAN
PV2.01	A	SYSTEM SITE PLAN
PV2.02	A	INVERTER LOCATION SITE PLAN
PV2.03	A	ACCESS SITE PLAN WITH AC LOOP
PV2.04	A	ELEVATIONS
PV3.00	A	AC SINGLE LINE DIAGRAM

REV.	DATE	DESCRIPTION	BY
A	02-09-2011	Bx1 RACK	VSM
A	12-20-2010	CREATED	VSM

REVISIONS (REV A) CREATED 10-27-2010

**CONERGY**  
CONERGY PROJECTS GROUP  
3550 WATT AVE.  
SUITE 140  
SACRAMENTO, CA 95821  
TEL# 916-979-7068  
FAX# 868-436-6114

**CONFIDENTIAL**  
THIS DRAWING IS THE PROPERTY OF CONERGY PROJECTS INC. THE INFORMATION CONTAINED HEREON MAY NOT BE USED OR DUPLICATED IN ANY MANNER WITHOUT WRITTEN PERMISSION BY OWNER.

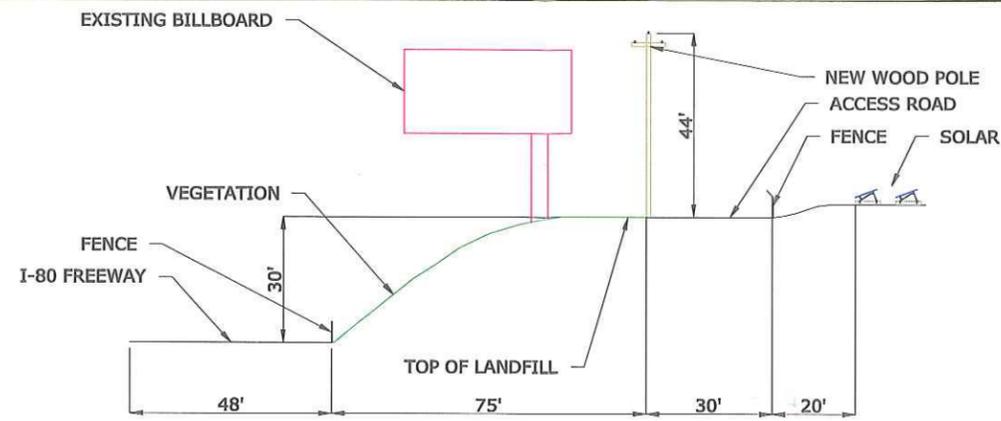
FACILITY NAME: CITY OF SACRAMENTO LANDFILL  
FACILITY LOCATION: SACRAMENTO, CA

TITLE SHEET

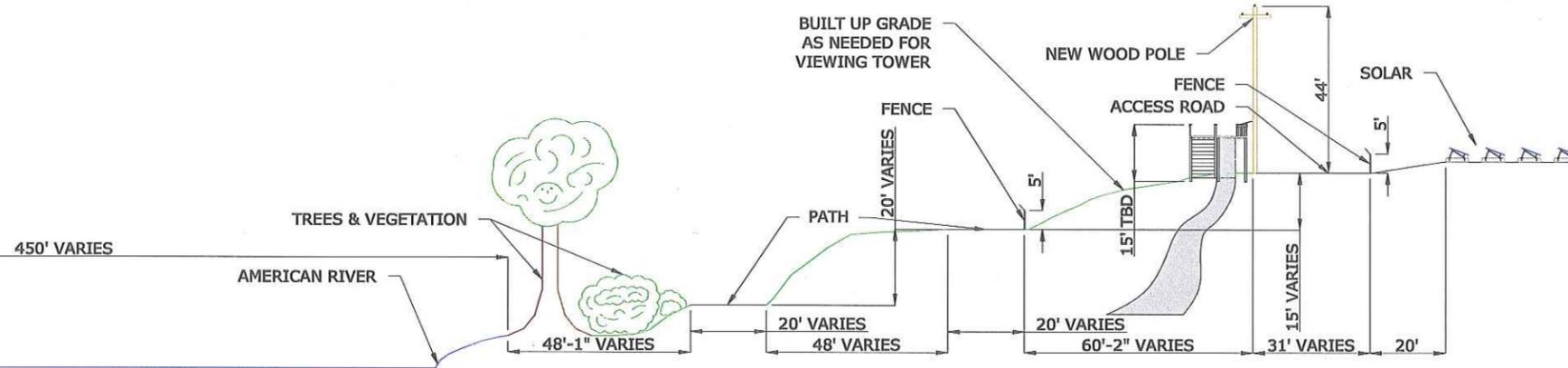
SIZE	DRAWING NO.	REV.
D	PV 0.00	A

FILENAME: SCALE SHEET 1 OF 7

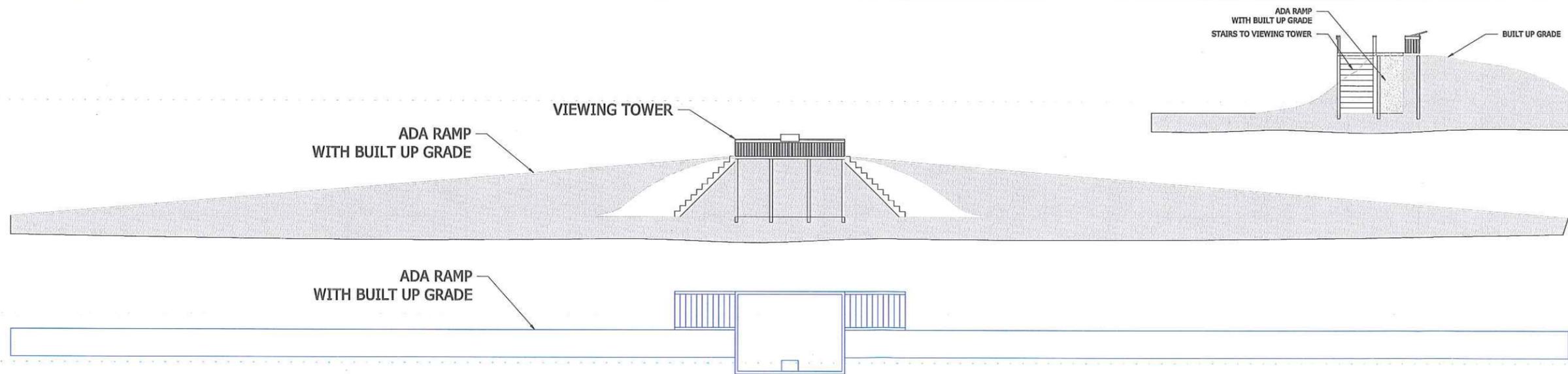




1 ELEVATIONS  
SCALE: 1" = 20'-0"



2 ELEVATIONS  
SCALE: 1" = 20'-0"



3 ELEVATIONS  
SCALE: 1" = 100'-0"

ENGINEERS STAMP:

GENERAL NOTES:

COPYRIGHT © 2010 BY CONERGY PROJECTS, INC. ALL RIGHTS RESERVED. THIS DRAWING OR SPECIFICATION IS PROTECTED BY U.S. COPYRIGHT LAW AND INTERNATIONAL TREATIES. IT HAS BEEN PREPARED EXPRESSLY FOR THE CLIENT NAMED IN THE PROJECT INFORMATION BOX HEREIN, TO BE USED ONLY IN CONNECTION WITH THE CONERGY PROJECT FOR WHICH IT WAS CREATED. NO OTHER USE, DISSEMINATION, OR DUPLICATION SHALL BE MADE WITHOUT THE PRIOR WRITTEN CONSENT OF CONERGY PROJECTS, INC.

REV	DATE	DESCRIPTION	BY
A	02-09-2011	S&T RACK	VSM
A	01-19-2011	CREATED	VSM
			CHK/APP/RAPP

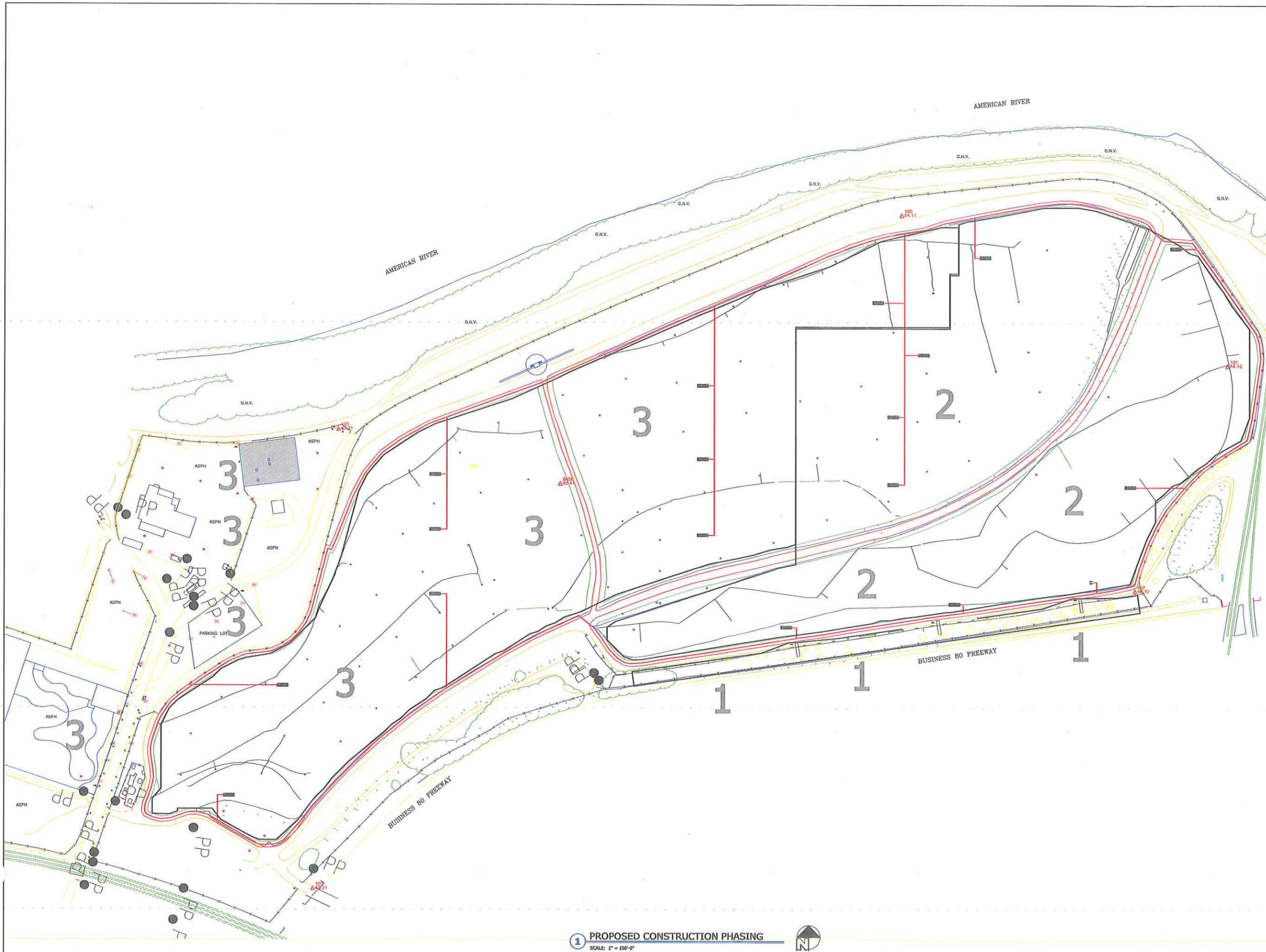
CONERGY PROJECTS GROUP  
3550 WATT AVE.  
SUITE 140  
SACRAMENTO, CA 95821  
TEL# 916-979-7068  
FAX# 916-436-8114

**CONFIDENTIAL**  
THIS DRAWING IS THE PROPERTY OF CONERGY PROJECTS INC. THE INFORMATION CONTAINED HEREON MAY NOT BE USED OR DUPLICATED IN ANY MANNER WITHOUT WRITTEN PERMISSION BY OWNER.

FACILITY NAME: CITY OF SACRAMENTO LANDFILL  
FACILITY LOCATION: SACRAMENTO, CA

ELEVATION

SIZE	DRAWING NO.	REV.
D	PV 2.04	A
FILENAME:	SCALE: 1" = 100'-0"	SHEET 6 OF 7



ENGINEERS STAMP:

GENERAL NOTES:

COPYRIGHT © 2010 BY CONERGY PROJECTS, INC. ALL RIGHTS RESERVED. THIS DRAWING OR SPECIFICATION IS PROTECTED BY U.S. COPYRIGHT LAW AND INTERNATIONAL TREATIES. IT HAS BEEN PREPARED EXPRESSLY FOR THE CLIENT NAMED IN THE PROJECT INFORMATION BOX HEREIN, TO BE USED ONLY IN CONNECTION WITH THE CONERGY PROJECT FOR WHICH IT WAS CREATED. NO OTHER USE, DISSEMINATION, OR DUPLICATION SHALL BE MADE WITHOUT THE PRIOR WRITTEN CONSENT OF CONERGY PROJECTS, INC.

REV	DATE	DESCRIPTION	BY
A	02-09-2010	Bx1 RACK	VSM
A	01-19-2010	CREATED	VSM
			CHK:KAPPR/APP


**CONERGY PROJECTS GROUP**  
 3550 WATT AVE.  
 SUITE 140  
 SACRAMENTO, CA 95821  
 TEL# 916-979-7088  
 FAX# 916-438-8114

**CONFIDENTIAL**  
 THIS DRAWING IS THE PROPERTY OF CONERGY PROJECTS INC. THE INFORMATION CONTAINED HEREON MAY NOT BE USED OR DUPLICATED IN ANY MANNER WITHOUT WRITTEN PERMISSION BY OWNER.

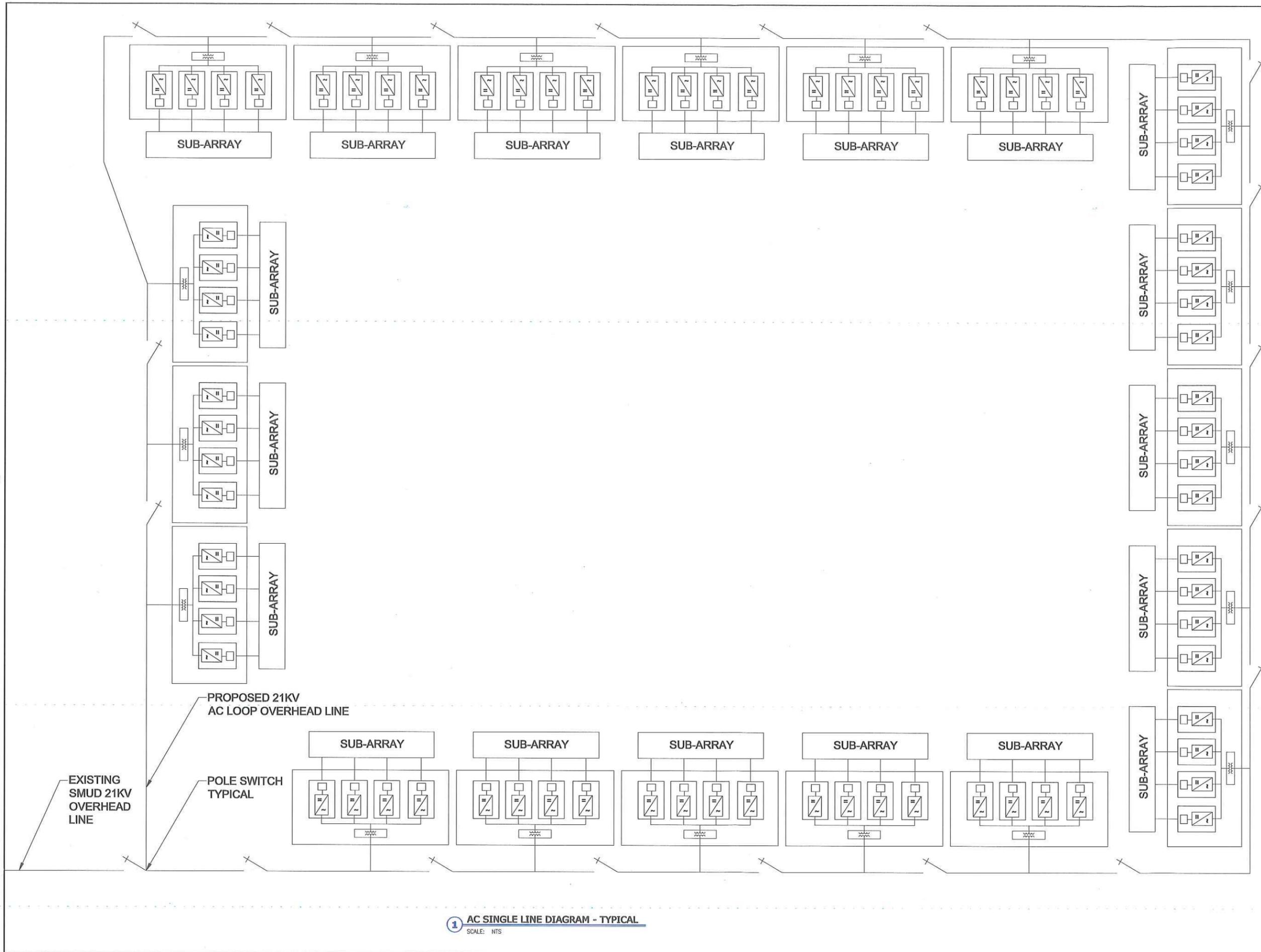
FACILITY NAME: CITY OF SACRAMENTO LANDFILL  
 FACILITY LOCATION: SACRAMENTO, CA

**PROPOSED CONSTRUCTION PHASING**

SIZE	DRAWING NO.	REV.
D	PV 2.05	A
FILENAME:	SCALE: 1" = 100'-0"	SHEET 8 OF 8

**1 PROPOSED CONSTRUCTION PHASING**  
 SCALE: 1" = 100'-0"





ENGINEERS STAMP:

GENERAL NOTES:

- ALL SPLICES TO USE POLARIS™ TYPE INSULATED WATERPROOF CONNECTORS OR OTHERWISE CONERGY APPROVED WIRE CONNECTORS
- FOR GROUNDING SEE PV3.20

COPYRIGHT © 2011 BY CONERGY PROJECTS, INC. ALL RIGHTS RESERVED. THIS DRAWING OR SPECIFICATION IS PROTECTED BY U.S. COPYRIGHT LAW AND INTERNATIONAL TREATIES. IT HAS BEEN PREPARED EXPRESSLY FOR THE CLIENT NAMED IN THE PROJECT INFORMATION BOX HEREIN, TO BE USED ONLY IN CONNECTION WITH THE CONERGY PROJECT FOR WHICH IT WAS CREATED. NO OTHER USE, DISSEMINATION, OR DUPLICATION SHALL BE MADE WITHOUT THE PRIOR WRITTEN CONSENT OF CONERGY PROJECTS, INC.

REV	DATE	DESCRIPTION	DWO	BY
A	12-20-2010	CREATED		

**CONERGY**  
 CONERGY PROJECTS GROUP  
 3550 WATT AVE.  
 SUITE 140 #4  
 SACRAMENTO, CA 95821  
 TEL# 916-979-7068  
 FAX# 866-436-6114

**CONFIDENTIAL**  
 THIS DRAWING IS THE PROPERTY OF CONERGY PROJECTS, INC. THE INFORMATION CONTAINED HEREON MAY NOT BE USED OR DUPLICATED IN ANY MANNER WITHOUT WRITTEN PERMISSION BY OWNER.

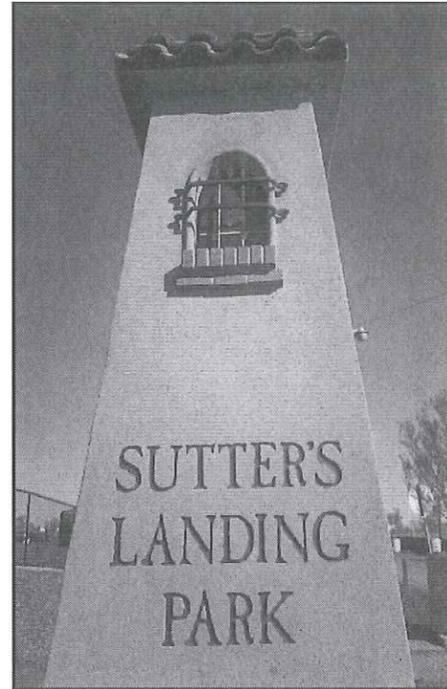
FACILITY NAME: CITY OF SACRAMENTO LANDFILL  
 FACILITY LOCATION: SACRAMENTO, CA

AC SINGLE LINE DIAGRAM - TYPICAL

SIZE	DRAWING NO.	REV.
D	PV 3.00	A

FILENAME: SCALE: SHEET 3 OF 3

1 AC SINGLE LINE DIAGRAM - TYPICAL  
 SCALE: NTS

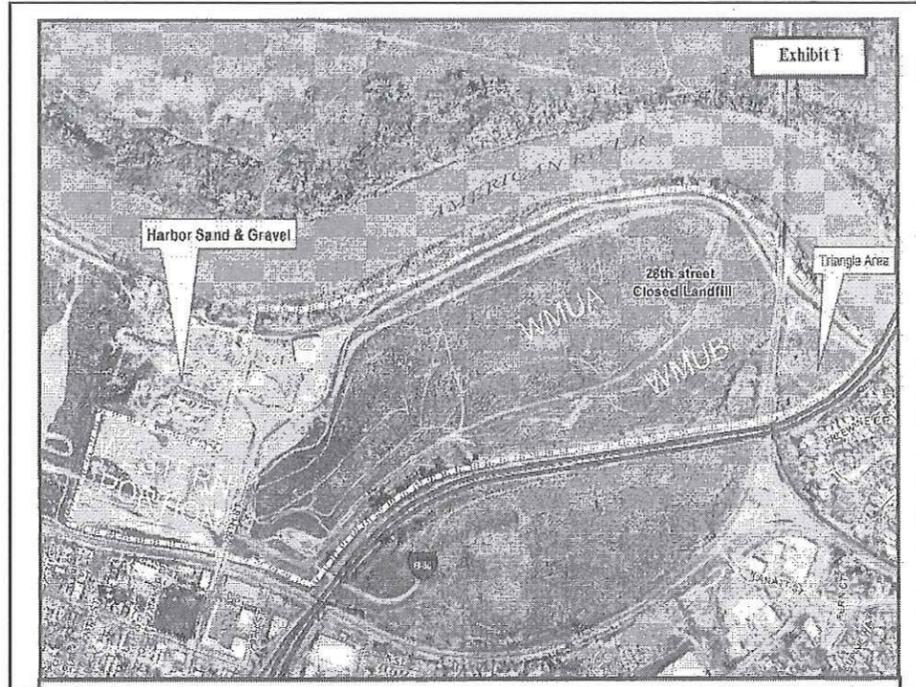


***Sutter's Landing Park/  
28<sup>th</sup> St. Landfill  
Proposed Solar Park***

**February 17, 2011  
Community Meeting**

***Agenda 630-730 pm***

- **Welcome / Opening Remarks**
- **Introductions / Presentations**
- **Q&A / Public Comment**
- **Visit Stations / Staff**

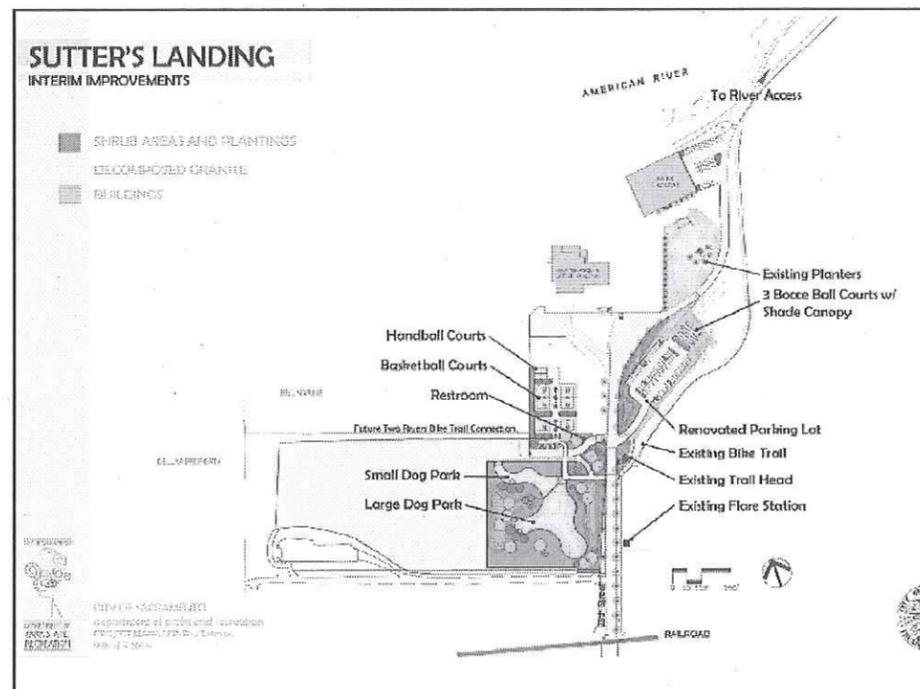


### ***History/Background***

- **Total acres = 172**
- **Landfill closed 1997**
- **30 yrs. post closure maintenance ends 2027**
- **Post Closure Maintenance: gas well monitoring, ground water monitoring, summer maint. to address settlement**

## *Sutter's Landing Park Background*

- All 172 acres are closed 28<sup>th</sup> St. Landfill
- 2003 Park Master Plan; amended 2006 to include potential for regional destination attractions
- Current park uses: Dog Park, river access, trail, indoor skate park
- 2011: Sports courts, improved parking & signage
- Future: bike facilities, sports fields; potential expansion; solar; interpretive facilities; habitat restoration along River bank

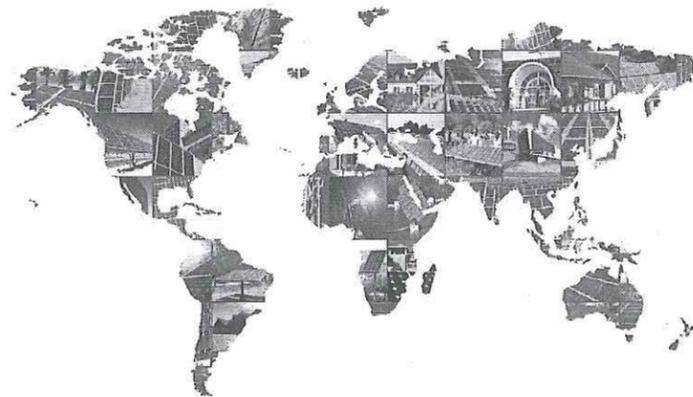


## **Conergy**

### ***Solar Park at Sacramento's Closed 28<sup>th</sup> St. Landfill***

*February 17, 2011*

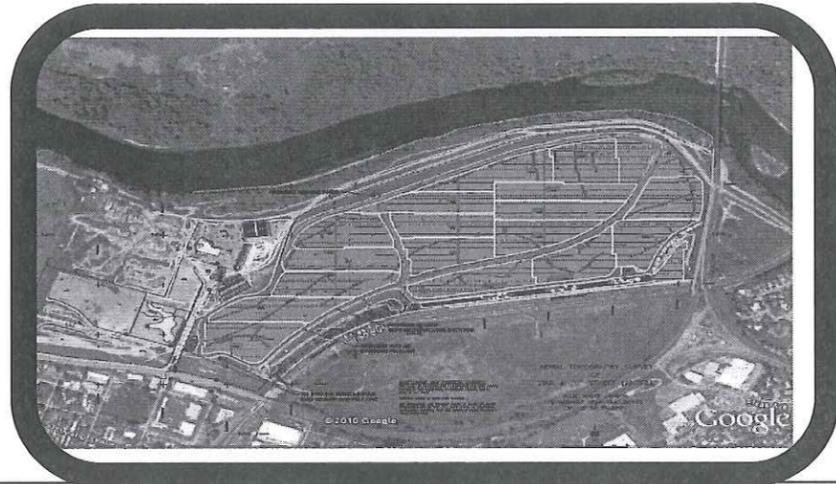
*Since its foundation in 1998 the Conergy group is grown to a worldwide market leader in the field of Renewable Energy installations.*



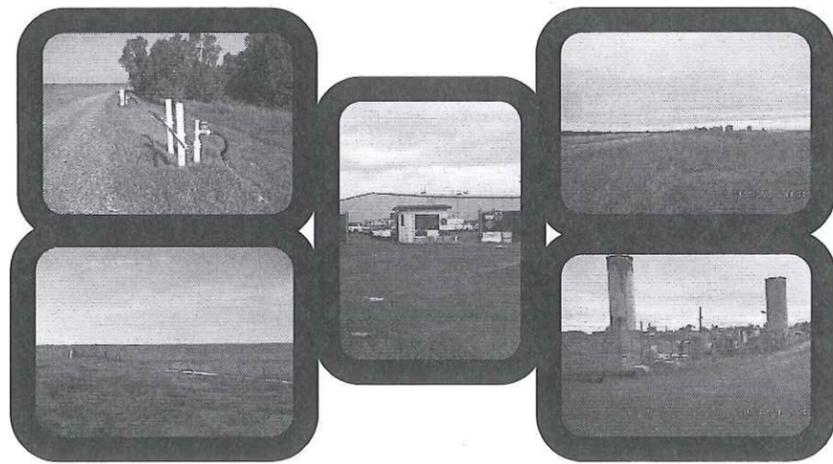
***Conergy – our world is full of energy***



### Sacramento Solar Park at Sutter's Landing



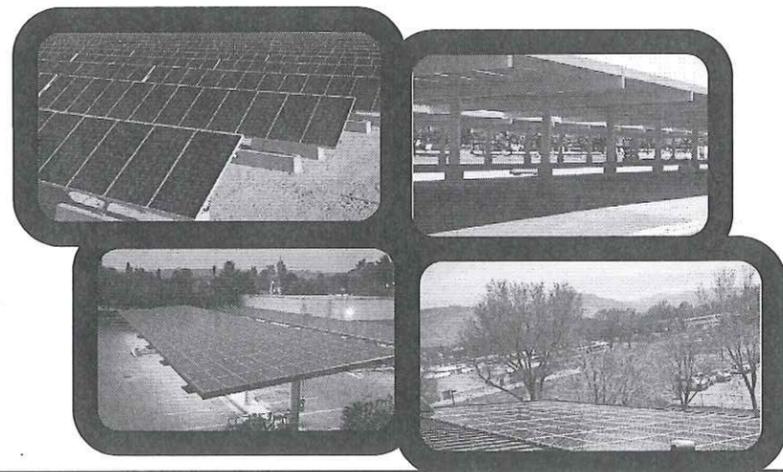
### What's There Now?



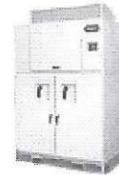
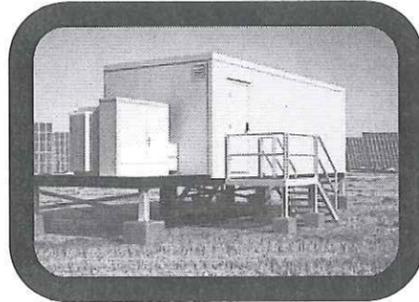
## Conergy Proposal

- *Lease the closed landfill area.*
- *Design a system that is compatible with the local habitat and is as low-impact to the local environment.*
- *Install up to 20MW AC of solar generation on the closed landfill and surrounding area.*
- *Install rooftop solar on the Skate Park Building.*
- *Install shade structures in various areas of the west side of the park.*
- *Install an educational viewing stand near the highest point of the area.*

## Typical Module Installation



## Types of Inverters (DC to AC)



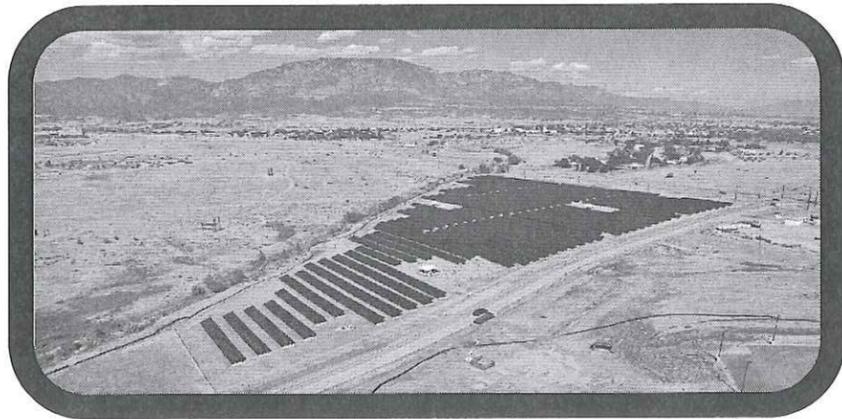
November 2009  
13

Sutter's Landing Regional Park  
Feasibility Study

 Schultz & Williams  
development management marketing

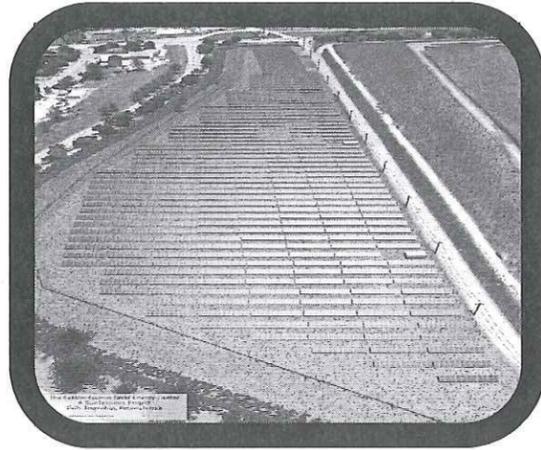
## Conergy's U.S. Experience with Closed Landfills

- Ft Carson, CO, 2MW Completed in 2007



## **Conergy's U.S. Experience with Closed Landfills**

- Falls Township, PA, 3MW Completed in 2008



### **Benefits of this Project**

***Some of the benefits of this project are that it will:***

- ***Use land that will otherwise be dormant for another 17 to 20 years.***
- ***Be visible from Business 80 and serve as the Gateway into the City of Sacramento.***
- ***Produce 'green' electricity to the grid that will power homes and businesses.***
- ***Be an educational destination for visitors.***

## Renewable Attributes (estimates only)

By offsetting fossil fuels this project will help to reduce:

- 631 million lbs of CO<sub>2</sub> (greenhouse gas)
- 462 thousand lbs of SO<sub>x</sub> (acid rain emissions)
- 1.8 million barrels of oil

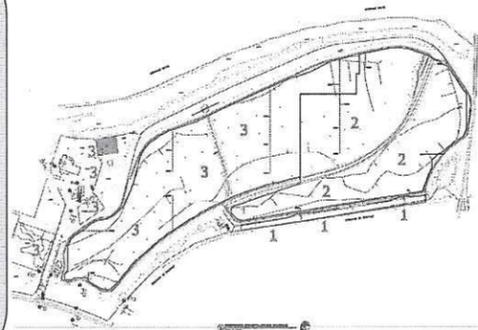
The project is equivalent to:

- 4,000 acres of trees
- Not driving 626 million miles

## Construction Phasing

A phase approach is proposed:

- Phase 1 - Adjacent to I/80 (1-2 MW)
- Phase 2 - Southern and Eastern sections (9 MW)
  - Phase 3 - Western section and remaining park (10 MW)



## ***FAQs & Answers***

1. **How will City address impact on local wildlife living on landfill**  
*Conduct biological survey of landfill as part of CEQA review*
2. **Will Solar Park be compatible with park development?**  
*Yes, this is one of the project's requirements*
3. **To whom will power be sold?**  
*This has yet to be determined*
4. **What is coverage area of proposed solar photovoltaic park?**  
*Majority of solar park will be developed on undeveloped portion of landfill, with roof mounted solar panels and shade structures on improved portion*

## ***Next Steps***

- |                                |                               |
|--------------------------------|-------------------------------|
| ▪ <b>March 3, 2011</b>         | <b>Parks &amp; Rec. Comm.</b> |
| ▪ <b>CEQA Analysis</b>         | <b>March-June 2011</b>        |
| ▪ <b>City Plng. Comm.</b>      | <b>Summer 2011</b>            |
| ▪ <b>Power Purch. Agreemt.</b> | <b>Thru Fall 2011</b>         |
| ▪ <b>State Permits</b>         | <b>Fall-Winter 2011</b>       |
| ▪ <b>Break Ground</b>          | <b>Sp.-Summer 2012</b>        |

- **Questions ?**

**Public Comments ?**

- **Visit Stations/Staff**

**[www.cityofsacramento.org/sutterslandingsolar](http://www.cityofsacramento.org/sutterslandingsolar)**

**Proposed Solar Park at Sutter's Landing**  
**2-17-11 Community Meeting**  
**Questions/Public Comments & Concerns**

1. Project construction phasing
2. Construction vs. disruption to park/neighborhood
3. Ongoing operations of closed landfill vs. disruption to park/neighborhood
4. Overhead facilities to tie into power grid: height? where?
5. Valuation, revenue generation
6. Habitat vs. installation locations
7. Habitat protection vs. solar facility (achieve win/win)
8. Use more of west side for solar facilities instead of east side
9. Nesting pair of Swainson's Hawk in the vicinity
10. Access to wildlife by public along the river
11. Intensive use of mount by Swainson's Hawks & other raptors
12. Fish & Game may not accept "paneled" land as habitat
13. # of kilowatt hours produced: 32 million/yr.
14. Where would funds be used in City? (not yet determined by City)
15. Viewing tower as a wildlife viewing point
16. Height of solar panels may impact viewshed on/from the river
17. Take a holistic view of site; make these coequal goals of the City:
  - a) Habitat preservation/enhancement
  - b) Solar production (power from renewable energy source)
  - c) Active and passive recreation opportunities
  - d) Revenue generation
18. Area of facility vs. power output
19. Any alternate sites in City parks considered?
20. Park is not an industrial area; it is a special area in our City

**28<sup>th</sup> STREET LANDFILL/SUTTERS LANDING PARK SOLAR PHOTOVOLTAIC PARK  
TENTATIVE SCHEDULE TO COMPLETE AGREEMENT**

<b>TASK</b>	<b>DATE</b>
1. Conergy Projects submits Special Use Permit Application	Late February, Early March 2011
2. CEQA Analysis	March through June 2011
3. Special Use Permit Analysis	March through June 2011
4. Appraisal of Land for Lease Value	March through June 2011
5. Meet and Confer with State Regulatory Agencies	March through August 2011
6. Planning Commission Review of Special Use Permit and CEQA Analysis	Summer 2011
7. Certification of CEQA Analysis by City Council and Option to Lease	Summer 2011
8. State Regulatory Meetings to Review Proposed Plans	April through Fall 2011
9. Conergy Projects Negotiates Power Purchase Agreement	April through Fall 2011
10. City Council Approves Ground Lease Agreement	May through Fall 2011
11. State Regulatory Permit Approvals Received	Late Fall, Early Winter 2011
12. Break Ground to Construct Solar Photovoltaic Farm	Spring/ Summer 2012

The Above Schedule Assumes No Significant Environmental Impacts that Cannot Be Mitigated For Are Identified in the CEQA Analysis. If a Full EIR is required, the CEQA Analysis Will Take an Additional Five to Eight Months